

# ACADEMIC CALENDAR

**2022-2023**



University  
of Manitoba

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# UNIVERSITY OF MANITOBA ACADEMIC CALENDAR

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# WELCOME

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# **UNDERGRADUATE STUDIES**

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## Important Notice

The University of Manitoba reserves the right to make changes in the information contained in the *Undergraduate Calendar* and the *Graduate Calendar* without prior notice. The University of Manitoba web site, [umanitoba.ca](http://umanitoba.ca) (<http://umanitoba.ca>) is a source for updated information.

Not every course listed in the *Undergraduate Calendar* or the *Graduate Calendar* will be offered in this academic year.

It is the responsibility of all students:

- To familiarize themselves each year with the university's academic regulations and policy in general;
- To familiarize themselves with the regulations and policies applying specifically to their faculty, school, or program;
- To familiarize themselves with the specific graduation requirements of the degree, diploma, or certificate they are seeking; and
- To ensure that the courses they have selected are appropriate to their programs.

In the event of an inconsistency between the general academic regulations and policies published in the *Undergraduate Calendar* and the *Graduate Calendar*, and such regulations and policies established by Senate and the councils of the faculties and schools, the version established by Senate and the councils of the faculties and schools shall prevail.

The regulations and policies contained in this year's editions of the *Undergraduate Calendar* and the *Graduate Calendar* apply, subject to change, only for the academic year indicated on the cover page of each publication.

The material in the current editions of the *Undergraduate Calendar* and the *Graduate Calendar* was submitted by the academic and administrative units concerned. The university neither represents nor warrants that all general information and course references used in these publications is accurate although reasonable efforts have been used to check the accuracy of the information.

Students also agree by the act of registration to be bound by the regulations, policies, procedures, bylaws and rules of the University of Manitoba that are in effect at the time of registration, including any amendments which may be enacted during the period of their registration. Students agree by the act of registration to be bound by the regulations, policies, procedures, bylaws and rules of the faculty or program in which they have registered, including any amendments which may be made during the period of their registration. Students also acknowledge that such amendments may have retroactive application.

Students also acknowledge that such regulations, policies, procedures, bylaws and rules will include, but are not limited to, those related to COVID-19 health and safety rules, protocols and processes.

No liability shall be incurred by the University of Manitoba for any loss or damage directly or indirectly suffered or incurred by any student, or any party claiming through or under any student, as a result of interruption or delays in, failure to provide or termination, of services, courses or classes arising out of cause or causes beyond its control including but not limited to acts of God, fires, floods, riots, wars, strikes or lockouts, mass casualty events, local, regional or global outbreak of disease or other public health emergency, social distancing or quarantine restriction, legislative or regulatory requirements, unusually severe weather, failure of public utility or common carrier, or attacks or other malicious acts, including but not

limited to attacks on or through the internet, or any internet service, telecommunications provider or hosting facility, damage to university property, financial exigency, or any other occurrence beyond the control of the University. Further, the University of Manitoba shall not be liable for any losses or damage suffered by a student who discloses his/her personal identification number (PIN) to anyone other than a university employee in the course of registration.

In March 2020, a global pandemic of the virus leading to COVID-19 was declared by the World Health Organization. The Governments of Canada, the Province of Manitoba, and local Governments responded and continues to respond to the pandemic with legislative amendments, controls, orders, by-laws, requests and requirements (collectively, the "Governmental Response"). It is uncertain how long the pandemic, and the related Governmental Response, will continue, and it is unknown whether there may be future resurgences of the virus leading to COVID-19 or any further mutation thereof (collectively, the "Virus") and resulting or supplementary renewed Government Response. Without limiting the foregoing paragraph, the University of Manitoba shall not be liable for and direct or indirect costs, losses or damages associated with any claim, loss or any failure, delay or termination in performance arising out of:

- a. the continued spread of or exposure to the Virus;
- b. the continuation of or renewed Governmental Response to control the spread of the Virus; and
- c. a decision of the University of Manitoba, made on an organization-wide basis and in good faith, to control the spread of the Virus, even if exceeding the then current specific Government Response.

Specifically, the COVID-19 pandemic may necessitate revisions to the format of course offerings. Tuition and mandatory fees have been set regardless of the method of instruction and will not be refunded in the event of a change in the method of instruction during any part of the academic year. In addition, scheduled dates and times may be extended or changed by the University of Manitoba as required. The University of Manitoba will notify students promptly of any such delays or changes and shall, so far as practicable use reasonable efforts to minimize and mitigate any such changes or delays.

## Freedom of Information and Protection of Privacy Act (FIPPA)

This personal information is being collected under the authority of The University of Manitoba Act. It will be used for the purposes of admission, registration, assessment of academic status, and communication with the student. It may be used for administrative research in support of provision of education and general administration of the University. It may be disclosed to other educational institutions, government departments, and co-sponsoring organizations, and, for those students who are members of UMSU, it will be disclosed to the University of Manitoba Students' Union. Upon graduation, the student's name and address, together with information on degrees, diplomas, and certificates earned will be given to and maintained by the alumni records department in order to assist the University's advancement and development efforts. Information regarding graduation and awards may be made public. Personal information will not be used or disclosed for other purposes, unless permitted by The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection of personal information, contact the Access and Privacy Office (tel. 204-474-9844),

The University of Manitoba  
233 Elizabeth Dafoe Library  
Winnipeg, Manitoba, Canada, R3T 2N2.

## **Disclosure of Personal Information to Statistics Canada**

The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student. At any time, students who do not wish to have their information used are able to ask Statistics Canada to remove their identifying information from the national database. Further information on the use of this information can be obtained from Statistics Canada's website (<https://www.statcan.gc.ca/eng/start/>) or by writing to the:

Post-Secondary Section, Centre for Education Statistics  
17th Floor, R.H. Coats Building  
Tunney's Pasture, Ottawa, Ontario, Canada, K1A 0T6.

## About the University

About the University (<http://umanitoba.ca/about/>)

University Administration (<https://umanitoba.ca/about-um/president/>)

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Tracey Peter, Ph.D.

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Stephanie Levene, M.B.A.

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### Université de Saint-Boniface

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### St. John's College

Warden and Vice-Chancellor: Allison Abra, B.A., M.A., Ph.D.

### St. Paul's College

Rector: Christopher Adams, Ph.D.

## Approved Teaching Centres

William and Catherine Booth College

Prairie Theatre Exchange

## Distinguished Professors

**Bernstein**, C., M.D. (Manitoba), F.R.C.P.C.; **Chen**, Tina, B.A. (Toronto), M.A., Ph.D. (Wisconsin-Madison); **Chochinov**, H. M., O.M., M.D., Ph.D. (Man.), F.R.C.P.C., F.R.S.C., F.C.A.H.S.; **Davie**, James, B.Sc., Ph.D. (UBC), F.C.A.H.S., F.R.S.C.; **Dhalla**, N.S., B.Sc. (Panjab), M.S. (Pennsylvania), Ph.D. (Pittsburgh); **Fayek**, M., B.Sc. Honours (Carleton), Ph.D. (Saskatchewan); **Gole**, A.M., B.Tech. (IIT Bombay), M.Sc., Ph.D.; **Greenfield**, H.J., B.A., M.Phil., M.A., Ph.D. (City University of New York); **Hack**, T., B. Comm. (Distinction) (Saskatchewan), B.Sc. (First Class Honours) (Calgary), M.N. (Manitoba), Ph.D. (Manitoba), FCAHS; **Jayas**, D.S., B.Sc. (G.B.Pant), M.Sc. (Manitoba), Ph.D. (Saskatchewan), P.Ag., P.Eng.; **Kouritzin**, S., B.A. (UBC), M.A. (UBC), Ph.D. (UBC); **Linden**, Rick, B.A. (Alberta), M.A. (Alberta), Ph.D. (Washington); **McCance**, D.C., Cert. Ed., M.A., Ph.D. (Manitoba); **Murphy**, L., B.Sc. (Hons.), Ph.D. (University of Sydney); **Nickerson**, P., B.Sc., M.D., F.R.C.P. (Manitoba); **Perkins**, P., B.A. (Hons.) (Utah), M.A., Ph.D. (Dalhousie); **Perry**, A., B.A. (Simon Fraser), M.A., Ph.D. (York); **Perry**, R.P., B.A. (UBC), M.Sc., Ph.D. (Calgary); **Pierce**, G., O.M., B.P.H.E. (Hons.) (Lakehead), M.Sc. (Dalhousie), Ph.D. (Manitoba); **Rockman-Greenberg**, C., B.Sc. (Hons.), M.D. (McGill), C.M., F.R.C.P.C., F.C.C.M.G.; **Roos**, L., A.B. (Stanford), Ph.D. (MIT); **Toles**, G., B.A., M.A., Ph.D. (Virginia); **Woodgate**, Roberta, B.N., M.N., Ph.D. (Manitoba)

## Distinguished Professors Emeritus

**Anna**, T.E., B.A., M.A., Ph.D. (Duke), F.R.S.C.; **Anthonisen**, N.R., A.B. (Dartmouth), M.D. (Harvard), Ph.D. (McGill); **Berkes**, F., B.Sc., Ph.D. (McGill); **Brydon**, D., B.A. (Hons), M.A. (Toronto), Ph.D. (Australian National), FRSC; **Butler**, M., B.Sc. (Hons.) (Birm.), M.Sc. (Wat), Ph.D. (King's College, London); **Chaturvedi**, M.C., B.Sc. (Met.) (Banara), M.Met., Ph.D. (Sheffield), P.Eng.; **Cohen**, H., B.Sc. (Hons.) (Manitoba), Sc.M. (Brown), Ph.D.; **Comack**, Elizabeth, B.A. (Hons) (Winnipeg), Ph.D. (Alberta); **Degner**, L.F., B.N., M.A., Ph.D. (Michigan); **Eales**, J.G., B.A. (Hons.) (Oxford), M.Sc., Ph.D. (UBC), F.R.S.C.; **Friesen**, G., B.A. (Saskatchewan), M.A., Ph.D. (Toronto); **Friesen**, H.G., O.C., B.Sc. (Med.), M.D. (Manitoba), D.Sc. (Western Ontario), F.R.C.P.C., F.R.S.C.; **Gibson**, D., B.A., LL.B. (Manitoba), LL.M. (Harvard); **Gratzer**, G., B.Sc., Ph.D., F.R.S.C.; **Hawthorne**, F.C., O.C., B.Sc. (Spec.) (Imperial College), A.R.S.M. (Royal School of Mines, London), Ph.D. (McMaster), F.R.S.C., F.G.A.C., F.M.S.A.; **Holley**, R.A., B.Sc., M.Sc. (McGill); Ph.D. (Guelph); **Judd**, E.R., B.A. (Hons.) (Queen's), M.A., Ph.D. (UBC), Diploma (Beijing Language Institute), Diploma (Fudan), F.R.S.C.; **Klostermaier**, K.K., D.Phil. (Gregorian), Ph.D. (Bombay); **Kwong**, J., B.A. (Hong Kong), M.Ed. (Alberta), Ph.D. (Toronto); **Martin**, G., B.A. (Colorado), M.A., Ph.D. (Arizona); **Oleszkiewicz**, J.A., M.Sc. (Wroclaw), M.Sc. (Vanderbilt), Ph.D., F.C.S.C.E.; **Page**, J.H., B.Sc. (Hons.) (Dal.). D.Phil. (Oxf.); **Ronald**, A.R., M.D., B.Sc., (Med.) (Manitoba); **Roos**, L., A.B. (Stanford), Ph.D. (MIT); **Sehon**, A., B.Sc., M.Sc., Ph.D., D.Sc. (Manchester), F.R.S.C.; **Shafai**, L., B.Sc. (Tehran), M.Sc., Ph.D. (Toronto), F.R.S.C.; **Smil**, V., M.S. (Prague), Ph.D. (Pennsylvania State), F.R.S.C.; **van Oers**, W.T.H., Ph.D. (Amsterdam); **Wolfart**, H.C., [B.A. equiv.] (Albert-Ludwigs-University, Freiburg im Breisgau), M.A. (Yale), M.A. (Cornell), M. Phil., Ph.D. (Yale), F.R.S.C.; **Younes**, M., Ch.B., D.P.H. (Egypt), F.R.C.P., Ph.D.

## Chancellors Emeriti

**Mauro**, A.V., O.C., Q.C., B.A., LL.B., LL.M., LL.D. (Manitoba), D.Comm. (Lakehead)

**Secter**, H.L., O.M., B.Comm., LL.B. (Manitoba), LL.M. (Harvard), LL.D. (Winnipeg)

## Presidents Emeriti

**Barnard**, D.T., O.M., Ph.D., F.R.S.C.

**Naimark**, A., B.Sc. (Med.), M.D. (Manitoba), M.Sc., (M.), LL.D., F.R.C.P.C., F.R.S.C.

**Szathmáry**, E.J.E. C.M., O.M., B.A. (Hons.), Ph.D., LL.D. (Toronto), D.Sc. (Western Ontario), D. Litt.S. (St. Michael's College), LL.D. (York), LL.D. (McMaster), LL.D. (Manitoba), LL.D. (Calgary), F.R.S.C.

## Faculties/Schools and Departments

**Note:** Codes for Faculties/Schools, Departments are shown in brackets.

Faculties/Schools	Departments
Agricultural and Food Sciences (Faculty 07; School 24)	Agribusiness and Ageconomics (061)
	Animal Science (035)
	Biosystems Engineering (034)
	Entomology (038)
	Food Science (078)
	General Agriculture (065)
	Plant Science (039)
	Soil Science (040)
	Human Nutritional Science (030)
Architecture (09)	Architecture (050)
	Architecture Interdisciplinary/ Design and Planning (166)
	City Planning (073)
	Environmental Design (079)
	Interior Design (051)
	Landscape Architecture (031)
Art (15)	Fine Arts (054)
Arts (01)	Anthropology (076)
	Arts Interdisciplinary (099)
	Asian Studies (150)
	Canadian Studies (151)
	Catholic Studies (160)
	Central and East European Studies (099S)
	Classics (003)
	Economics (018)
	English, Film, and Theatre (004)
	French, Spanish and Italian (044)
	German and Slavic Studies (008)
	Global Political Economy (157)
	History (011)
	Icelandic (012)
	Judaic Studies (055)
	Labour Studies (153)
	Linguistics (126)
	Indigenous Studies (032)
	Philosophy (015)
	Political Studies (019)
	Psychology (017)

	Religion (020)
	Sociology (077)
	Ukrainian Canadian Heritage Studies (155)
	Women's and Gender Studies (156)
Education (08)	Curriculum, Teaching and Learning (132)
	Disability Studies (162)
	Educational Administration, Foundations and Psychology (129)
	Education Ph.D. (124)
Engineering (03)	Civil Engineering (023)
	Electrical and Computer Engineering (024)
	Engineering - Preliminary Year (130)
	Mechanical (025)
	Engineering (025)
Environment, Earth, and Resources, Clayton H. Riddell (028)	Geological Sciences (007)
	Environment and Geography (128)
	Environment, Earth, and Resources (177)
	Resource Management (056)
Extended Education (26)	
Graduate Studies (016)	Graduate Studies (069)
	Mauro Centre for Peace Studies (170)
Health Sciences (29)	General Human Ecology (028)
	Health Sciences (173)
	Health Studies (173)
Dentistry (17)	Dental Diagnostic and Surgical Sciences (103)
	Dentistry (066)
	Oral Biology (100)
	Preventative Dental Science (101)
	Restorative Dentistry (102)
Dental Hygiene (20)	Dental Hygiene (070)
Medicine (05)	Anaesthesia (096)
	Biochemistry and Medical Genetics (137)
	Community Health Sciences (093)
	Family Social Sciences (062)
	Human Anatomy and Cell Science (080)
	Immunology (072)
	Interdisciplinary Medicine (165)
	Medical Education (888)
	Medical Microbiology and Infectious Diseases (097)
	Medicine (083)
	Pathology (088)
	Pharmacology (089)
	Psychiatry (091)
	Physiology (090)

	Surgery (094)
Nursing (13)	Midwifery (049)
	Nursing (049)
Pharmacy (11)	Pharmacy (046)
Rehabilitation Sciences (19)	Medical Rehabilitation (068)
	Occupational Therapy (168)
	Physical Therapy (167)
	Respiratory Therapy (169)
Kinesiology and Recreation Management (22)	Kinesiology (171)
	Physical Education (057)
	Physical Education & Recreation Studies General (172)
	Recreation Studies (123)
Law (10)	Law (045)
Management, I. H. Asper School of Business (06)	Accounting and Finance (009)
	Actuarial Studies, Warren Centre (010)
	Business Administration (027)
	Interdisciplinary Management (098)
	Marketing (118)
	Supply Chain Management (164)
Music, Marcel A. Desautels (21)	Music (033)
Science (02)	Biological Sciences (071)
	Chemistry (002)
	Computer Science (074)
	Data Science (178)
	Mathematics (136)
	Microbiology (060)
	Physics and Astronomy (016A)
	Statistics (005)
Social Work (12)	Social Work (047)
University 1 (27)	

## Alphabetical Listing of Subjects

Subject	Code	Faculty/School
Accounting	ACC	Management
Actuarial Studies Warren Centre	ACT	Management
Agribusiness and Ageconomics	ABIZ	Agricultural and Food Sciences
Agroecology	AGEC	Agricultural and Food Sciences
Agriculture	AGRI	Agricultural and Food Sciences
Agriculture Diploma	DAGR	Agricultural and Food Sciences
American Sign Language	ASLL	Arts
Anatomy	ANAT	Medicine
Anesthesia	ANES	Medicine
Animal Science	ANSC	Agricultural and Food Sciences

Anthropology	ANTH	Arts
Applied Mathematics	AMAT	Science
Arabic	ARA	Arts
Architecture	ARCG	Architecture
Architecture Interdisciplinary	ARCH	Architecture
Arts Interdisciplinary	ARTS	Arts
Asian Studies	ASIA	Arts
Astronomy	ASTR	Science
Biochemistry and Medical Genetics	BGEN	Medicine
Biological Sciences	BIOL	Science
Biosystems Engineering	BIOE	Agricultural and Food Sciences
Biomedical Engineering	BME	Engineering
Biotechnology	BTEC	Science
Canadian Studies	CDN	Arts
Catholic Studies	CATH	Arts
Chemistry	CHEM	Science
City Planning	CITY	Architecture
Civil Engineering	CIVL	Engineering
Classics	CLAS	Arts
Community Health Sciences	CHSC	Medicine
Computer Science	COMP	Science
Data Science	DATA	Science
Dental Diagnostic and Surgical	DDSS	Dentistry
Dental Hygiene	HYGN	Dental Hygiene
Dentistry	DENT	Dentistry
Diagnostic Cytology	CYTO	Medical Rehabilitation
Diploma in Agriculture	AGRI	Agricultural and Food Sciences
Disability Studies	DS	Disability Studies
Economics	ECON	Arts
Education Ph.D.	EDUC	Education
Educational Administration, Foundations and Psychology	EDUA	Education
Education: Curriculum, Teaching and Learning	EDUB	Education
Electrical Engineering	ECE	Engineering
Engineering - Preliminary Year	ENG	Engineering
English	ENGL	Arts
Entomology	ENTM	Agricultural and Food Sciences
Entrepreneurship/Small Business	ENTR	Management
Environment	ENVR	Environment, Earth, and Resources
Environment, Earth, and Resources	EER	Environment, Earth, and Resources

Environmental Architecture	EVAR	Architecture	Kinesiology	KIN	Kinesiology and Recreation Management
Environmental Design	EVDS	Architecture	Kinesiology, Phys.Ed and Recreation	KPER	Kinesiology, Phys.Ed and Recreation
Environmental Interior Environment	EVIE	Architecture	Labour and Workplace Studies	LABR	Arts
Environmental Landscape and Urbanism	EVLU	Architecture	Landscape Architecture	LARC	Architecture
Family Social Sciences	FMLY	Medicine	Latin	LATN	Arts
Film Studies	FILM	Arts	Law	LAW	Law
Finance	FIN	Management	Linguistics	LING	Arts
Fine Art General Courses	FA	Art	Management Information Systems	MIS	Management
Fine Art Diploma	FNDP	Art	Management Science	MSCI	Management
Fine Art: Art History	FAAH	Art	Marketing	MKT	Management
Fine Art Studio Courses	STDO	Art	Mathematics	MATH	Science
Food Science	FOOD	Agricultural and Food Sciences	Mechanical Engineering Graduate	MECG	Engineering
Forensic Sciences	FORS	Science	Mechanical Engineering Undergraduate	MECH	Engineering
French	FREN	Arts	Medical Microbiology and Infectious Diseases	MMIC	Medicine
General Agriculture	AGRI	Agricultural and Food Sciences	Medical Rehabilitation	REHB	Medical Rehabilitation
General Human Ecology	HMEC	Human Ecology	Medicine	MED	Medicine
General Management	GMGT	Management	Microbiology	MBIO	Science
Geography	GEOG	Environment, Earth, and Resources	Midwifery	MDFY	Nursing
Geological Sciences	GEOL	Environment, Earth, and Resources	Music	MUSC	Music
German	GRMN	Arts	Native Studies	NATV	Arts
Global Political Economy	GPE	Arts	Nursing	NURS	Nursing
Graduate Studies	GRAD	Graduate Studies	Occupational Therapy	OT	Medical Rehabilitation
Greek	GRK	Arts	Operations Management	OPM	Management
Health Studies	HEAL	Health Sciences	Oral Biology	ORLB	Dentistry
Hebrew	HEB	Arts	Pathology	PATH	Medicine
History	HIST	Arts	Peace Studies	PEAC	Graduate Studies
Human Nutritional Sciences	HNSC	Agricultural and Food Sciences	Pharmacology	PHAC	Medicine
Human Resources Management/ Industrial Relations	HRIR	Management	Pharmacy	PHRM	Pharmacy
Icelandic	ICEL	Arts	Pharmacy	PHMD	Pharmacy
Immunology	IMMU	Medicine	Philosophy	PHIL	Arts
Indigenous Studies	INDG	Arts	Physical Education	PHED	Kinesiology and Recreation Management
Interdisciplinary Management	IDM	Management	Physical Education and Recreation Studies General	PERS	Kinesiology and Recreation Management
Interdisciplinary Medicine	IMED	Medicine	Physical Therapy	PT	Medical Rehabilitation
Interior Design	IDES	Architecture	Physics	PHYS	Science
International Business	INTB	Management	Physiology	PHGY	Medicine
Italian	ITLN	Arts	Plant Science	PLNT	Agricultural and Food Sciences
Judaic Studies	JUD	Arts	Polish	POL	Arts
			Political Studies	POLS	Arts
			Post Graduate Medical Education	PGME	Medicine

Preventive Dental Science	PDSO	Dentistry
Psychiatry	PCTY	Medicine
Psychology	PSYC	Arts
Recreation	REC	Kinesiology and Recreation Management
Religion	RLGN	Arts
Resource Management	NRI	Environment, Earth, and Resources
Respiratory Therapy	RESP	Medical Rehabilitation
Restorative Dentistry	RSTD	Dentistry
Russian	RUSN	Arts
Semitic Languages and Literature	SEM	Arts
Slavic Studies	SLAV	Arts
Social Work	SWRK	Social Work
Sociology	SOC	Arts
Soil Science	SOIL	Agricultural and Food Sciences
Spanish	SPAN	Arts
Statistics	STAT	Science
Supply Chain Management	SCM	Management
Surgery	SURG	Medicine
Textile Sciences	TXSC	Agriculture
Theatre	THTR	Arts
Ukrainian	UKRN	Arts
Ukrainian Cdn. Heritage	UCHS	Arts
Undergraduate Medical Education	UGME	Medicine
Women's Studies	WOMN	Arts
Yiddish	YDSH	Arts



# Academic Programs

## Undergraduate Programs Offered

The following is a listing of all degree, diploma and certificate programs offered at the Fort Garry Campus, the Bannatyne Campus and at Université de Saint-Boniface.

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- Internationally Educated Agrologists Post-Baccalaureate Diploma (p. 188)
- Internationally Educated Engineers Qualification Program (IEEQ) – Post-Baccalaureate Diploma in Engineering (p. 489)
- Italian Minor (Concentration) (p. 308)
- Italian Studies, B.A. General (p. 306)
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- Leadership and Organizations, B. Comm., Honours (p. 751)
- Linguistics Minor (Concentration) (p. 384)
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- Management / Red River College Polytech Joint Program, B.Comm Honours (p. 776)
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- Management Information Systems, B. Comm., Honours (p. 763)
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- Mathematics - Economics Joint, B.Sc. Honours (p. 904)
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- Mathematics Minor (p. 446)
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- Nursing, B.N. (p. 662)
- Nutrition Option, B.Sc. - Human Nutritional Sciences (p. 174)
- Pharmacy, B.Sc. (p. 672)
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- Philosophy Minor (Concentration) (p. 397)
- Philosophy, B.A. Double Advanced Major (p. 394)
- Philosophy, B.A. Double Honours (p. 391)
- Philosophy, B.A. General (p. 395)
- Philosophy, B.A. Single Advanced Major (p. 392)
- Philosophy, B.A. Single Honours (p. 390)
- Physical Education, B.P.E. (p. 683)
- Physical Geography Minor (p. 571)
- Physical Geography, B.Sc. Honours (p. 560)
- Physical Geography, B.Sc. Major (p. 566)
- Physics and Astronomy Minor (p. 928)
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- Preliminary Engineering Program (p. 466)
- Program for Deaf Studies and the American Sign Language (p. 384)
- Psychology Minor (p. 932)
- Psychology Minor (Concentration) (p. 412)
- Psychology, B.A. Double Honours (p. 407)
- Psychology, B.A. General (p. 410)
- Psychology, B.A. Single Advanced Major (p. 408)
- Psychology, B.A. Single Honours (p. 406)
- Psychology, B.Sc. Honours (p. 928)
- Psychology, B.Sc. Major (p. 929)
- Recreation Management and Community Development, B.R.M.C.D. (p. 683)
- Recreation Studies Minor (p. 684)
- Religion Minor (Concentration) (p. 420)
- Religion, B.A. Double Honours (p. 414)
- Religion, B.A. General (p. 419)
- Religion, B.A. Single Advanced Major (p. 415)
- Religion, B.A. Single Honours (p. 413)
- Religion, B.A., Double Advanced Major (p. 417)
- Respiratory Therapy, B.R.T. (p. 675)
- Russian Minor (Concentration) (p. 336)
- Russian, B.A. General (p. 335)
- Social Work, B.S.W. (p. 953)
- Sociology Minor (Concentration) (p. 425)
- Sociology, B.A. Double Honours (p. 422)

- Sociology, B.A. General (p. 424)
- Sociology, B.A. Single Advanced Major (p. 423)
- Sociology, B.A. Single Honours (p. 421)
- Soil Science Minor (p. 188)
- Spanish Minor (Concentration) (p. 312)
- Spanish, B.A. General (p. 310)
- Spanish, B.A. Single Advanced Major (p. 308)
- Sport, Physical Activity and Recreation in the Community Certificate (SPARC) (p. 685)
- Statistics - Actuarial Joint, B.Sc. Honours (p. 940)
- Statistics - Economics Joint, B.Sc. Honours (p. 941)
- Statistics - Mathematics Joint, B.Sc. Honours (p. 942)
- Statistics Minor (p. 939)
- Statistics, B.Sc. Honours (p. 933)
- Statistics, B.Sc. Major (p. 936)
- Theatre Minor (Concentration) (p. 297)
- Theatre, B.A. Double Advanced Major (p. 295)
- Theatre, B.A. General (p. 296)
- Theatre, B.A. Single Advanced Major (p. 294)
- Ukrainian Canadian Heritage Studies Minor (p. 432)
- Ukrainian Canadian Heritage Studies, B.A. General (p. 430)
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- Ukrainian Minor (Concentration) (p. 337)
- Ukrainian, B.A. General (p. 336)
- Undergraduate Medical Education Program (MD) (p. 610)
- Women's and Gender Studies Minor (Concentration) (p. 441)
- Women's and Gender Studies, B.A. Double Advanced Major (p. 437)
- Women's and Gender Studies, B.A. Double Honours (p. 435)
- Women's and Gender Studies, B.A. General (p. 439)
- Women's and Gender Studies, B.A. Single Advanced Major (p. 436)
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# Academic Schedule

## Academic Schedule Fall/Winter Term 2022-2023 Dates Applicable to all U of M Students

### University Closure

When the University is closed no classes/examinations will be held

Event	Date
Canada Day	July 1, 2022
Terry Fox Day (Civic Holiday)	August 1, 2022
Labour Day	September 5, 2022
Queen Elizabeth II Day of Mourning	September 19, 2022
National Day for Truth and Reconciliation	September 30, 2022
Thanksgiving Day	October 10, 2022
Remembrance Day	November 11, 2022
Winter Holiday	December 24, 2022- January 3, 2023
Louis Riel Day	February 20, 2023
Good Friday	April 7, 2023
Victoria Day	May 22, 2023
Canada Day (Holiday Observed)	July 3, 2023
Terry Fox Day (Civic Holiday)	August 7, 2023

### Dates Applicable to most U of M Students

Some additional or differing date information is included in separate sections for: Agriculture Diploma, Art (School of), Dental Hygiene, Dentistry (includes IDDP), Education (B.Ed. only), Management, Medicine (excludes Family Social Sciences), Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician's Assistant Studies, Respiratory Therapy, and Social Work. Students in these programs should also see their respective section of the Academic Schedule.

### Orientation

Event	Date
New Student Orientation Fall Term Fort Garry Campus	Sept 6, 2022
Faculty of Agricultural & Food Sciences, Faculty of Arts, School of Art, Faculty of Environment, Earth & Resources, Faculty of Music, Faculty of Science, Faculty of Social Work, Interdisciplinary Health Program	Sept 6, 2022
Faculty of Law First Year Orientation	Sept 6 to 7, 2022
New Student Orientation Fort Garry Campus Winter Term	Jan 6, 2023

### Start and End Dates

Additional or differing dates exist for: Agriculture Diploma, Dental Hygiene, Dentistry, Education, Management, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician's Assistant Studies, Respiratory Therapy, and Social Work. Students in these programs should also see their respective section of the Academic Schedule.

Event	Date
Fall Term	September 7- December 12, 2022
Winter Term (no classes, examinations or tests will be held April 7, 2023)	January 9 to April 12, 2023
Winter/Summer Term spanning distance and online courses	January 9 to July 6, 2023

### Registration and Withdrawal Dates

Additional or differing dates exist for: Agriculture Diploma and other faculties, colleges and/or schools offering irregularly scheduled courses. Agriculture Diploma students should also see their respective section of the Academic Schedule; all others should also refer to either the 'Irregular Refund and Voluntary Withdrawal Deadline' information posted on the Registrar's Office website (<https://umanitoba.ca/registrar/>), or the Class Schedule. ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/))

### Regular Registration Period

Event	Date
Fall Term and Fall/Winter Term classes	Ends September 6, 2022
Winter Term classes and Winter / Summer Term spanning distance and online courses	Ends January 8, 2023

### Limited Access Term Expiry Dates

(to be determined by the Registrar's Office in accordance with the Registration Schedule)

Event	Date
Fall Term and Fall/Winter Term classes	TBD
Winter Term and Winter/Summer Term spanning distance and online courses	TBD

### Registration Revision Period

Students may use this period of time to make changes to their selected courses or class schedule. Last day to drop is 1 business day prior to the end of the Registration Revision Period.

Event	Date
Fall Term and Fall/Winter Term classes	September 7 to 21, 2022
Winter Term classes and Winter/ Summer Term spanning distance and online courses	January 9 to 23, 2023

### Last Date to Drop without Penalty

Last date to drop and have course excluded from transcripts; VWs will be recorded on transcripts for courses dropped after this date. There will be no refunds for courses dropped after this date. Additional or differing dates exist for Agriculture Diploma; students in this program should also see their respective section of the Academic Schedule.

Event	Date
Fall Term	September 20, 2022
Fall/Winter Term classes Part A	September 20, 2022

Fall/Winter Term classes Part B (VW January 20, 2023 recorded if dropped after Sept 21, 2021)

Winter Term classes and Winter/Summer Term spanning distance and online courses	January 20, 2023
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### Last Date to Register/Registration Revision Deadline

Event	Date
Fall Term and Fall/Winter Term classes	September 21, 2022
Winter Term classes and Winter/Summer Term spanning distance and online courses	January 23, 2023

### Voluntary Withdrawal (VW) Deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from courses after this date

Event	Date
Fall Term classes	November 22, 2022
Fall/Winter Term spanning classes	January 20, 2023
Winter Term classes	March 22, 2023
Winter/Summer Term spanning distance and online courses	May 11, 2023

### Fee Payment Deadlines

A financial penalty will be assessed on accounts with an outstanding balance after this date.\*

Event	Date
Fall Term	October 5, 2022
Winter Term	February 7, 2023

\* Please see Last Day to Drop without Penalty

### Term Breaks

Academic and administrative offices will be open during this period; no classes, tests or assignment due dates occur during this time. Additional or differing dates exist for: Dental Hygiene, Dentistry, Education (B.Ed. only), Medicine (M.D. only), Occupational Therapy, Pharmacy, Physical Therapy, and Respiratory Therapy. Students in these programs should also see their respective section of the Academic Schedule.

Event	Date
Fall Term Break (The U of M will be closed Friday November 11 for Remembrance Day)	November 7 to 10, 2022
Winter Term Break (The U of M will be closed Monday February 20 for Louis Riel Day)	February 21 to 24, 2023

### Examination and Test Dates

Students are reminded that they must remain available until all examination and test obligations have been fulfilled. Additional or differing dates exist for: Agriculture Diploma, Dental Hygiene, Dentistry, Education, Medicine (M.D.), and Pharmacy. Students in these programs should also see their respective section of the Academic Schedule. Students in faculties, colleges, schools or programs offering irregularly

scheduled courses should also see the exam timetable available through their program office

Event	Date
Fall Term (includes tests and mid term exams for Fall/Winter Term classes)	December 13 to 23, 2022
Winter Term (includes final exams for Fall/Winter Term classes)	April 14 to 28, 2023

### Challenge for Credit Application Deadline

Event	Date
For classes offered Fall Term 2022 and spanning Fall/Winter 2022-2023	September 21, 2022
For classes offered Winter Term 2023	January 23, 2023

### Final Grade Appeal Deadlines

Event	Date
For Final grades received for Fall Term 2022 classes	January 23, 2023
For final grades received for Winter Term 2023 and Fall 2022/Winter 2023 classes	May 29, 2023

### Graduation and University Convocation

Degrees, Diplomas and Certificates will be awarded at Convocation. Graduation date may differ from Convocation Ceremony date. Additional or differing dates exist for Agriculture Diploma, Dental Hygiene, Dentistry, Medicine, Occupational Therapy, Pharmacy, Physical Therapy, and Respiratory Therapy; students in these programs should also see their respective section of the Academic Schedule.

#### For students graduating Fall 2022

Event	Date
Deadline to apply online to graduate for most Undergraduate students	August 2, 2022
Faculty of Graduate Studies Submission Deadline*	August 25, 2022
Convocation Ceremony (Fort Garry Campus)	October 19 to 20, 2022
Convocation Ceremony (Bannatyne Campus)	October 27, 2022

#### For students graduating February 2023

Event	Date
Deadline to apply online to graduate for most Undergraduate students	September 21, 2022
Faculty of Graduate Studies Submission Deadline*	January 4, 2023
Graduation date for students graduating in February	February 1, 2023
Convocation Ceremony (Fort Garry Campus)	June 6-9, 2023

**For students graduating Spring 2023**

Event	Date
Deadline to apply online to graduate for most Undergraduate students	January 23, 2023
Faculty of Graduate Studies Submission Deadline*	March 30, 2023
Convocation Ceremony (Bannatyne Campus)	May 18, 2023
Convocation Ceremony (Fort Garry Campus)	June 6-9, 2023
Convocation Ceremony- Université de Saint-Boniface	June 12, 2023
Graduate Studies Submission Deadline* for students graduating Fall 2022	August 24, 2023
Annual Traditional Graduation Pow Wow in honour of Indigenous graduates	May 6, 2023

\* Last date for receipt by Graduate Studies of Theses/Practica and reports on Theses/Practica, comprehensive examinations, and project reports from students, and lists of potential graduands from departments.

**Dates Applicable to Agriculture Diploma****Orientation**

Event	Date
Orientation	September 7, 2022 (morning)
Orientation	September 8, 2022 (morning)
Orientation	September 9, 2022 (all day)

**Start and End Dates**

Event	Date
Fall Term	Sept. 12 to Dec 9, 2022
Experiential Learning	Oct 11 to 14, 2022 (subject to change)
Winter Term	Jan 9 to Apr 6, 2023
Experiential Learning	Jan 19, 23 to 25, 2023 (subject to change)

**Registration and Withdrawal Dates****Regular Registration Period**

Event	Date
Fall Term and Fall/Winter Term classes	Ends Sept. 11, 2022
Winter Term Classes	Ends Jan 8, 2023

**Late Registration/Registration Revision Period**

A financial penalty may be assessed on late registrations. Students may use this period of time to make changes to their selected courses or class schedule

Event	Date
Fall Term and Fall/Winter Term classes	Sept 12 to 27, 2022
Winter Term Classes	Jan 9 to 24, 2023

**Last Day to Drop without Penalty**

Last date to drop and have class excluded from transcripts; VWs will be recorded on transcripts for classes dropped after this date

Event	Date
Fall Term and Fall/Winter Term classes	Sept 26, 2022
Winter Term Classes	Jan 23, 2023

**Last Date to Register/Registration Revision Deadline**

Event	Date
Fall Term and Fall/Winter Term classes	Sept 27, 2022
Winter Term Classes	Jan 24, 2023

**Voluntary (VW) Withdrawal deadline**

Last date to withdraw and not receive a final grade; students cannot withdraw from classes after this date.

Event	Date
Fall Term classes	Nov 21, 2022
Winter Term and Fall/Winter Term classes	Mar 17, 2023

**Examination and Test Dates**

Event	Date
Fall Term (includes tests and midterms exams for Fall/Winter Term classes)	Dec 12 to 22, 2022
Winter Term (includes final exams for Fall/Winter Term classes; no classes, examinations or tests will be held on April 15, 2022)	Apr 10 to 19, 2023

**Dates applicable to Architecture****Important Dates (Mandatory for all ED2 Students)**

Event	Date
Orientation	Aug 26, 2022 (subject to change)

**Dates applicable to Art (School of)****Important Dates**

Event	Date
First Year Field Trip	TBD

**Dates applicable to Dental Hygiene****Start and End Dates**

Event	Date
Year 2	
Fall Term Classes	Aug 15 to Nov 25, 2022 (classes) Dec 2, 2022 (Clinics)
Winter Term Classes	Jan 3 to March 31, 2023
Year 3	
Fall Term Classes	Aug 8 to Nov 25, 2022 (Classes) Dec 9, 2022 (Clinics)
Winter Term Classes	Jan 9 to March 31, 2023 (classes) April 6, 2023 (clinics)

## Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 2	
Fall Term	August 29, 2022
Winter Term	January 23, 2023
Year 3	
Fall Term	September 6, 2022
Winter Term	January 30, 2023

Voluntary Withdrawal (VW) deadline

Event	Date
Year 2	
Fall Term	November 7, 2022
Winter Term	March 6, 2023
Year 3	
Fall Term	October 31, 2022
Winter Term	March 13, 2023

## Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students

Event	Date
Fall Term Break	N/A
Winter Term Break	Feb 27 to March 3, 2023

## Examination and Test Dates

Event	Date
Year 2	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec 5 to 16, 2022
Winter Term	Apr 3 to 6, 2023
Year 3	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec 12 to 16, 2022
Winter Term	Apr 10 to 14, 2023

## Convocation Ceremony

Event	Date
Bannatyne Campus	May 18, 2023

## Dates applicable to Dentistry (including International Dentist Degree Program)

### Start and End Dates

Event	Date
Years 1 and 2 Classes and Clinics	
Fall Term	Aug 8 to November 25, 2022
Winter Term	Jan 3 to April 28, 2023
Year 3/IDDP 1 Classes and Clinics	
Fall Term	Aug 2 to Nov 25, 2022 (classes) & Dec 3 (clinics), 2022
Winter Term	Jan 3 to Apr 28, 2023

Year 4/IDDP 2 Classes and Clinics

Fall Term	Aug 2 to Dec 2, 2022 (classes & clinics)
Winter Term	Jan 3 to Apr 21, 2023

## Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 1 & 2	
Fall Term	August 29, 2022
Winter Term	January 30, 2023
Years 3 & 4	
Fall Term	August 22, 2022
Winter Term	January 30, 2023

Voluntary Withdrawal (VW) deadline

Event	Date
Years 1, 2 & 3	
Fall Term	October 31, 2022
Winter Term	March 27, 2023
Year 4	
Fall Term	October 31, 2022
Winter Term	March 20, 2023

## Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students

Event	Date
Fall Term Break	N/A
Winter Term Break	Feb 27 to Mar 3, 2023

## Examination and Test Dates

Event	Date
Years 1,2 and 3/IDDP 1	
Fall Term (includes tests and midterm exams for Fall/Winter term classes)	Dec 5 to 16, 2022
Winter Term	May 1 to 12, 2023
Year 4/IDDP 2	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec 12 to 16, 2022
Winter Term	Jan 9 to 13, 2023

## Convocation Ceremony

Event	Date
Bannatyne Campus	May 18, 2023

## Dates applicable to Education (B.Ed. only \*)

Note: Unless registered in a B.Ed. course, PBDE students follow the dates listed in Section 1.2: Dates applicable to most U of M students.

\*All dates are tentative and dependent on decisions made by the Province regarding K – 12 schools during and post-pandemic.



**Orientation**

Event	Date
All students	September 6, 2021

**Start and End Dates**

Note: Practicum dates may vary by practicum placement.

Event	Date
Fall Term	
Practicum Block	Sept 7 to 9, 2022
Practicum Mondays	Sept 12, 26; Oct 24, 31, 2022
Day Classes	Sept 13 to Nov 9, 2022
MTS PD Day	Oct 21, 2022
Practicum Block	Nov 14 to Dec 13, 2022
Winter Term	
Day Classes	Jan 10 to Mar 17, 2023
Practicum Mondays	Jan 9, 16, 23, 30; Feb 6, 13, 27; Mar 6, 13, 2023
Practicum Block	Mar 20 to 24; Apr 3 to 26, 2023

**Term Breaks**

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Fall Term Break (Note: Dates may vary by practicum placement)	Nov 10 to 11, 2021
Winter Term Break	see Term Break for all U of M students
Winter Practicum Break (Note: Dates may vary by school division and/or practicum placement)	Mar 27 to 31, 2023

**Examination and Test Dates**

Event	Date
Fall Term (as required)	Nov 5, 2022
Winter Term (as required)	March 18, 2023

**Dates applicable to Management (Graduate Programs)****Orientation**

Event	Date
Fall Term (all programs)	Early August 2022 TBD

**Start and End Dates**

Event	Date
Fall Term (M.B.A, M. Fin., and M.S.C.M.) Irregular Start	early August to Dec. 9, 2022
Winter Term (M.B.A., M. Fin., and M.S.C.M.) Irregular Start	Early Jan to April 12, 2023
Fall Term (M.Sc., and Ph.D.)	Sept 7 to Dec 12, 2022
Winter Term (M.Sc., and Ph.D.) No classes, examinations or tests will be held Apr.7, 2023.	Jan 9 to Apr 12, 2023

**Dates applicable to Medicine (excludes Family Social Sciences and Interdisciplinary Health Programs)**

Note: Family Social Sciences and Interdisciplinary Health Programs students follow the Dates applicable to most U of M students.

**Orientation**

Event	Date
Year 1	Aug 23 to 26, 2022

**Start and End Dates**

Event	Date
Year 1	
Fall Term	Aug 29 to Dec 22, 2022
Winter Term	Jan 9 to June 3, 2023
Rural Week	May 29 to June 2, 2023
Year 2	
Fall Term	Aug 29 to Dec 22, 2022
Winter Term	Jan 9 to May 26, 2023
Year 3	
Fall Term	August 22 to Dec 16, 2022
Winter Term	Jan 3 to May 14, 2023
Year 4	
Fall Term	Aug 22 to Dec 16, 2022
Winter Term	Jan 3 to May 14, 2023

**Registration and Withdrawal Dates**

Last Date to Drop without Penalty

Event	Date
Fall Term	
Year 1	Sept 19, 2022
Year 2	Sept 19, 2022
Year 3	Sept 12, 2022
Year 4	Sept 12, 2022
Winter Term	
Year 1	Jan 30, 2023
Year 2	Jan 30, 2023
Year 3	Jan 24, 2023
Year 4	Jan 24, 2023

Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Year 1	Nov 21, 2022
Year 2	Nov 21, 2022
Year 3	Nov 14, 2022
Year 4	Nov 14, 2022
Winter Term	
Year 1	Apr 17, 2023
Year 2	Apr 10, 2023
Year 3	Apr 4, 2023
Year 4	Apr 4, 2023

### Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Year 1 & 2	
Fall Term Break	N/A
Winter Term Break	Mar 20 to 24, 2023
Year 3 & 4	
Fall & Winter Term Break	N/A

### Examination and Test Dates Convocation Ceremony

N/A

Event	Date
Bannatyne Campus	May 18, 2023

### Dates applicable to Nursing

#### Orientation

Event	Date
Fall Term	Aug 30 to 31, 2022
Winter Term	Dec 20 to 21, 2022

### Dates applicable to Occupational Therapy

#### Orientation

Event	Date
Year 1	Aug 22 to 23, 2022
Year 2	Aug 22, 2022

#### Start and End Dates

Event	Date
Year 1	
Fall Term Classes	Aug 22 to Nov 18, 2022
Basic Fieldwork	Nov 21 to Dec 16, 2022
Winter Term Classes	Jan 4 to May 5, 2023
Intermediate Fieldwork 1	May 8 to June 30, 2023
Year 2	
Fall Term Classes	Aug 22 to Dec 16, 2022
Intermediate Fieldwork 2	Jan 2 to March 3, 2023
Winter Term Classes	Mar 13 to June 30, 2023
Advanced Fieldwork	Flexible start and end dates between July 3 to Oct 6, 2023

### Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Fall Term	
Year 1	Sept 6, 2022
Year 2	Sept 6, 2022
Winter term	
Year 1	Jan 25, 2023
Year 2	Mar 27, 2023

Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Year 1	Oct 24, 2022
Year 2	Nov 14, 2022
Winter Term	
Year 1	Apr 5, 2023
Year 2	June 5, 2023

### Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students

Event	Date
Fall Term Break	Oct 10 to 14, 2022
Winter Term Break *	March 6 to 10, 2023

\*Note: Some students may need to complete fieldwork during the mid-term break depending on availability of fieldwork sites.

### Convocation Ceremony

Event	Date
Bannatyne Campus	October 27, 2022

### Dates applicable to Pharmacy

#### Orientation

Event	Date
Year 1	Aug 29, 2022

#### Start and End Dates

Event	Date
Year 1	
Fall Term Classes	Aug 29 to Dec 9, 2022
Winter Term Classes	Jan 9 to Apr 14, 2023
Year 2	
Fall Term Classes	Aug 29 to Dec 5, 2022
IPPE Community	Jan 3 to 27, 2023
Winter Term Classes	Jan 30 to May 5, 2023
Year 3	
Fall Term Classes	Sept 6 to Dec 9, 2022
Winter Term Classes	Jan 9 to Apr 14, 2023
Year 4	
Practicum Block 1	May 9 to June 30, 2022
Practicum Block 2	July 4 to Aug 26, 2022
Practicum Block 3	Aug 29 to Oct 21, 2022
Practicum Block 4	Oct 24 to Dec 16, 2022
Practicum Block 5	Jan 3 to Feb 24, 2023
Practicum Block 6	Feb 27 to Apr 21, 2023

### Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Fall Term	
Years 1 & 3	Sept 20, 2022
Year 2	Sept 12, 2022

Year 4	By Course
Winter term	
Years 1 & 3	Jan 23, 2023
Year 2	Feb 13, 2023
Year 4	By Course

## Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Years 1 & 3	Nov 22, 2022
Year 2	Nov 14, 2022
Year 4	By Course
Winter Term	
Years 1 & 3	Mar 27, 2023
Year 2	Apr 17, 2023
Year 4	By Course

## Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Year 1 & 3	Please refer to dates applicable to most U of M students
Year 2	
Fall	Please refer to dates applicable to most U of M students
Winter	Mar 20 to 24, 2023
Year 4	n/a

## Examination &amp; Test Dates

Event	Date
Years 1 & 3	Dec 12 to 22, 2022
Fall Term Exams	Please refer to dates applicable to most U of M students
Winter Term Exams	Apr 17 to 28, 2023
Year 2	
Fall Term Exams	Dec 6 to 16, 2022
Winter Term Exams	May 8 to 19, 2023
Year 4	
Fall and Winter Term Exams	n/a

## Convocation Ceremony

Event	Date
Bannatyne Campus	May 18, 2023

## Dates applicable to Physical Therapy

Event	Date
Orientation	N/A

## Start and End Dates

Event	Date
Year 1	
Fall Term Classes	Aug 2 to Dec 22, 2022
Winter Term Classes	Jan 3 to Mar 24, 2023

Clinical Placement	2x6 week placement between Apr 3 to Aug 4, 2023
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Year 2	
Fall Term Classes	Aug 2 to Sept 29, 2022
Clinical Placement	1x5 week placement block + 1x5 week research block between Oct 3 to Dec 22, 2022
Winter Term Classes	Jan 3 to Mar 24, 2023
Clinical Placement	2x6 week placement between Apr 3 to Aug 4, 2023

## Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Fall Term	
Year 1	Aug 28, 2022
Year 2	Aug 28, 2022
Winter term	
Year 1	Jan 15, 2023
Year 2	Jan 15, 2023

## Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Year 1	Nov 14, 2022
Year 2	Sept 12, 2022
Winter Term	
Year 1	Feb 27, 2023
Year 2	Feb 27, 2023

## Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Fall Term Break	N/A
Winter Term Break	Mar 27 to 31, 2023

## Convocation Ceremony

Event	Date
Bannatyne Campus	October 27, 2022

## Dates applicable to Physician Assistant Studies

Event	Date
Year 1	Aug 29 to Sept 6, 2022
Clinical Year 2 Orientation	Aug 22 to 26, 2022

## Start and End Dates

Event	Date
Fall Term	Please refer to dates applicable to most U of M students (subject to change)
Winter Term	Jan 4 to Apr 7, 2023
Spring/Summer Term	Apr 24 to Jul 14, 2023
Fall Term Clinical Year 2 Rotations	Aug 29 to Dec 16, 2022

Winter Term Clinical Year 2 Rotations	Jan 2 to Apr 23, 2023
Spring/Summer Term Clinical Year 2 Rotations	Apr 24 to Aug 16, 2023

### Term Breaks

Event	Date
Term 1 Break	Dec 23, 2022 to Jan 2, 2023
Reading Week	Feb 21 to Feb 24, 2023
Term 2 BReak	Apr 17 to Apr 21, 2023
Summer Break (Term 3)	Jul 24, 2023 until Clinical Orientation for next year

### Examination and Test Dates

Event	Date
Fall Term Year 1	Dec 12 to 16, 2022
Winter Term Year 1	Apr 10 to 14, 2023
Spring Term Year 1	July 17 to July 23, 2023

### Convocation Ceremony

Event	Date
Bannatyne Campus	October 27, 2022

## Dates applicable to Respiratory Therapy

### Orientation

Event	Date
Year 1	Sept 1 & 2, 2022
Year 3	Aug 18, 2022

### Start and End Dates

(Includes clinical placement and classes)

Event	Date
Year 1	
Fall Term	Sept 6 to Dec 16, 2022
Winter Term	Jan 4 to Apr 21, 2023
Winter Term Clinical Placement	May 1 to 26, 2023
Year 2	
Fall Term	Sept 6 to Dec 16, 2022
Winter Term	Jan 4 to May 26, 2023
Winter Term Clinical Placement	May 29 to June 23, 2023
Year 3	
Fall Term	Aug 18 to Dec 16, 2022
Winter Term	Jan 3 to May 26, 2023

### Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Fall Term	
Years 1 & 2	Sept 20, 2022
Year 3	Sept 6, 2022
Winter Term	
Year 1	Jan 25, 2023
Year 2	Feb 1, 2023
Year 3	Jan 25, 2023

### Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Years 1 & 2	Nov 22, 2022
Year 3	Nov 15, 2022
Winter Term	
Year 1	Apr 12, 2023
Year 2	May 3, 2023
Year 3	Apr 11, 2023

### Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Fall Term Break	N/A
Winter Term Break	Please refer to dates applicable to most U of M students

### Convocation Ceremony

Event	Date
Bannatyne Campus	October 27, 2022

## Dates applicable to Social Work

### Orientation

Event	Date
Fort Garry, Inner City Field Instruction Orientation	Sept 6, 2022

### Start and End Dates

#### Field Instruction\*

Event	Date
Field Instruction*	
Fall Term	Sept 6 to Dec 16, 2022
Winter Term	Jan 9 to Apr 21, 2023

\*Note: Some students may need to complete fieldwork during the fall and/or winter term breaks.

## Dates for Summer Term

### Start and End Dates (Generally Monday to Thursday classes)

Classes on Monday, May 22<sup>nd</sup> will be made up on Friday, May 26<sup>th</sup>

Classes on Monday, July 3<sup>rd</sup> will be made up on Friday July 7<sup>th</sup>

Classes on Monday, August 7<sup>th</sup> will be made up on Friday, August 11<sup>th</sup>

May - August courses will have no classes scheduled Monday, June 19<sup>th</sup> to Friday, June 30<sup>th</sup>

Event	Date
May- June	May 8 to June 15, 2023 6 hours instruction/week
July-August	July 3 to August 11, 2023 6 hours instruction/week

May- August 3 credits	May 8 to August 11, 2023 3 hours instruction/week
May-August 6 credits	May 8 to August 11, 2023 6 hours instruction/week

## Registration and Withdrawal Dates

### Regular Registration Period

Registration start dates are to be determined by the Registrar's Office.

Event	Date
May-June	Ends May 7, 2023
July- August	Ends July 2, 2023
May- August 3 credits	Ends May 7, 2023
May-August 6 credits	Ends May 7, 2023

## Late Registration/Registration Revision Period

Students may use this period of time to make changes to their selected courses or class schedule.

Event	Date
May-June	May 8 to May 11, 2023
July- August	July 3 to July 7, 2023
May-August 3 credits	May 8 to May 18, 2023
May-August 6 credits	May 8 to May 11, 2023

## Last Date to Drop without Penalty

Last date to drop and have course excluded from transcripts; VWs will be recorded on transcripts for courses dropped after this date. There will be no refunds for courses dropped after this date.

Event	Date
May-June	May 11, 2023
July-August	July 7, 2023
May- August 3 credits	May 18, 2023
May- August 6 credits	May 11, 2023

## Voluntary Withdrawal (VW) deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from courses after this date.

Event	Date
May-June	June 1, 2023
July-August	July 27, 2023
May- August 3 credits	July 11, 2023
May-August 6 credits	July 11, 2023

## Fee Payment Deadlines

A financial penalty will be assessed on accounts with an outstanding balance after this date. (determined by Financial Services)

## Examination and Test Dates

Event	Date
Winter/Summer Term Spanning distance and online courses	July 7 to 10, 2023
May-June	June 19 to 24, 2023
July-August	August 14 to 19, 2023

May-August 3 credits	August 14 to 19, 2023
May-August 6 credits	August 14 to 19, 2023

## Challenge for Credit

Event	Date
Challenge for credit application deadline	
For classes offered Summer Term 2023	Apr 28, 2023

## Other Summer Term Start and End Dates

### Dentistry

Event	Date
IDDP Program, Year 1	May 8 to June 30, 2023

### Management

Event	Date
Management	Irregular dates Apr to Aug 2023

### Medicine

Event	Date
Year 3	May 15 to Sept 24, 2023
Year 3 Summer Break	Jul 29 to Aug 13, 2023

### Nursing

Event	Date
Regular Registration Period Ends	May 7, 2023
First Day of Classes	May 8, 2023
Late Registration/Registration Revision Period	May 8 to 19, 2023
Drop Date	May 19, 2023
Summer Term Break	June 19 to 23, 2023
Voluntary Withdrawal Date	July 21, 2023
Last Instructional Day	August 11, 2023
Summer Term Final Exam	August 14 to 19, 2023

### Pharmacy

Event	Date
Year 2 IPPE Hospital Rotation	4 week block completed between June 5 to Aug 18, 2023

### Physician Assistant Studies

Event	Date
Year 1 Summer Term	April 24 to July 14, 2023
Year 1 Summer Exams	Jul 17 to 21, 2023
Year 2 Clinical Rotations and Final Activities	Apr 24 to Aug 16, 2023

# University Policies and Procedures

- Accessibility Policy and Procedures (p. 37)
- Authorized Withdrawal Policy and Procedure (p. 44)
- Campus Alcohol Policy (p. 46)
- Conflict of Interest Between Evaluators and Students Due to Close Personal Relationships Policy and Procedure (p. 47)
- Disclosure and Security of Student Academic Records (p. 47)
- Electronic Communication with Students (p. 48)
- Final Examinations and Final Grades Policy and Procedure (p. 48)
- Grade Point Averages Policy (p. 53)
- Repeated Course Policy (p. 55)
- Respectful Work and Learning Environment and Sexual Assault Policy and Procedure (p. 57)
- Responsibilities of Academic Staff with Regard to Students Policy and Procedure (p. 75)
- Self-Declaration for Brief and Temporary Student Absences (p. 81)
- Student Discipline Bylaw and Procedure (p. 84)
- University Parking Regulations (p. 103)
- Violent or Threatening Behaviour and Procedure (p. 110)
- Voluntary Withdrawal Policy (p. 116)

## Accessibility Policy and Procedure

### Accessibility Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

#### Part I: Reason for Policy

1.1 The University of Manitoba promotes diversity, inclusion, and accessibility in our programs, employment opportunities, and in the conduct of the University's affairs. We believe in the inherent dignity of all people. We are committed to identifying and removing barriers that prevent full and meaningful participation in all aspects of campus life. The University will comply with all applicable federal, provincial, and municipal legislation with respect to accessibility and will implement the standards specified under The Accessibility for Manitobans Act ("AMA").

1.2 The purpose of this Policy is to ensure that all members of the University community, including those with disabilities, are provided with an accessible learning and working environment.

#### Part II: Policy Content

##### Disability

2.1 For the purpose of this Policy and related procedures an employee or student with a disability is a person who experiences a mental, cognitive, physical or sensory impairment for which they may require accommodation.

##### General

2.3 The University recognizes it is subject to The Human Rights Code (Manitoba) and the AMA, and as such has a duty to provide reasonable accommodation to employees and students with documented disabilities in its efforts to provide an accessible learning and working environment.

2.4 The concept of reasonable accommodation requires a partnership between the individual requiring the accommodation and the University.

All concerned should be responsible for respecting the dignity and confidentiality of the individual who requests the accommodation.

2.5 The University shall endeavor to maintain an accessible work and learning environment at all its campuses through the provision of accommodation supports and services to employees and students with disabilities.

2.6 The University will use reasonable efforts to offer reasonable accommodation in the working and learning environments. The University will also seek to identify, remove and prevent barriers to accessibility at the University.

2.7 The University will use reasonable efforts to ensure that employment opportunities and programs of study are accessible to potential employees and students with disabilities.

#### 2.8 Confidentiality

All communication regarding the accommodation of an employee's or student's disability shall be confidential and in accordance with the University's policy and procedures related to The Personal Health Information Act (Manitoba).

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Policy is required.

3.2 The Associate Vice-President (Human Resources) and Vice-Provost (Students) are responsible for the implementation, administration and review of this Policy.

3.3 All members of the University community are responsible for complying with this Policy.

### Part IV: Authority to Approve Procedures

4.1 The Board, the Senate and the Administration may approve procedures which give effect to this Policy, in accordance with their respective jurisdiction.

### Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years by the Responsible Executive Officer. The next scheduled review date for this Policy is January 1, 2025.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document

### Part VI: Effect on Previous Statements

6.1 This Policy is a new policy.

### Part VII: Cross References

7.1 This Policy, should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Student Accessibility Procedure;
- (b) Student Accessibility Appeal Procedure;

- (c) Respectful Work and Learning Environment Policy;
- (d) RWLE and Sexual Assault Procedure;
- (e) The Accessibility for Manitobans Act;
- (f) The Human Rights Code; and
- (g) The Personal Health Information Act.

## Student Accessibility Procedure

### Part I: Reason for Procedure

1.1 To set out Procedures secondary to the Policy entitled “The University of Manitoba Accessibility Policy” in connection with supporting an accessible learning environment where students with disabilities who are admitted to the University can gain access to and participate in all programs for which they are academically qualified.

1.2 While it is a guiding principle of this policy that all members of the University community share responsibility for creating and maintaining an accessible learning environment, the University has designated Student Accessibility Services (“SAS”) to facilitate the implementation of accommodations for students with documented disabilities.

1.3 The University’s duty to provide reasonable accommodation to students with documented disabilities may obligate the University to offer a modification, substitution, or waiver. Such accommodations are consistent with the obligation to administer the University’s academic programs as approved by Senate so long as

- (a) The accommodation is reasonable;
- (b) The accommodation does not create an undue hardship for the University; and
- (c) The accommodation does not compromise a defined Bona Fide Academic Requirement.

### Part II: Procedural Content

#### Definitions

2.1 The terms below have the following defined meanings for the purpose of this Procedure:

- (a) **“Documented Disability”** means a disability requiring accommodation which has been accepted as such by Student Accessibility Services.
- (b) **“Bona Fide Academic Requirement”** or “BFAR” describes the knowledge and skills that a Student must acquire and /or demonstrate in order to complete a course or program successfully. These are the essential and minimum requirements, including methods of assessment that the Student must meet. Unless otherwise specified by an academic program, BFARs may be modified. They cannot be waived or substituted.
- (c) **“Reasonable Accommodation”** means an accommodation of the special needs of any Student, if those special needs are based upon a Documented Disability, that is reasonable but not necessarily perfect in the circumstances, that does not cause undue hardship to the University, and does not compromise a Bona Fide Academic Requirement of the University. The University is under no obligation to offer a Reasonable Accommodation (or any accommodation for that matter) on compassionate or other grounds.

(d) Standard Accommodations are those Reasonable Accommodations that are widely accepted by post-secondary institutions in Canada, which includes but are not limited to examples of Modifications provided in section 2.2(a)(i-vi).

(e) Non-Standard Accommodations are considered when Standard Accommodations do not address the disability-related barriers a Student is experiencing in an academic program. Non-Standard Accommodations are those Reasonable Accommodations recommended by Student Accessibility Services and considered by the Accommodation Team in accordance with section 2.24.

(f) **“Academic Staff Member”** means a professor, instructor and/ or academic staff person who is responsible for providing the educational program or course to a Student requiring Reasonable Accommodation.

(g) **“Accessibility Advisory Committee”** (AAC) means a Faculty/ School or College committee, which is responsible for advising the respective Dean/Director on matters related to accommodation and the impact of accommodation on academic standards. Other resource personnel from within or external to the University may act as a consultant to the AAC. Since the AAC is advisory to the Dean/Director and may, at times, be in receipt of and requested to consider a Student’s personal information and personal health information, student membership on the AAC is not recommended.

(h) **“Accommodation Team”** (AT) means the Faculty/School or College team established to work with Student Accessibility Services on the provision of Reasonable Accommodation when Student Accessibility Services identifies the Reasonable Accommodation as Non-Standard or unusual for the circumstances. It is intended AT will be engaged early on in the process when necessary.

(i) **“Faculty/School”** includes:

(ii) all faculties, including constituent colleges within a faculty and constituent schools of a faculty, in which students enroll for study, and including the Extended Education Division and University 1; and

(i) all schools of the University

(j) **“SAS”** refers to the office of Student Accessibility Services at the University of Manitoba.

(k) **“Student”** means any of the following individuals:

- (i) Applicant- an individual who has submitted application for admission to the University;
- (ii) Admitted- an individual who has accepted an offer of admission to the University;
- (iii) Current- an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension.

2.2 The terms below have the following defined meanings and are types of ‘Reasonable Accommodation’:

(a) **"Modification"** means an accommodation involving a relatively minor change made to an academic requirement of a program or course. Modifications usually entail a revision to the way a Student must demonstrate required skills and knowledge, or sometimes additional assistance for a Student which does not detract from the skills and knowledge the Student must acquire. Without limitation, modifications typically include such things as:

- (i) providing additional time and quiet space to write examinations;
- (ii) alternate exam formats;
- (iii) alternate modes of course delivery or evaluation;
- (iv) provision of a note taker or interpreter;
- (v) special equipment in classrooms; and
- (vi) adaptive technology

(b) **"Substitution"** means the replacement of a certain admission criterion, prerequisite course, course/program requirement or University requirement with another that is deemed comparable. Substitutions are commonly used to effect accommodations. Senate approves required program content including courses and other elements such as breadth, depth, math and written requirements; Faculties/Schools administer these programs. In administering a program, it may become impossible, impractical, or unfeasible for a Student to complete all program requirements exactly as approved by Senate. Deans and directors, or their designates may approve Substitutions. Deans may delegate their authority to an associate Dean or department head. Such delegations should be made in writing.

(c) **"Waiver"** means the removal of a criterion for admission, progression or graduation from a program of study. A waiver is an accommodation, but should never be offered in regard to a Bona Fide Academic Requirement. A Waiver does not include a case where a requirement is replaced by another requirement (this is a Substitution), but rather is the complete elimination of a non-essential academic requirement. Deans and Directors may approve Waivers and may delegate this authority to an associate Dean. Such delegations should be made in writing. Deans and Directors do not have the authority to waive general university academic requirements that apply to all students regardless of Faculty/ College or School.

(d) **"Degree Notwithstanding a Deficiency"** means a degree that is conferred upon a Student who has not met all the Senate-approved requirements of his or her program of study and for whom no other accommodation has been approved in regard to the missing requirements. A Degree Notwithstanding a Deficiency, when approved by Senate, is the only way in which a Student may effectively obtain a Waiver of what would otherwise be considered a Bona Fide Academic Requirement. Senate alone may grant a Degree Notwithstanding a Deficiency.

## Responsibilities and Rights of Students

2.3 In order to facilitate appropriate Reasonable Accommodations of a student's disability related needs, SAS requires Students with disabilities requesting accommodations to register with the office as soon as possible.

2.4 Students registering with SAS must provide the following information in a form approved by SAS:

- (a) Name, contact information, student number; and
- (b) Documentation from a registered health professional which should include:
  - (i) Name of the registered health professional;
  - (ii) Dates of the clinical assessments performed in determining the disability and the need for Reasonable Accommodations;
  - (iii) How the disability will affect the Student in the academic setting (i.e. on campus, in classroom, lab, clinical/fieldwork and other instructional settings, and during tests and exams);
  - (iv) An indication of the duration of the Student's period of disability; and
  - (v) Recommendations for appropriate accommodations to be made for that Student, with reference to any relevant health information that may support those recommendations.

2.5 The information outlined in section 2.4 is required from the Student at time of registration and must be kept up to date.

2.6 All personal information, including personal health information, shall be kept confidential in accordance with *The Freedom of Information and Protection of Privacy Act (Manitoba)* and *The Personal Health Information Act (Manitoba)*. The information will be shared with only those who need to know in order to give effect to the Policy and assist the Student in obtaining Reasonable Accommodations.

2.7 Students must schedule a meeting with SAS staff to discuss their accommodation requirements and acquaint themselves with the SAS procedures. The following documents should be prepared by SAS staff for each Student as required:

- (a) Letter of Accommodation (outlining individual needs for distribution to instructors); and
- (b) Tests/Exams Particular Forms (to be completed for each test/exam).

2.8 As part of the registration process, Students should be made aware of the Canada Student Grant program of funding.

### The Canada Student Grant

2.9 All eligible Students will be requested to complete an application for a Canada Student Grant or notify SAS of ineligibility for the grant.

2.10 Upon receipt of a Canada Student Grant, any portion designated for services retained through the SAS office at the University should be submitted to the SAS office. A receipt will then be issued to the Student for their records.

### Responsibility and Rights of Student Accessibility Services <sup>1</sup>

2.11 Student Accessibility Services has the responsibility and right to:

- (a) Offer advice, guidance and support for Students requiring academic accommodation and assign a SAS advisor to the Student.
- (b) Request and evaluate documentation from registered health professionals provided by Students requesting assistance from SAS and assign appropriate services to meet the needs of each



Student by adapting services, courses, and programs as feasible. SAS will consider the suggestions/recommendations noted in the documentation of a disability/condition but may not agree to all of the suggestions/recommendations.

(c) On the basis of supporting documentation, make recommendations and decisions regarding Reasonable Accommodation in a timely manner. In situations where the requested academic accommodation is beyond the authority of SAS (i.e. a Substitution, Waiver, or Degree Notwithstanding a Deficiency), SAS will provide recommendations to the appropriate authority identified in section 2.2 of this procedure.

(d) Coordinate service(s) and Reasonable Accommodation(s) for Students with Documented Disabilities to ensure that their needs are addressed.

(e) Provide support to Academic Staff Members in accommodating and working with Students with Documented Disabilities.

(f) Prepare the recommended accommodation plan for the Student with Documented Disabilities and send out the Letter of Accommodation to alert Academic Staff Members to the Reasonable Accommodations in place.

(g) Inform and assist Academic Staff Members and other staff in providing Reasonable Accommodations and understanding disability issues.

(h) Ensure that the University's Bona Fide Academic Requirements will not be compromised.

(i) Work with Students and Academic Staff Members to resolve disagreements regarding recommended Reasonable Accommodation(s).

(j) Provide a focus for activity and expertise regarding disability-related Reasonable Accommodations within the University, and for liaison with outside organizations regarding accessibility issues, and programs and services for Students with disabilities at the University.

(k) Keep current with associated legislation.

(l) Prepare an annual report for the University Senate.

<sup>1</sup> Rights and Responsibilities section of policy adapted and used with permission from Mount Royal University, policy 517 Academic Accommodations for Students with Disabilities.

### **Responsibility and Rights of Academic Staff Members**

2.12 Academic Staff Members have the right to:

(a) Determine course content and methods of instruction.

(b) Ensure that the academic integrity and standards of the course are not compromised and ensure that established entry-to-practice competencies and requirements for professional disciplines are not compromised.

(c) Evaluate Student work, performance and competencies related to the course content and relevant academic standards, including failing any Student who has not passed or satisfied the course requirements.

(d) Discuss with as much notice as possible, any particular Accommodation(s) with SAS, if in the Academic Staff Member's opinion, the Accommodation(s) compromise(s) the integrity of the course.

(e) Determine the appropriate method of adapting their teaching style to meet Accommodation(s).

(f) Consult with professionals, on or off campus, to determine how best to accommodate Students with Documented Disabilities in their course.

(g) Question or challenge an Accommodation by working first with SAS and/or with any Accommodation Team or Liaison.

2.13 Academic Staff Members have the responsibility to:

(a) Support the University's commitment and obligation to accommodate Students with Documented Disabilities.

(b) Work with SAS to gain knowledge of appropriate Reasonable Accommodations(s) for Student(s).

(c) Provide Reasonable Accommodation(s) recommended by SAS without compromising the academic integrity and professional standards of the course.

(d) Maintain the Student's dignity and privacy in relation to the Documented Disability and Reasonable Accommodation.

(e) Communicate in the classes and/or course outline their willingness to meet with Students to discuss Accommodation(s) facilitated by SAS.

(f) Work with Students and SAS to resolve disagreements regarding Reasonable Accommodation(s).

(g) Work with SAS when considering Reasonable Accommodations for field trips or clinical practicum that are requested or required.

(h) Work with their Accessibility Advisory Committee and /or Accommodation Team.

### **Responsibilities and Rights of Faculties/Schools**

2.14 Each Faculty/School and/or College has the responsibility to:

(a) create and maintain an Accessibility Advisory Committee (AAC);

(b) create and maintain an Accommodation Team (AT); and

(c) ensure that the academic integrity and standards of the program are not compromised and ensure that established entry-to-practice competencies and requirements for professional disciplines are not compromised.

### **Faculty/School Accessibility Advisory Committee**

2.15 Each Faculty/School and/or College will maintain an Accessibility Advisory Committee ("AAC").

### **Membership of the Faculty/School AAC**

2.16 The Faculty/ School AAC shall consist of the following staff:

(a) The Committee Chair will be the Associate Dean or designate, as appointed by the Dean/Director;

(b) 4 -6 Academic Staff Members of the Faculty/School as appointed by the Dean/Director; and

(c) A staff representative from SAS in a consultative role.

### Responsibilities the Faculty/School AAC

2.17 The AAC will be responsible for:

- (a) Advising the Dean on all matters related to accommodations including the resolution of conflict; and
- (b) Reviewing impact of Accommodations on academic standards.

2.18 The AAC role is to:

- (a) Meet a minimum of two times per year;
- (b) Recommend Faculty/School or College policies and processes;
- (c) Receive reports from the SAS representative;
- (d) Monitor trends internally, locally, and nationally regarding appropriate accommodations/approaches to accommodation;
- (e) Support the Accommodation Team in working through the logistics of accommodations, including the acquisition of resources
- (f) Generally monitor and ensure student awareness of procedures and processes
- (g) provide an annual report to the Dean, Faculty Council and Vice-Provost(Students) (a copy of the report shall also be provided to the Coordinator of SAS).

2.19 In fulfilling its responsibilities, an AAC will establish practices to include the following:

- (a) a process to keep Student identities anonymous, unless not feasible based on the requirements of the Student;
- (b) a process to work with and support the Accommodation Team.

### Faculty/College/School Accommodation Team

2.20 Each Faculty/School will maintain an Accommodation Team ("AT"). Where a Faculty/School is comprised of constituent Colleges, a separate AT will be maintained for each College.

2.21 The AT shall consist of the following staff appointed by the Dean/Director or designate:

- (a) one or more representatives from the Faculty/School or College who have expertise and responsibilities in the area of student academic progress;
- (b) a Faculty/ School or College academic staff person who can offer insight into the essential requirements of a course/program or Bona Fide Academic Requirements; and
- (c) the SAS staff member assigned to Faculty/School or College as member of the team.

2.22 The AT may consult with or add individuals to meetings as needed (for example: an academic staff person with content or assessment expertise in a particular field of knowledge).

### Responsibilities the Faculty/College/School AT

2.23 The Accommodation Team (AT) shall have the following responsibilities:

- (a) meet as required;
- (b) review consider Non-Standard Accommodation recommendations made by Student Accessibility Services (SAS);
- (c) upon request, help SAS facilitate the implementation of approved Non-Standard Accommodations;
- (d) monitor individual student progress as needed;
- (e) report to the Dean/Director if it appears that established processes and procedures are not understood or being followed by members of the Faculty/School or College;
- (f) provide information, as appropriate and on a 'need-to know' basis, to the respective AAC and to other individuals as needed; and
- (g) at least annually provide a report to the respective AAC of matters considered by the AT, outlining de-identified information regarding the number and types of issues considered, information regarding observable trends (if any), and de-identified information regarding particularly important cases.

2.24 In fulfilling its responsibilities, an AT will establish practices to include an effective system of communications that includes SAS, instructors, Academic Staff Members, department heads and the associate Dean.

### Reconsideration Process

2.25 The reconsideration process is to review a Modification of a course or program requirement. Requests for Substitutions, Waivers, or Degree Notwithstanding a Deficiency must be referred directly to the appropriate authority identified in section 2.2 of this procedure.

2.26 Students who believe that they have not been treated fairly in accordance with this procedure or who believe they were not reasonably accommodated with the type of accommodation offered are expected first to discuss this matter with their SAS advisor.

2.27 Academic Staff Members concerned that the type of accommodation may compromise the academic integrity of a course or program of study are expected first to discuss this matter with the Student's SAS advisor.

2.28 Any matters unresolved by discussion between students, Academic Staff Members and the SAS advisor will be handled in accordance with the Student Accessibility Appeal Procedure.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a review of this procedure is required.

3.2 The Provost and Vice-President (Academic) is responsible for the communication, administration and interpretation of this procedure.

3.3 All Students and Employees are responsible for complying with this Policy.

## Part IV: Review

4.1 Formal procedure reviews will be conducted every ten (10) years. The next scheduled review date for this procedure is January 1, 2025.

4.2 In the interim this procedure may be revised or rescinded if:

- (a) the Provost and Vice-President (Academic) deems it necessary; or
- (b) the relevant Policy is revised or rescinded.

4.3 If this procedure is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:

- (a) comply with these revised procedures; or
- (b) are in turn repealed.

## Part V: Effect on Previous Statements

5.1 This procedure supersedes the following:

- (a) Accessibility for Students with Disabilities (January 26, 1995);
- (b) all previous Board/Senate procedures, and resolutions on the subject matter contained herein; and
- (c) all previous Administration procedures, and resolutions on the subject matter contained herein.

## Part VI: Cross References

6.1 This procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Accessibility Policy
- (b) Student Accessibility Appeal Procedure
- (c) General Academic Regulations, Academic Calendar

# Student Accessibility Appeal Procedure

## Part I: Reason for Procedure

1.1 To define the extent to which the University provides a process for

- (a) students to appeal decisions relating to accommodation of a disability which adversely affect them; and
- (b) Academic Staff Members to appeal decisions relating to student accommodation of a disability which would undermine Bona Fide Academic Requirements or any essential skills document developed for programs that are subject to external accreditation.

1.2 Appeals involving academic consequences related to accommodations, waiver and substitution requests and requests to graduate notwithstanding would not be heard through the Student Accessibility Procedure, but would instead be considered by Faculty/College/School appeal committees, and if not resolved, would be considered by the Senate Committee on Appeals.

## Part II: Procedural Content

### Definitions

2.1 All terms defined in the Student Accessibility Procedure shall have the same meaning in this Student Accessibility Appeal Procedure.

2.2 Students who believe that they have not been treated in accordance with the Student Accessibility Procedure, or who believe they were not reasonably accommodated by the proposed Accommodation, or who believe that the proposed Accommodation may have been different in light of new or previously unavailable information or documentation may first discuss this matter with the Coordinator of Student Accessibility

Services (SAS) and request reconsideration. In seeking to resolve any disagreement, the Faculty/School Accessibility Advisory Committee may be consulted by a party.

2.3 Academic Staff Members who believe that a proposed accommodation would compromise the defined Bona Fide Academic Requirements or essential skills document in question may request that the Coordinator of SAS reconsider the proposed accommodation. In seeking to resolve any disagreement, the Faculty/School Accommodation Team and/or Accessibility Advisory Committee may be consulted. An Academic Staff Member making the request for reconsideration must make it in writing and be able to demonstrate a substantial, viable and direct connection to the student and the proposed accommodation. In such cases, the student shall be made aware of the request for reconsideration and have the opportunity to provide their position to the Coordinator of SAS before a final determination is made.

2.4 Following a request for reconsideration from a student, an Academic Staff Member or both, the Coordinator of SAS shall issue a decision in writing to the student, the Academic Staff Member and the Faculty/School, as appropriate, in a timely manner. The Coordinator of SAS will consider any deadlines which impact the student's progress in their program and will make reasonable efforts to ensure that the timing of the decision does not delay the student's progress in their program. In the event of a conflict of interest on the part of the Coordinator of SAS, the request for initial reconsideration shall be addressed to the Executive Director of Student Support.

## Formal Appeal to Senate Committee on Academic Accommodation Appeals

2.5 If a student or an Academic Staff Member does not agree with the decision of the Coordinator of SAS regarding a request for reconsideration, they may file a formal appeal to the Senate Committee on Academic Accommodation Appeals. Such an appeal must be filed within ten (10) working days of the date on the letter of reconsideration, or until such time as the Chair may allow if a written request for extension is made prior to the deadline.

2.6 If an Appellant files for an appeal beyond the ten (10) working day period, the Appellant must provide written reasons for the delay. The Chair shall have the discretion to extend the deadline for filing the appeal if it is determined that there are special circumstances which justify or excuse the delay. The Chair's decision is final and not appealable.

2.7 The Appellant must submit all documentation that will be relied upon for the appeal and must include the following:

- (a) A completed and signed Senate Committee on Academic Accommodation Appeals – Appeal Form. The form is available at the Student Advocacy Office, The Office of the University Secretary, and on the University of Manitoba website;
- (b) A letter to the Chair clearly explaining the grounds for the appeal;
- (c) A copy of the letter of reconsideration from the Coordinator of SAS;
- (d) A copy of all the documentation submitted in regard to the request for accommodation and reconsideration;
- (e) If the Appellant intends to have a lawyer present at the appeal hearing, the name and address of the lawyer shall be provided at the time of filing the appeal.

2.8 The remedy sought of the Committee shall not differ from that requested in the reconsideration, unless extraordinary circumstances are presented.

2.9 The Appellant shall have the right to be accompanied by a spokesperson. In the event the Appellant is a student, the spokesperson may be an advocate from the Student Advocacy Office, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the university community not receiving payment for appearing, a member of the Appellant's immediate family or a lawyer. It is the Appellant's sole responsibility to ensure:

- (a) that his/her spokesperson is familiar with the Student Accessibility Appeal Procedure, the University of Manitoba Accessibility Policy and the Student Accessibility Procedure;
- (b) the adequacy of his/her representation, if any; and
- (c) to pay for his/her own lawyer's fees, if any.

2.10 Students may appeal a decision when:

#### **Failure of Judgment**

- (a) they believe the decision made by the Coordinator of SAS was incorrect in his/her judgment regarding the need for, application of, or implementation of an Accommodation.

#### **Failure of Process**

- (b) they believe the decision made by the Coordinator of SAS was incorrect due to a failure on his/her part or the part of SAS to dutifully perform the process of determining eligibility, or determining a reasonable accommodation.

#### **Failure of Information**

- (c) they believe the determination made by the Coordinator of SAS was incorrect due to a lack of information, or documentation. Generally speaking, a failure of information is informally handled by the student providing updated or requested documentation.

2.11 Academic Staff Members may appeal a decision when:

#### **Compromising Academic Standards**

- (a) they believe that the decision made by the Coordinator of SAS would undermine the Bona Fide Academic Requirements or essential skills document developed for programs that are subject to external accreditation. The onus is on the Academic Staff Member to establish how the standards or essential skills would be compromised by providing the Accommodation. If a Bona Fide Academic Requirements or an essential skills document has not been developed, no appeals shall be available to Academic Staff Members.

2.12 Academic Staff Members filing appeals under this Procedure must demonstrate a substantial, viable and direct connection to the student and the proposed accommodation.

2.13 The composition of the Senate Committee on Accommodation Appeals shall include:

- (a) Ten (10) members of the academic staff appointed by Senate for a three (3) year term;

(b) Two (2) students appointed by Senate for a one (1) year term;

(c) A Chair appointed by the President for a three (3) year term;

(d) A Vice-Chair elected from and by the academic staff members for a three (3) year term.

2.14 Upon receipt of an Appeal, the Senate Committee on Academic Accommodation Appeals will notify the Dean or delegate of the Faculty/School, SAS and the respondent of a hearing date.

2.15 Appeals will be heard by a panel of at least four (4) members: two (2) academic staff members, a student and the Chair.

2.16 The Committee panel will meet to determine whether there are grounds to hear the appeal and whether the appeal falls within the jurisdiction of the Committee.

2.17 The Chair of the panel shall only vote in case of a tie.

2.18 If the panel determines that it will hear the appeal, they shall convene a hearing with the appellant, SAS or others as soon as possible to consider submissions from all the parties and Dean, if applicable. If the appellant is an Academic Staff Member, the student shall also be invited to attend the hearing.

2.19 The Committee panel may establish rules and procedures for its hearings and meetings. Such procedures must ensure fairness for all parties and facilitate a timely resolution of appeals.

2.20 The Committee panel will determine the appropriate accommodation on the basis of the student's disability and the Bona Fide Academic Requirements or essential skills document of the course or program.

2.21 The Committee panel will provide written reasons for its decision, which shall be final and binding on all parties.

2.22 All matters considered by the Committee shall be strictly confidential.

2.23 In the consideration of appeals by the Committee panel, time shall be of the essence. Attention will be paid to any deadlines which impact the student's progress in their program and reasonable efforts will be made to ensure that the decision of the Committee does not delay the student's progress.

### **Part III: Accountability**

3.1 The Office of Legal Counsel is responsible for advising the University Secretary that a formal review of this Procedure is required.

3.2 The University Secretary is responsible for the implementation, administration and review of this Policy and is responsible for the implementation, administration and review of this Procedure.

3.3 All Students and Employees are responsible for complying with this Policy.

### **Part IV: Review**

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2028.

4.2 In the interim, these Procedures may be revised or rescinded if:

- (a) the Provost and Vice-President (Academic) deems it necessary; or

- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Parent Policy is revised or repealed

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Accessibility Policy
- (b) Student Accessibility Procedure
- (c) Senate Committee on Admission Appeals
- (d) Senate Committee on Appeals

# Authorized Withdrawal Policy and Procedure

## Authorized Withdrawal Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

### Part I: Reason for Policy

1.1 The University of Manitoba provides Students with a range of course and program withdrawal options to facilitate academic progression and personal circumstances. The purpose of this Policy is to define and establish the requirements for Authorized Withdrawal at the University of Manitoba.

### Part II: Policy Content

#### Definitions

2.1 The following terms have the following defined meanings for the purpose of this Policy and its Procedures:

- (a) "Authorized Withdrawal" or "AW" is an approved withdrawal from all courses in a given period for medical or compassionate reasons.
- (b) "Calendar" means the University's official academic calendar for the Term and Level in which a course is taught.
- (c) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (d) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.
- (e) "Leave of Absence" is a period of leave, established, administered, and approved by the Faculty/College/School that enables Students to temporarily withdraw from the University.

(f) "Level" refers to the level of the degree in which the Student is enrolled, such as undergraduate level, graduate level or non-degree level.

(g) "Official Record" is a Student's complete academic history at the University of Manitoba that is maintained by the Registrar's Office. Official Records are available in the form of an Official Transcript or a Student History.

(h) "Official Transcript" is an official document printed on secure paper and signed by the Registrar that reflects a Student's permanent record at the University of Manitoba.

(i) "Policy" means this Authorized Withdrawal Policy.

(j) "Procedure" means the Authorized Withdrawal Procedure.

(k) "Registration Revision Period" is the period after the beginning of classes within which students may withdraw from a course or courses without academic or financial penalty.

(l) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(m) "Student" refers to any person enrolled at the University.

(n) "Student History" is the complete record of a Student's activity at the University, including a record of Authorized Withdrawals, produced for internal administrative use.

(o) "Term" is a period of time defined in the Calendar within which a course for credit may be offered, including Fall, Winter and Summer Terms.

(p) "University" means The University of Manitoba.

(q) "Voluntary Withdrawal" or "VW" is a registration option that enables students to withdraw from a course or courses after the Registration Revision Period without academic penalty.

(r) "Voluntary Withdrawal Period" is the period after the Registration Revision Period within which students may voluntarily withdraw from a course or courses, as outlined in section 2.6 of the Voluntary Withdrawal Policy.

#### General

2.2 An AW is to be distinguished from other withdraw options at the University, including Voluntary Withdrawal and Leaves of Absence.

2.3 Requests for AW must be based on medical or compassionate grounds as outlined in Section 2.2 of the Procedure.

2.4 Faculties/Colleges/Schools may adopt supplemental regulations, subject to approval by Senate, pertaining to AW from their programs.

#### Scope

2.5 Requests for AW will only be considered for withdrawal from all courses in a given Term, except in extraordinary circumstances.

2.6 Requests for AW will be considered for the currently enrolled Term and for Terms dating back no more than three academic years, except in extraordinary circumstances.

2.7 Withdrawal from future Terms may be subject to supplemental regulations adopted under section 2.4 of this Policy. Students

considering withdrawing from the University for future terms should consult their Faculty/College/School of registration.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Policy.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Policy.

### Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

### Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) The Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

### Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Voluntary Withdrawal Policy, effective February 1, 1977 and revised May 13, 1993, and December 7, 2005;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

### Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Authorized Withdrawal Procedure;
- (b) Definitions of Academic Units Policy;
- (c) Voluntary Withdrawal Policy.

## Authorized Withdrawal Procedure

### Part I: Reason for Procedure

1.1 To outline the Procedures to be followed in order to comply with the Authorized Withdrawal Policy.

### Part II: Procedural Content

2.1 These Procedures are to be read in conjunction with the Policy and all terms defined in the Policy shall have the same meaning in this Procedure.

2.2 An AW may be approved under the following circumstances:

- (a) Medical Grounds. When a serious event, including but not limited to illness, accident or injury affects a student's ability to attend classes and/or complete course requirements; and/or
- (b) Compassionate Grounds. When an extraordinary personal circumstance, including but not limited to a serious illness or death of a significant person in a Student's life affects a Student's ability to attend classes and/or complete course requirements.

2.3 Ceasing to attend a class or classes will not constitute an AW. In cases where a request for an AW is not approved, a Student will remain enrolled in, and will receive a final grade for all registered courses.

### Requests for Authorized Withdrawal

2.4 Requests for AW's at the undergraduate Level must be submitted to the Dean's Office of the Faculty/College/School of registration and will be processed through the Dean's Office of the Student's Faculty/College/School of registration.

2.5 Requests for AW's at the graduate Level must be submitted to the head or graduate chair in the department in which the Student is registered, for recommendation to and approval by the Faculty of Graduate Studies.

2.6 An AW request must include the following:

- (a) Official request form: The Request for an Authorized Withdrawal Form is available through the Dean's Office of the student's Faculty/College/School of registration, or from Student Advocacy.
- (b) Letter of Explanation written by the student and detailing how the circumstances or symptoms affected their ability to attend classes and/or complete course requirements;
- (c) Supporting documentation including but not limited to:
  - (i) Letters or documents from objective, credible and verifiable health care professionals. Students are encouraged to consult the Guidelines for Health Care Professionals that are available through the Office of Student Advocacy;
  - (ii) A funeral program and/or obituary;
  - (iii) A police report or auto accident report; and/or
  - (iv) Travel receipts (e.g., airline, rail, bus).

2.7 If an AW request is approved, a Faculty/College/School may impose conditions prior to re-enrolment including, but not limited to, meeting with an academic advisor, producing a certificate of fitness to return to studies, and/or making use of support services on campus.

2.8 In limited enrolment programs, re-enrolment following an AW may be subject to availability of space.

### Responsibilities of the Student

2.9 Students are responsible for considering all implications prior to requesting an AW. Withdrawal may affect academic progression, financial aid eligibility, CIS athletic eligibility, entrance into professional programs, and/or student visa requirements.

### Responsibilities of the Faculties/Colleges/Schools

2.10 Faculties/Colleges/Schools are required to consider requests for AW and to direct the Registrar's Office to process approved requests.

2.11 Faculties/Colleges/Schools are required to notify students of the outcome of their AW request in a timely manner.

2.12 Faculties/Colleges/Schools are responsible for ensuring that the receipt, storage and disposal of personal information are appropriately managed and secured under The Personal Health Information Act (PHIA), The Freedom of Information and Protection of Privacy Act (FIPPA), and the University's Access and Privacy Policy and Procedures.

2.13 Faculties/Colleges/Schools must provide an annual report on AW applications and approvals to the Provost and Vice-President (Academic).

### Official Records

2.14 An AW will appear on a Student History but will not appear on Official Transcripts issued by the University.

### Tuition Fee Refund

2.15 The approval of an AW request will not automatically result in a tuition fee refund. Students must apply to the Registrar's Office for a refund using the Tuition Fee Appeal Form, available at the Registrar's Office.

### Appeal Process

2.16 The process for appealing an unsuccessful AW request will be subject to the policies and procedures established by the Student's Faculty/College/School of registration or enrolment.

2.17 Faculties/Colleges/Schools must disclose to the Student the length of time available to appeal an unsuccessful AW request.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Procedure is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Procedure.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2026.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the Provost and Vice-President (Academic), or Approving Body, deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;

(c) the Procedure is now in conflict with another Governing Document; and/or

(d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

(a) Voluntary Withdrawal Policy, effective February 1, 1977 and revised May 13, 1993 and December 7, 2005;

(b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and

(c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

(a) Authorized Withdrawal Policy;

(b) Access and Privacy Policy and Procedure;

(c) Guidelines for Healthcare Professionals;

(d) Tuition Fee Appeal Form

# Campus Alcohol Policy

The Policy is available online at [http://umanitoba.ca/admin/governance/governing\\_documents#university-community](http://umanitoba.ca/admin/governance/governing_documents#university-community) ([http://umanitoba.ca/admin/governance/governing\\_documents/#university-community](http://umanitoba.ca/admin/governance/governing_documents/#university-community)).

## Part I: Reason for Policy

This policy is a general statement and guideline, setting out the University's requirement for strict compliance with the Liquor Control Act (Manitoba), as well as any rules and regulations, and any successor or replacement rules and regulations, at all events and facilities at which alcohol is available. This policy is further to the Liquor Control Act (Manitoba), as well as any rules and regulations and directives issued pursuant to the Act (The "MLCC rules and regulations").

## Part II: Policy Statement

2.1 Alcohol abuse is a serious health problem and can lead to conduct that may endanger the safety of individuals and result in damage to property both on and off the University of Manitoba Fort Garry and Bannatyne Campuses (the "Campuses"). This in turn may result in legal claims involving the University and others. The purpose of this policy is to explicitly establish the general means by which alcohol abuse on the Campuses can be reduced, and to the extent possible, eliminated.

2.2 The University shall meet the policy's objective by:

2.2.1 Offering an alcohol education and awareness program within the scope of programs offered by or through Student Affairs;

2.2.2 Maintaining University guidelines with respect to the serving and consumption of alcohol on the Campuses;

2.2.3 Requiring that events and facilities at which alcohol is served on the Campuses (the "events and facilities") be managed effectively, and in accordance with the University's policy and procedures and MLCC rules

and regulations; and This policy applies broadly, and covers all events and facilities on the Campuses.

### Part III: Accountability

3.1 The University Secretary is responsible for advising the Associate Vice-President (Administration) that a formal review of the Policy is required.

3.2 The Associate Vice-President (Administration) or the Manager of Special Functions is responsible for the communication, administration and interpretation of this policy.

### Part IV: Secondary Documents

4.1 The Approving Body may approve Procedures which are secondary to and comply with this Policy.

### Part V: Review

5.1 Formal Policy reviews will be conducted every ten (10) years. The next scheduled review date for this Policy is December 18, 2019.

5.2 In the interim, this Policy may be revised or rescinded if:

- (a) the Approving Body deems necessary; or
- (b) the relevant Bylaw, Regulations or Policy is revised or rescinded.

5.3 If this Policy is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:

- (a) comply with the revised Policy; or
- (b) are in turn rescinded.

### Part VI: Effect on Previous Statements

6.1 This Policy supersedes the following:

- (a) all previous Board/Senate Policies, Procedures, and resolutions on the subject matter contained herein; and
- (b) all previous Administration Policies, Procedures, and directives on the subject matter contained herein;
- (c) Campus Alcohol Policy dated September 25, 2001

### Part VII: Cross References

- (a) Procedures: Campus Alcohol Policy
- (b) Student Discipline Bylaw
- (c) The Liquor Control Act (Manitoba)

## Conflict of Interest Between Evaluators and Students Due to Close Personal Relationships Policy and Procedure

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

The purpose of this policy is to ensure that the relationship between an evaluator and the person being evaluated is and is seen to be impartial.

## Definitions

1. An evaluator includes any person who participates, whether at first instance or on appeal, in the process of admitting or selecting a student to a course or program, determination of a student's progress or academic standing, or the receipt by a student of a prize, award or university financial support.
2. A conflict of interest means a close personal relationship between an evaluator and a student or applicant, or between evaluators, that gives rise to a reasonable apprehension of bias and, in any event, such relationships shall include that of:
  - a. parent/child;
  - b. spouses;
  - c. grandparent/grandchild;
  - d. siblings;
  - e. in-laws; or
  - f. persons living in the same dwelling unit.

## Procedures

1. Responsibility for avoiding the conflict of interest rests with the evaluator. In cases of uncertainty, the evaluator shall and the student may refer the matter for determination to the department head (or dean/director, as appropriate). The decision of the department head is subject to review by the dean/director of the academic unit.
2. Where there is a conflict of interest, the evaluator shall immediately withdraw from participation and shall inform the student concerned and the head or dean/director, as appropriate.
  - a. Where alternative sections or electives exist, the alternative must be taken, unless the dean/director concerned determines that this will create an undue hardship for the student.
  - b. Where the dean/director has exercised discretion under 2.(a) or where no alternatives exist to compulsory courses, the dean/director shall ensure fair evaluation by having another suitably qualified evaluator review the submitted material or hear the oral presentations. Where practicable, the evaluator shall not participate in setting the examination or other evaluation method.
3. Where the dean or director has a conflict of interest, the President shall name a replacement to act in the matter.
4. In the case of failure to observe these regulations, staff members will be subject to the discipline procedures provided by the appropriate collective agreement or personnel policy of the University.

## Disclosure and Security of Student Academic Records

Relevant Governing Documents are available online at: [http://umanitoba.ca/access\\_and\\_privacy/governance.html](http://umanitoba.ca/access_and_privacy/governance.html)

The University and its constituent units have a clear obligation to the student and to society concerning the disclosure and security of information about a student's academic record. All student records will be handled in accordance with The Freedom of Information and Protection of Privacy Act (Manitoba) (FIPPA) and the Personal Health Information Act (Manitoba) (PHIA) as appropriate.



# Electronic Communication with Students

The Policy is available online at [http://umanitoba.ca/admin/governance/governing\\_documents#university-community](http://umanitoba.ca/admin/governance/governing_documents#university-community) ([http://umanitoba.ca/admin/governance/governing\\_documents/#university-community](http://umanitoba.ca/admin/governance/governing_documents/#university-community)).

## Part I: Reason for Policy

1.1 The University of Manitoba (the "University") is committed to using available technology to communicate among members of the University community. It recognizes an expanding reliance on electronic communication by academic and administrative staff of the University with students due to the convenience, speed, cost-effectiveness, and environmental advantages it provides. This policy will define the proper use of electronic communications between University academic or administrative staff and students. Electronic communications may include, but are not limited to, electronic mail, electronic bulletin boards, and web sites.

1.2 When communicating by email it is important to ensure that the email is being directed to the intended individual. In an effort to protect confidentiality and privacy in electronic communications and ensure compliance with applicable legislation and policies including The Freedom of Information and Protection of Privacy Act ("FIPPA"), The Personal Health Information Act ("PHIA") and the University's Computer Usage Policy, all official electronic communications must be directed to University of Manitoba email accounts (see section 2.4).

## Part II: Policy Content

2.1 The University requires all students to activate an official University email account.

2.2 The University authorizes the use of electronic communication for official communication between university staff and students, subject only to the confidentiality and privacy provisions outlined below.

2.3 All students are expected to comply with established guidelines and procedures that define the proper use of electronic communications as outlined in this policy and in the University's Use of Computer Facilities Policy.

### Provision of University of Manitoba Email Accounts

2.4 The University will provide all students with an official University email address. University email accounts must be obtained by students through the Claim ID process at: <http://umanitoba.ca/claimid> (<http://umanitoba.ca/claimid/>). The University email account claimed will be the address listed in University directories and contact information available to staff and faculty. The University will direct all official email communications to the official University email account.

### Appropriate Use of University Email

2.5 Certain University electronic communications may be time-critical. Students are responsible for checking their University email account on a regular basis in order to stay current with University communications.

2.6 In general, electronic communications, including email, are not appropriate for transmitting sensitive or confidential information, including personal information, unless an appropriate level of security matches its use for such purposes:

(a) Confidentiality regarding student records is protected under FIPPA. All use of electronic communication, including use for sensitive or confidential information, must be consistent with the University FIPPA and PHIA Policy;

(b) Personal Health Information should not be transmitted via electronic communication at any time;

(c) Email shall not be the sole method for notification of any legal action.

### Access to University Email

2.7 Students who are not in possession of a home computer or laptop, or do not have access to a computer at work, can use computers available in campus labs or in their local library.

### Use of University Email for Instructional Purposes

2.8 Academic staff may determine the extent to which electronic communication will be used in their classes. It is highly recommended that if academic staff have electronic communication requirements and expectations, these are specified in course syllabi, and that all assignments sent electronically (including by email) be accepted only when sent from a University email account. Academic staff may reasonably expect that students are accessing their University email account, and may use electronic communication for their courses accordingly.

## Final Examinations and Final Grades Policy and Procedure

### Final Examinations and Final Grades Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

### Part I: Reason for Policy

1.1 To establish the University of Manitoba's policy relating to final examinations and grades and to oversee the procedures related to final examinations, deferred and supplemental examinations, and final grades.

#### Use of Terms

1.2 Final Examination: A final examination is a test scheduled within an examination period which serves as the final evaluation of student performance in a course.<sup>1</sup>

1.3 Deferred Examination: A deferred examination is a privilege that may be granted to a student:

(a) who is unexpectedly unable to write a final examination as scheduled; or

(b) who knows in advance that he or she is unable to write an examination at the scheduled time. Students may request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:

(i) a medical condition; or

- (ii) participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event; or
- (iii) religious obligations.

Making a false or misleading claim regarding a deferred examination may be considered an offence under the Student Discipline Bylaw. Penalties may range from a failed grade in the course to suspension or expulsion.

(c) Supplemental Examination: A supplemental examination is the rewriting of a final examination and is a privilege offered by some faculties, schools, and academic units to students who have not achieved the minimum result in required courses. Within the conditions established by the student's faculty, a student who is granted a supplemental examination is given the opportunity to rewrite a final examination. The impact of a supplemental examination on the final grade is to be determined by regulations within the faculty.

<sup>1</sup> University of Western Ontario, Academic Handbook, Issued 2009 03.

## Part II: Policy Content

2.1 The Senate has determined that each faculty or school or academic unit shall be responsible for establishing regulations governing evaluation procedures for students enrolled in its courses.

2.2 Those relevant items listed under procedures for final examinations, deferred and supplemental examinations, and final grades shall be incorporated into the regulations established by faculties, schools or academic units.

2.3 Faculties, schools, and academic units shall submit regulations and amendments to evaluation procedures to Senate for its approval via the Senate Committee on Instruction and Evaluation.

2.4 The Senate has determined that each faculty or school or academic unit shall adopt a formal policy for the appeal of grades given for term work, in that faculty or school or academic unit, that has been returned or made available to students before the last day of classes. Policies adopted by a faculty or school or academic unit, after review by the Senate Committee on Instruction and Evaluation, shall be forwarded to Senate for information.

## Deferred and Supplemental Examinations Procedures

### Part I: Reason for Procedure

1.1 To set out procedures secondary to the Policy entitled "Final Examinations and Final Grades", in connection with deferred examinations and supplemental examinations.

### Part II: Procedural Content

#### Deferred Examinations

2.1 A deferred examination is a privilege that may be granted to a student who is unexpectedly unable to write an examination as scheduled or a student who knows in advance that he or she is unable to write an examination at the scheduled time. Making a false or misleading claim may be considered an offence under the Student Discipline Bylaw. Penalties may range from a failed grade in the course to suspension or expulsion.

2.2 Students who are unable to write an examination due to an unexpected illness must file an application for a deferred examination with the advising office of the faculty, school, or academic unit (including University 1 or Extended Education) in which they are registered, setting out the reasons for the deferral. The application must normally be filed within forty-eight (48) hours of the scheduled date of the missed examination or, in a case where more than one examination was missed, within forty-eight (48) hours of the scheduled date of the last examination missed. The application must be accompanied by a medical certificate or otherwise appropriate documentation certifying the reason for the deferral, the inability of the student to write the examination at the regular scheduled time and, where possible, an indication of the period of incapacity. Based on the evidence, the Dean or Director shall decide whether the application is approved. Based on the student's ongoing incapacity or other exceptional circumstances a deferral may be granted to a student who files an application after the forty-eight (48) hour period has lapsed.

2.3 Students may request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:

- (a) participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event;
- (b) religious obligations; or
- (c) a medical condition.

Students requesting a deferred examination due to a known condition as listed above must file an application normally twenty (20) working days prior to the day of the scheduled examination with the advising office of the faculty, school, or academic unit (including University 1 or Extended Education) in which they are registered.

2.4 Initial approval of all deferred examinations by the student's faculty, school, or academic unit shall be conditional upon verification that the student has completed all required components of the course and that it is mathematically possible for the student to pass the course by writing the final examination. Approval will be rescinded if these conditions are not met.

2.5 Any students requesting a deferred examination(s) on the grounds that said examination(s) conflict(s) with vacation or holiday plans shall not normally be granted a deferral.

2.6 If a student becomes ill or receives word of a family emergency during the course of an examination and is unable to continue, the student must report at once to the Chief Invigilator, hand in the examination, and indicate either that they wish to submit their examination paper as: (1) completed; or (2) not completed and with the right to request a deferred examination. The Chief Invigilator must record all notifications. Students leaving an examination early in compliance with this section are eligible to apply for a deferred examination under the provisions of section 2.2. Only students who do not complete the examination and who notify the Chief Invigilator of the reason they cannot complete the examination shall be eligible to apply for a deferred examination.

2.7 No faculty, school, or academic unit shall have regulations that compel students to accept deferrals for any or all examinations or examination series.

2.8 When an application for a deferred examination is approved by the faculty, school, or academic unit, the head of the unit in which the course is offered, in consultation with the instructor concerned, shall schedule

the deferred examination to take place normally within thirty (30) working days from the end of the examination series from which the examination was deferred, taking into account the following:

(a) If a deferred final examination is granted for a course that is a pre-requisite to another course or courses, students may be permitted to remain registered in those affected courses. However, if the examination is written after the revision deadline and the pre-requisite course is not satisfied, the student will be withdrawn from all courses requiring it. Faculties, schools, and academic units are encouraged to schedule deferred examinations in pre-requisite courses early in a term to ensure that results are available prior to the course revision deadline.

(b) Faculties, schools, and academic units are requested to schedule deferred examinations as soon as possible for potential graduands so that final grades may be available in sufficient time to meet planned graduation deadlines.

2.9 In the event students are unable to write the examination as outlined in section 2.8 the following may take place:

(a) the deferred examination shall be written at the next scheduled examination series in which the course is offered (unless the faculty, school, or academic unit chooses to make other arrangements); subsequent requests for re-deferral may result in the student being denied registration in the current or a future term until all outstanding examination obligations have been completed;

(b) the head of the academic unit in which the course is offered, in consultation with the instructor concerned, may assign a grade without examination. In such cases, the grades shall be assigned on the basis of the term work and assignments. Faculty or School Councils shall establish the procedure by which such a decision will be implemented.

(c) the deferred examination must be written within a time frame that enables the examination to be written and graded, and, if necessary, a supplemental examination to be written and graded, before the start of the next academic term in such cases in which the progression rules of the student's program require the successful completion of an entire academic year before a student is eligible to proceed in the next academic year.

2.10 Students who, for medical reasons, withdraw from a program or receive deferred examination privileges for all final examination series, or who fail to write deferred examinations as scheduled, may be prevented by the faculty, school or academic unit from reregistration until they have established, through appropriate medical consultation, their fitness to resume studies.

### Supplemental Examinations

2.11 Supplemental Examinations are offered by some faculties to students who have not achieved the minimum result in required courses. Within the conditions established by the student's faculty, a student who is granted a Supplemental Examination is given the opportunity to rewrite a final examination. The impact of a supplemental examination on the final grade is to be determined by regulations within the faculty.

2.12 The results of supplemental examinations must be reported to the faculty or school council.

## Final Examinations Procedures

### Part I: Reason for Procedure

1.1 To set out Procedures secondary to the Policy entitled "Final Examinations and Final Grades" in connection with the method of conducting final examinations. A final examination is a test scheduled within an examination period which serves as the final evaluation of student performance in a course<sup>1</sup>.

<sup>1</sup> University of Western Ontario, Academic Handbook, Issued 2009 03.

### Part II: Procedural Content

#### Information Provided to Students

2.1 Within the first week of the academic term, students shall be informed of the method of evaluation to be used in each course, as specified in the Responsibilities of Academic Staff with Regard to Students Policy.

#### Examination General Regulations

2.2 Any test or tests, which have an aggregate value of more than 20% of the total value of the course may not be scheduled to take place during the fourteen (14) calendar days ending with the last day of classes in the term during the regular session as defined in the University General Calendar, or during the last two (2) classes of Summer Evening and the last three (3) classes for Summer Session (see Responsibilities of Academic Staff with regard to Students Policy).

2.3 No project or assignment may be announced during the periods outlined in section 2.2 unless contained in the course outline or syllabus required to be provided to all students in the course during the first week of classes (see Responsibilities of Academic Staff with Regard to Students Policy).

#### Final Examinations

2.4 No final examinations or the submission of take-home final examinations shall be scheduled to occur prior to the examination periods as described in the General Calendar except with the expressed joint consent of the Deans and Directors involved.

2.5 The weight of each question shall be clearly indicated on the examination paper.

2.6 The name of the instructor or course coordinator shall be clearly indicated on the examination paper.

2.7 Faculties, schools or academic units electing to use the services of the Registrar's Office shall adhere to the regulations outlined in section 2.8 below.

#### Regulations for Examinations Administered by the Registrar's Office

2.8 If a faculty, school, or academic unit elects to use the services of the Registrar's Office to schedule and administer examinations, the following regulations shall apply:

(a) Requests for examination scheduling must be submitted five (5) working days prior to the Revision Deadline for the term in which the course is offered.

(b) Examinations shall be of one, two or three hours duration.

(c) The faculty, school, or academic unit shall be responsible for supplying the number of examination invigilators as deemed necessary by the Registrar's Office.

(d) Examination question papers must be submitted to the Registrar's Office ten (10) calendar days in advance of the examination.

(e) The Registrar's Office shall make a record of any issues arising during the conduct of examinations and bring any matters to Senate that it deems to be significant.

(f) The responsibilities of invigilators (see section 2.14-2.16) shall apply for examinations administered by the Registrar's Office.

### Regulations for Examinations Administered by Student Accessibility Services

2.9 Examinations administered by Student Accessibility Services are additionally regulated by the Accessibility for Students with Disabilities Policy.

### Invigilation of Examination

2.10 The faculty, school, or academic unit shall supply such number of examination invigilators as is necessary. At a minimum, there shall normally be one invigilator for the first sixty (60) students and one additional invigilator for each fifty (50) students thereafter.

2.11 Invigilation of examinations shall normally be carried out by the instructor of record. In addition, university employees appointed as invigilators by a faculty, school, or academic unit may assist.

2.12 An instructor must be available during the whole of his or her examination even though he or she is not invigilating that examination.

2.13 In view of the responsibilities with which a Chief Invigilator has been charged, selection of Chief Invigilators for large examination halls shall ensure that they are persons at a more senior rank than that of teaching assistants.

### Responsibilities of Invigilators and Students

#### 2.14 Prior to an Examination

(a) Invigilators are required to report to the Registrar's Office for examinations administered by the Registrar's Office for supervisory duties not later than thirty minutes (one half hour) prior to the scheduled time for each examination. Examination material, supervisory lists, and the name of the invigilator in charge will be distributed.

(b) At each seat in the examination room, the invigilator should place the appropriate material required for the examination.

(c) The time of commencement of the examination shall be announced.

(d) Each student shall display his or her student card and photo identification and shall sign an attendance form.

#### 2.15 Conduct During Examination

(a) Any student departing from accepted procedure during an examination must be reported immediately to the Chief Invigilator.

(b) The Chief Invigilator shall allow the student to continue writing the examination except as noted in subsection 2.15(g).

(c) The Chief Invigilator shall record the nature of the alleged infraction on the form provided by the Registrar's Office.

(d) The Chief Invigilator shall complete the introductory section of the form immediately and shall ask the student to sign at that point in order that the student provides positive identification.

(e) The Chief Invigilator shall advise the student, when the identification portion of the form has been signed, of his or her right to submit a separate report on the circumstances of the incident to the Dean or Director of his or her faculty, school, or academic unit.

(f) The Chief Invigilator shall ask that the student read the form containing full details of the incident by or at the close of the examination. The form, thus completed, shall be sent to the Registrar's Office for distribution to the Dean or Director, to the student and to the invigilators involved in the incident.

(g) Notwithstanding the above, in those cases in which the behaviour of a student is disruptive to others writing the examination, or to the conduct of that examination, the Chief Invigilator may, after due warning, require that student to cease writing the examination and leave the examination hall. For such cases the form provided by the Registrar's Office must be completed, to the extent possible, in the manner outlined in the above paragraph.

(h) The Chief Invigilator shall ensure that no student leaves the room without signing the roll and submitting a script. In addition:

(i) No student shall be permitted to leave the examination room during the first thirty (30) minutes of an examination.

(ii) No student shall be permitted to enter the examination room after at least one other student who is writing the same examination has left the examination room.

(iii) A student who arrives to write an examination more than thirty (30) minutes after the start of the examination will not be permitted to write the examination.

(iv) Any student who, due to late arrival, is not permitted to write an examination will be asked to complete the appropriate form and will then be advised to contact the Office of his or her Dean or Director not later than the next business day to discuss possible alternatives.

(v) No student scheduled to write an examination in a centrally administered location who arrives late for the examination shall be permitted to write longer than the scheduled end-time for that examination. For those examinations not centrally scheduled, flexibility may be allowed at the discretion of the unit administering the examinations, but all students in a given course with commonly examined sections should have equal opportunities to take advantage of whatever flexibility is afforded.

(vi) Should a technical irregularity occur in an examination, such as misprinted information or wrong instruction, invigilators supervising the same examination in other locations must be informed. The Registrar's Office should be contacted immediately should this or other similar problems arise in an examination room.

(vii) If a student becomes ill or receives word of a family emergency during the course of an examination and is unable to continue, the student must report at once to the Chief Invigilator, hand in the examination, and indicate

either that they wish to submit their examination paper as: (1) completed; or (2) not completed and with the right to request a deferred examination. The Chief Invigilator must record all notifications. Students leaving an examination early in compliance with this section are eligible to apply for a deferred examination under the provisions outlined in section 2.2 of the Deferred and Supplemental Examinations Procedures. Only students who do not complete the examination and who notify the Chief Invigilator of the reason they cannot complete the examination shall be eligible to apply for a deferred examination.

Note: Documentation verifying the illness may be required.

### 2.16 At the Close of the Examination

- (a) The time of conclusion of the examination should be announced.
- (b) Every candidate must turn in an examination script before leaving the room to the invigilator located at the exit of the room.
- (c) A count must be made of the scripts by course number and balanced against the total for each course examination indicated on the nominal roll.
- (d) No student may be permitted to re-enter an examination room until all examination scripts have been collected.
- (e) The nominal roll must be returned to the Registrar's Office at the conclusion of the examination session. Examination scripts may be either received by the instructor(s) concerned or be delivered to the Registrar's Office.

### Audio Visual Supports

2.17 The use of audio visual supports to display examination or test questions shall be prohibited with either of the following two exceptions:

- (a) Audio visual supports may be used to display examination questions where arrangements have been made to display all questions simultaneously for the entire examination period; or
- (b) In courses where time limited identification is a legitimate and specified part of the examination process, the use of overhead or slide projectors, or other audio visual supports for display purposes shall be permitted.

Examinations using audio visual supports should not be scheduled with other examinations.

### Unauthorized Materials in Examinations

2.18 Students are not permitted to access any unauthorized materials during an examination. This includes but is not limited to calculators, books, notes, pencil cases, or any electronic device capable of wireless communication and/or storing information (e.g. computer, dictionary, translator, cell phone, pager, PDA, mp3 units, etc.). However, students may bring in such materials or devices when permission has been given by the instructor.

### Security

2.19 Students may store valuables and personal items under the desk or chair of the examination room but may not have access to these items during the examination. Items stowed under the desk or chair must not obstruct the aisles of the examination room. Students must ensure that all items required for the examination are placed on top of the desk prior to the start of the examination.

### Posting Examination Answers

2.20 Answers to examination questions shall not be posted prior to the conclusion of the examination.

### Student Access to Final Examinations

2.21 In order to allow proper feedback, students shall have an opportunity to read their own final examination script and any comments written on it prior to the deadline for a formal grade appeal, but only in the presence of the instructor or a staff member appointed by a faculty, school, or academic unit.

2.22 Notwithstanding section 2.21 above, there is no obligation upon the faculty, school, or academic unit to make machine-scored examination answer sheets available for consultation by students. It is expected that faculties, schools, and academic units will provide appropriate means of feedback to students in such circumstances and, where practicable, will encourage instructors to discuss selected questions and answers.

## Final Grades Procedures

### Part I: Reason for Procedure

1.1 To set out procedures secondary to the Policy entitled "Final Examinations and Final Grades", in connection with:

- (a) Final grades;
- (b) Incomplete grades;
- (c) Continuing grades;
- (d) Appeal of final grades; and
- (e) Grading systems.

### Part II: Procedural Content

#### Final Grades

2.1 Departments are required, subject to faculty and school regulations, to establish a procedure for the review and approval of final grades prior to submission to the Registrar.

2.2 All final grades must be submitted in accordance with the instructions received from the Registrar.

2.3 Final grades will be released to students by the Registrar's Office as they are submitted by faculties and schools, except where alternate arrangements have been made Between the Dean or Director and the Registrar.

2.4 To protect the confidentiality of students' personal and private information, neither faculties, schools, academic units, nor instructors may post or publicly release grades.

#### Incomplete Grades

2.5 A student who is unable to complete the term work prescribed in a course may apply to the instructor, on or before the End Date for the term in which the course is offered (as set out in the Academic Schedule), for consideration of a grade classification of Incomplete.

2.6 The student is expected to write the final examination if one is scheduled for the course. It is possible to request a deferred examination based upon the conditions stated in the Deferred and Supplemental Examinations Procedures.

2.7 Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work,

the instructor shall calculate the temporary grade using a zero value for incomplete work. The grade code reported will consist of the appropriate letter grade following by a space followed by the letter "I".

2.8 In addition to the grade, the recommendation should indicate the reason(s) for consideration being given, a description of the outstanding work to be completed, and the date by which the work must be submitted. The following maximum extensions are allowed:

- (a) for courses terminated in April – August 1st
- (b) for courses terminated in August – December 1st
- (c) for courses terminated in December – April 1st

2.9 If the final grade is not reported within one month of the extension deadline, the letter "I" will be dropped and the grade remains as awarded. The student's opportunity to improve the grade will have lapsed.

2.10 In no case will the satisfaction of the Incomplete requirements cause a grade to be lowered.

2.11 When specific circumstances warrant, Deans or Directors may extend the date by which an Incomplete must be cleared. Instructors must formally request such an extension prior to the elapse of the maximum deadline date. In addition, the Registrar's Office must be notified of the extension.

### Continuing Grades

2.12 For those graduate level courses which continue beyond the normal academic term, which are being taken by students enrolled in the Faculty of Graduate Studies, the instructor shall recommend that a grade of "CO" be used until such time as a final grade can be established.

### Appeal of Term Work

2.13 The appeal of term work returned or made available to students before the last day of classes shall be subject to policies and procedures established by Faculty/School Councils.

### Appeal of Final Grades

2.14 A student may enter an appeal, through the Registrar's Office, for assessment of one or more grades. A student wishing to make a final grade appeal must do so by the deadlines set for the following terms and sessions:

- (a) On a Fall Term course grade the deadline is fifteen (15) working days following the first day in January which the University is open.
- (b) On a Winter Term course grade the deadline is fifteen (15) working days after Victoria Day.
- (c) For Summer Session course grades the deadline is thirty (30) working days following the end of the examination period.
- (d) For all other programs the deadline is twenty (20) working days following the end of the examination period.

Applications must be made on a prescribed form obtainable from the Registrar's Office. On payment of the prescribed fee, such appeals shall be forwarded to the Head of the academic unit in which the course is offered.

2.15 Examination scripts are to be held by the teaching unit responsible for the course until six (6) months after the expiration of the appeal

period. In individual cases where appeals have been initiated, the holding period will be extended accordingly.

(a) Each faculty, school, or academic unit is responsible for arranging the proper processing of the appeals, and shall report the results of appeals to the Registrar's Office.

(b) Normally the re-evaluation of a grade shall be undertaken by the instructor(s) responsible for the particular course (section) in consultation with at least one other instructor – in the same or related subject area – who shall independently assess the script and/or other relevant material.

(c) In the event that an appealed grade has been awarded on the basis of an examination only, the entire script will be re-read.

(i) Except as noted below, where the grade has been awarded on the basis of an examination in combination with term work, the examination script will be re-read and term mark calculation reviewed.

(ii) In the case of grades awarded solely on the basis of term work, only the calculation will be reviewed.

(iii) In instances where term work has not been returned to students before the last day of classes, that term work shall also be re-read.

(d) Grades subject to appeal may not be lowered.

(e) In cases where appeals have resulted in a change of grade, the application fee will be refunded to the student.

(f) Teaching units shall be responsible for arranging to destroy examination scripts held by them in accordance with this section, ensuring in the process, the confidentiality of the document.

(g) The result of an appeal must be submitted to the Registrar's Office within thirty (30) days of the deadline for a student to submit the appeal being considered. In the event this deadline cannot be met, the academic unit must notify the Registrar's Office with reasons for the delay. In no case shall an appeal be delayed longer than sixty (60) days.

(h) Students who wish to appeal the results of a grade appeal based on procedural grounds must file an appeal with the office the Dean/Director of the teaching unit. A request for a review of appeal procedures must be filed within ten (10) working days of receipt of notification of the result of a Grade Appeal.

### Grading Systems

2.16 Faculties and schools may investigate various grading systems in order that a better understanding is reached regarding the relationship between grading systems, evaluation processes, student performance and program objectives. Prior to taking action based on such investigation, the faculty or school must submit its proposal to the Senate Committee on Instruction and Evaluation for its approval.

## Grade Point Averages Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

## Part I: Reason for Policy

1.1 The University of Manitoba articulates, on an institutional level, the rules for calculation of Grade Point Averages (GPA). The purpose of this Policy is to define and describe the manner in which GPA will be calculated and reported at the University.

## Part II: Policy Content

### Definitions

2.1 The following terms have the following defined meanings for the purpose of this Policy:

(a) "Authorized Withdrawal" or "AW" is an approved withdrawal from all courses in a given period for medical or compassionate reasons, granted in accordance with the Authorized Withdrawal Policy and Procedure.

(b) "Calendar" means the University's official academic calendar for the Term and Level in which a course is taught.

(c) "Challenge for Credit" is a process whereby students have the opportunity to demonstrate that they have acquired a command of the general subject matter, knowledge, intellectual and/or skills that would normally be found in a university-level course.

(d) "College" means a Professional College as defined under the Definitions of Academic Units Policy.

(e) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(f) "Letter of Permission" refers to a letter granting institutional permission for Students enrolled in a degree program at the University to take courses at other University-recognized colleges and universities. Courses may be considered for transfer credit provided that such courses are approved in advance by the Faculty/College/School in which the Student is registered.

(g) "Grade Point" refers to a numerical value assigned to a letter grade received in a course.

(h) "Level" refers to the level of the degree in which the Student is enrolled, such as undergraduate level, graduate level or non-degree level.

(i) "Official Record" is a Student's complete academic history at the University of Manitoba that is maintained by the Registrar's Office. Official Records are available in the form of an Official Transcript or a Student History.

(j) "Official Transcript" is an official document printed on secure paper and signed by the Registrar that reflects a Student's permanent record at the University of Manitoba.

(k) "Policy" means this Grade Point Averages Policy.

(l) "Procedure" or "Procedures" means a procedure approved by the Provost and Vice-President (Academic) under section 4.1 of this Policy.

(m) "Quality Points" is the grade point value of the assigned Letter Grade multiplied by the credit hours of the course.

(n) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(o) "Student" refers to any person enrolled at the University.

(p) "Student Information System" is any software application that enables the University to manage Student data.

(q) "Student History" is the complete record of a Student's activity at the University, including a record of Authorized Withdrawals, produced for internal administrative use.

(r) "Term" is a period of time defined in the Calendar within which a course for credit may be offered, including Fall, Winter and Summer Terms.

(s) "University" means The University of Manitoba.

(t) "Voluntary Withdrawal" or "VW" is a registration option that enables Students to withdraw from a course or courses without academic penalty.

### General

2.2 "Grade Point Average" or "GPA" is the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted. This calculation can be applied to determine the following types of GPA:

(a) "Cumulative Grade Point Average" or "CGPA", which is the calculated GPA of all courses, institutional and transferred, completed at the same Level;

(b) "Degree Grade Point Average" or "DGPA", which is the calculated GPA of all courses accepted for credit by the University towards a designated degree;

(c) "Sessional Grade Point Average" or "SGPA", which is the calculated GPA of all courses completed at the same Level during the Fall and Winter Terms of one academic year; and

(d) "Term Grade Point Average" or "TGPA", which is the calculated GPA of all courses completed during a single Term at the same Level.

2.3 The following rules apply in regards to calculating GPA at the University:

(a) All standard letter grades (A+ to F) will be included in GPA calculations and will be displayed on a Student's Official Record in the Term they were completed.

(b) When a Student repeats a course or takes an equivalent course or mutually exclusive course (for example, a course that may not be held for credit with the original course), all attempts at that course shall be used in the calculation of the TGPA and CGPA. Whether or not grades for repeated courses are used toward the DGPA will be subject to Faculty policy.

(c) Grades not included in GPA calculations (for example: Pass/Fail, VW, AW) are displayed on a Student's Official Record.

(d) Courses completed from another institution by means of a Letter of Permission shall be used in the calculation of CGPA and DGPA, but shall not be used in the calculation of TGPA.

(e) Courses completed by means of Challenge for Credit shall be used in the calculation of CGPA, DGPA, and TGPA.

2.4 The University of Manitoba will report CGPA, TGPA, and DGPA for all Students through the Student Information System.

2.5 Faculties/Colleges/Schools may use any of the GPA calculation methods to assess Student performance.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Policy.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Grade Point Averages Policy, effective May 1, 2006;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Authorized Withdrawal Policy;

(b) Definitions of Academic Units Policy;

(c) Voluntary Withdrawal Policy;

(d) Repeated Course Policy.

## Repeated Course Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (p. 56) will not affect registration for the 2022-2023 (including Summer Term 2023).**

## Part I: Reason for Policy

1.1 The purpose of this Policy is to:

- (a) Articulate, on an institutional level, the rules that are to be applied when a course is repeated or its equivalent taken; and
- (b) Identify the implications of repeating courses at the University.

## Part II: Policy Content

### Definitions

2.1 The following terms are defined for the purpose of this Policy:

- (a) "Calendar" means the University's official academic calendar for the Term and Level in which a course is taught.
- (b) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (c) "Cumulative Grade Point Average" or "CGPA" is the calculated GPA of all courses, institutional and transferred, completed at the same Level.
- (d) "Degree Grade Point Average" or "DGPA" refers to the calculated GPA of all courses accepted for credit by the University towards a designated degree.
- (e) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.
- (f) "Grade Point" refers to a numerical value assigned to a letter grade received in a course.
- (g) "Grade Point Average" or "GPA" is the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted.
- (h) "Initial Registration Period" refers to the period of assigned registration times within the Calendar for new and returning Students.
- (i) "Level" refers to the level of the degree in which the Student is enrolled, such as undergraduate level, graduate level or non-degree level.
- (j) "Limited Access" is a registration rule that prevents Students who have previously enrolled in a course, including courses from which they VW, from registering prior to the Limited Access Registration Date.



(k) "Limited Access Registration Date" means the date, following the Initial Registration Period, upon which Students who are subject to Limited Access can register for courses.

(l) "Policy" means this Repeated Course Policy.

(m) "Procedure" or "Procedures" means a procedure approved by the Provost and Vice-President (Academic) under section 4.1 of this Policy.

(n) "Quality Points" is the grade point value of the assigned Letter Grade multiplied by the credit hours of the course.

(o) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(p) "Student" refers to any person enrolled at the University.

(q) "Term" is a period of time defined in the Calendar within which a course for credit may be offered, including Fall, Winter and Summer Terms.

(r) "University" means The University of Manitoba.

(s) "Voluntary Withdrawal" or "VW" is a registration option that enables Students to withdraw from a course or courses without academic penalty.

## General Policy

2.2 Subject to the regulations of Faculties/Colleges/Schools, a Student may be permitted to repeat a course or its equivalent. This applies to courses that were completed with a satisfactory grade or failing grade and courses from which a Student has received a VW.

2.3 Faculties/Colleges/Schools may determine, through their respective Faculty/College/School Councils, the limits on the number of repeated courses that a Student may incur while working towards completing their degree.

2.4 Faculties/Colleges/Schools may determine, through their respective Faculty/College/School Councils, the limits of repeated courses permitted for each individual course and whether or not Students who have previously achieved satisfactory grades will be permitted to repeat a course or its equivalent.

2.5 When a Student wishes to repeat a course or to register for a course equivalent to that for which the Student has received a VW, the following rules apply:

(a) Students will be subject to Limited Access for a period of three consecutive Terms following the Term in which the course was initially completed or in which the student elected to VW;

(b) Only the attempt in which the highest grade was achieved shall be counted towards a Student's degree or diploma. Inclusion of repeated course grades in the DGPA is subject to faculty/college/school regulations; and

(c) Grades from all course completions will be used in the calculation of the CGPA, subject to the Grade Point Averages Policy.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Policy.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) College Council Bylaws
- (b) Definitions of Academic Units Policy
- (c) Faculty and School Council General Bylaw
- (d) Grade Point Averages Policy
- (e) Voluntary Withdrawal Policy

# Respectful Work and Learning Environment and Sexual Assault Policy and Procedure

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#university-community](http://umanitoba.ca/admin/governance/governing_documents#university-community) ([http://umanitoba.ca/admin/governance/governing\\_documents/#university-community](http://umanitoba.ca/admin/governance/governing_documents/#university-community)).

## Respectful Work and Learning Environment (RWLE) and Sexual Assault Policy

### Part I: Reason for Policy

1.1 The University of Manitoba does not condone behaviour that is likely to undermine the dignity, self-esteem or productivity of any of its members and prohibits any form of discrimination or harassment whether it occurs on University property or in conjunction with University-related activities. The University of Manitoba is committed to providing an inclusive and respectful work and learning environment, free from discrimination or harassment as prohibited in the Manitoba Human Rights Code; and also an environment that does not detract from the academic freedom of the University's Academic Staff.

1.2 The reason for this Policy is to:

- (a) Promote and support a respectful work and learning environment at the University; and
- (b) Ensure compliance with relevant legislation, including The Human Rights Code (Manitoba), The Workplace Safety and Health Regulation (Manitoba), and The Freedom of Information and Protection of Privacy Act (Manitoba). Part II Policy Content Definitions

### Part II

2.1 The following terms are defined for the purpose of this Policy:

- (a) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.
- (b) "Breach" means any conduct, behaviour, action or omission which is prohibited under this Policy or the Procedure, including but not limited to Discrimination, Harassment, and Reprisals.
- (c) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (d) "Complainant" means the individual or individuals bringing forward a complaint of a Breach.

(e) "Designated Officer" means the Vice-President (Administration), or designate.

(f) "Discrimination" has the same meaning as defined in section 2.5 of the Procedure.

(g) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(h) "Formal Complaint" means a complaint to the Office of Human Rights and Conflict Management that is in writing and contains, at minimum, the following information:

- (i) The name of the Complainant and contact information for the Complainant;
- (ii) A description of the alleged Breach;
- (iii) The approximate date of the alleged Breach;
- (iv) The name of the Respondent;
- (v) Contact information for the Respondent, if known;
- (vi) An indication that the Complainant desires the complaint to be the subject of an Investigation;

(i) "Harassment" refers to Personal Harassment or Human Rights Based Harassment as defined in section 2.10 of the Procedure.

(j) "Informal Resolution" means the resolution of an alleged Breach to the satisfaction of the Complainant and the Respondent, without an Investigation being completed, as per sections 2.23 to 2.32 of the Procedure.

(k) "Investigation" means a formal investigation of an alleged Breach conducted in accordance with the Procedure.

(l) "Investigator" means one or more persons appointed as the investigator of an alleged Breach, pursuant to section 2.59 of the Procedure.

(m) "Office of Human Rights and Conflict Management" or "OHRCM" means the unit appointed by the University of Manitoba to implement this Policy and the Procedure.

(n) "Policy" means this Respectful Work and Learning Environment Policy.

(o) "Preliminary Assessment" means the initial review of a Formal Complaint, in accordance with sections 2.36 to 2.41 of the Procedure.

(p) "Procedure" means the Disclosures and Complaints Procedure.

(q) "Protected Characteristic" has the same meaning as defined in section 2.6 of the Procedure.

(r) "Reasonable Accommodation" means an accommodation of the special needs of any individual or group, if those special needs are based upon any Protected Characteristic, that is reasonable but not necessarily perfect in the circumstances, that does not cause undue hardship to the University, and does not compromise bona fide and reasonable requirements of the University.

(s) "Reprisal" means any measures taken against a Complainant, Respondent, or any other person because they have asked

for advice regarding this Policy or Procedure, brought forward allegations of a Breach or made a Formal Complaint, cooperated with an Investigation, or rejected a sexual solicitation or advance. Reprisal measures include, but are not limited to:

- (i) Discipline;
- (ii) Academic penalties (in the case of students);
- (iii) Demotion;
- (iv) Termination of employment;
- (v) Termination of an academic appointment;
- (vi) Any other measure which significantly adversely affects working conditions or educational experience; and
- (vii) A threat to take any of the measures referred to above.

(t) "Respondent" means an individual or individuals accused of having caused or contributed to a Breach.

(u) "School" means a "School of the University" or a "School of the Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(v) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(w) "University" means The University of Manitoba.

(x) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.

(y) "University Matter" has the same meaning as defined in section 2.3 of the Procedure.

### **Vision for the University Community**

2.2 The University wishes to promote and support a community which embraces diversity and inclusion, provides for equity, and recognizes the dignity of all people.

2.3 Members of the University Community, including every student and employee, are entitled to a respectful work and learning environment that is:

- (a) Free from Discrimination and provides for Reasonable Accommodation;
- (b) Free from Harassment; and
- (c) Collegial and conducive to early resolution of conflict between members of the University Community.

2.4 A respectful work and learning environment is critical to the success and proper functioning of the University. Whether behaviour is viewed as respectful can be influenced by place, time, and context.

2.5 The University wishes to encourage early resolution of conflict between members of the University Community, and to provide guidance to managers, Academic Staff and Unit Heads on addressing behaviour that falls short of Harassment or Discrimination, but that nevertheless

has a negative impact on the work and learning environment for which they are responsible.

2.6 Managers, Academic Staff and Unit Heads must establish and maintain a climate of respect and demonstrate and model appropriate behaviours within any work and learning environments for which they are primarily responsible. They are expected to identify and address issues of concern in a timely manner, recognizing the value of early intervention. The University will provide training and resources to assist managers, Academic Staff and Unit Heads to fulfil these expectations.

### **Implementation of Vision**

2.7 In furtherance of its vision, the University will:

(a) Through various academic and administrative units and programs, educate members of the University Community about:

- (i) The University's general expectations for respectful conduct;
- (ii) The rights and obligations of members of the University Community under this Policy and the Procedure; and
- (iii) Best practices to facilitate early resolution of conflict between members of the University Community and/or to address behaviour that falls short of Harassment or Discrimination, but nevertheless has a negative impact on the work and learning environment.

(b) Ensure, so far as is reasonably practicable, that:

- (i) No member of the University Community is subjected to Discrimination or Harassment while participating in a University Matter;
- (ii) No employee is subjected to Discrimination or Harassment in the workplace; and
- (iii) No student is subjected to Discrimination or Harassment in the learning environment;

(c) Adopt procedures, protocols, and practices which will encourage individuals to bring concerns about an alleged Breach to an appropriate authority, including provisions to protect against Reprisal those who bring forward such allegations;

(d) Provide supports to encourage and facilitate the Informal Resolution of an alleged Breach where appropriate;

(e) Take action respecting any person under the University's direction who subjects a student, an employee, or any other member of the University Community, to Discrimination or Harassment;

(f) Supplement existing policies, procedures or bylaws, by providing a mechanism for the Investigation of an alleged Breach; and

(g) Adopt procedures, protocols and practices which promote the creation of a respectful environment, including providing guidance on how to deal with matters of concern which do not constitute Harassment or Discrimination.

2.8 The University is committed to promoting a respectful work and learning environment that is harassment and discrimination-free by encouraging all members of the University Community to:

- (a) Bring forward credible evidence of a Breach of which they become aware, to an appropriate authority;
- (b) Provide reasonable cooperation in an Investigation of a Breach; and
- (c) Be aware of their rights and responsibilities under this Policy.

2.9 Managers, Academic Staff and Unit Heads should contact the Office of Human Rights and Conflict Management and other administrative units as appropriate to receive advice and assistance in dealing with situations of concern.

2.10 Discipline may be implemented against any person whose behaviour is found to have caused or contributed to a Breach or other violation of this Policy and the Procedure.

### Awareness Building and Responsibilities

2.11 All members of the University Community have a responsibility to educate themselves as to expectations for respectful conduct and reporting requirements as outlined in this Policy and the Procedure.

2.12 All members of the University Community, especially those in an instructional, supervisory or managerial position, have a duty to educate those for whom they are responsible regarding expectations for respectful conduct which is harassment and discrimination-free, including this Policy and the Procedure. It is further the duty of such individuals to deal appropriately with allegations regarding Breaches or other violations of this Policy and the Procedure, and individuals should consult with the Office of Human Rights and Conflict Management in fulfilling this duty.

2.13 The University, through the Office of Human Rights and Conflict Management and other units as appropriate, will provide information to and respond to inquiries from the University Community regarding the University's expectations for respectful conduct that is harassment and discrimination-free and the rights and obligations of members of the University Community under this Policy and the Procedure.

### Annual Report

2.14 The OHRCM will produce and provide an annual report to the Designated Officer, outlining:

- (a) Information on activities undertaken to raise awareness and contribute to prevention including the type of activity and the number of students and staff who attend;
- (b) De-identified data regarding the number and types of Disclosures and Formal Complaints received;
- (c) De-identified data on process factors such as the number and types of Investigations conducted and whether they resulted in a finding of Breach or No Breach;
- (d) Aggregate anonymized data on Complainant and Respondent roles as either Faculty, Staff, Students, or Other at the University;
- (e) De-identified data on fairness factors such as time to process and the identity of investigators;
- (f) Information regarding observable trends and commentary on the implementation and effectiveness of the Policy; and
- (g) Other relevant information which may further the implementation of the Policy and its Procedures.

2.15 The annual report will be made available to the University Community.

### Balancing of Rights

2.16 Nothing in this Policy or the Procedure is intended to detract from the academic freedom of the University's Academic Staff.

2.17 Nothing in this Policy or the Procedure is intended to compromise the University's academic standards or the integrity of its programs. The University encourages diversity and Reasonable Accommodation, but will also vigorously defend bona fide academic requirements.

2.18 The University encourages informed debate which may, from time to time, include discussion of unpopular opinions or controversial material. Such material may be used to further scholarly pursuits, provided that the communication is compatible with the principles of human rights, the Criminal Code, and the principles of respectful behaviour embodied in this Policy and the Procedure. Opinions must be expressed in a manner which is not in Breach of this Policy or the Procedure.

2.19 This Policy and the Procedure applies to the general workplace, but is not intended to:

- (a) Regulate teaching techniques, pedagogy, research, and service; or
- (b) Limit the legitimate work of managers, supervisors and academic administrators to assign work and provide feedback on work or performance.

### Additional Protections

2.20 Confidentiality obligations required of and related to the University, Complainants, Respondents, and witnesses are found at sections 2.68 and 2.69, and sections 2.87 to 2.95 of the Procedure.

2.21 Nothing in this Policy or the Procedure is intended to discourage or prevent a member of the University Community, including students and employees, from filing a complaint with, for example, the Winnipeg Police Service, the Manitoba Human Rights Commission, professional regulatory bodies, or from exercising any other legal rights pursuant to any other law.

2.22 Nothing in this Policy or the Procedure is intended to limit the rights of an employee governed by a collective agreement. If there is any ambiguity or conflict between this Policy or the Procedure, and a collective agreement, the collective agreement will prevail.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Policy is required.

3.2 The Vice-President (Administration) is responsible for the implementation, administration and review of this Policy.

3.3 All members of the University Community are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Vice-President (Administration) may approve procedures, if applicable, which are secondary to and comply with this Policy, including but not limited to:

(a) A procedure to supplement existing policies, procedures or bylaws, by providing a mechanism for the Investigation of an alleged Breach, including regarding:

- (i) Receipt and review of Formal Complaints;
- (ii) The circumstances under which an Investigation should take place;
- (iii) Appointment of Investigators;
- (iv) Conduct of an Investigation, in accordance with the principles of procedural fairness;
- (v) Respecting the confidentiality of information collected in relation to Formal Complaints and Investigations;
- (vi) Protecting individuals against Reprisal;
- (vii) Protecting individuals against unfounded allegations of a Breach;
- (viii) Producing a report at the conclusion of an Investigation; and
- (ix) Providing information to appropriate disciplinary authorities, if necessary

(b) Generally defining the responsibility, authority and accountability of members of the University Community under this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Policy is September 29, 2023.

5.2 In the interim, this Policy may be revised or repealed by Approving Body if:

- (a) The Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;
- (b) The Policy is no longer legislatively or statutorily compliant; and/or
- (c) The Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) Comply with the revised Policy; or
- (b) Are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Respectful Work and Learning Environment Policy, dated September 1, 2016;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Disclosures and Complaints Procedure
- (b) Sexual Violence Policy
- (c) Academic Freedom and Responsibilities Policy
- (d) Access and Privacy Policy and Procedure
- (e) Definitions of Academic Units Policy
- (f) Records Management Policy and Procedure
- (g) Responsible Conduct of Research Policy
- (h) Student Discipline Bylaw
- (i) Student Non-Academic Misconduct and Concerning Behaviour Procedure
- (j) Student Discipline Appeal Procedure
- (k) Violent or Threatening Behaviour Policy and Procedure
- (l) Use of Computer Facilities Policy and Procedure
- (m) Criminal Code, RSC 1985, c C-46
- (n) The Human Rights Code, C.C.S.M. c. H175
- (o) Workplace Safety and Health Regulation, 217/2006
- (p) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175
- (q) The Personal Health Information Act, C.C.S.M. c. P33.5

## Disclosures and Complaints Procedure

### Part I: Reason for Procedure

1.1 The reason for this Procedure is to:

- (a) Promote and support a respectful work and learning environment at the University that is free from all forms of Discrimination, Harassment, and Sexual Violence;
- (b) Provide specific guidance to the University Community regarding expectations for appropriate conduct and behaviour;
- (c) Set out a fair and consistent process for responding to Disclosures or Formal Complaints of Harassment, Discrimination, Sexual Violence or Reprisal that ensures that all University Community Members will be treated with compassion, dignity, and respect; and
- (d) Ensure compliance with relevant legislation, including The Human Rights Code (Manitoba), The Advanced Education Administration Act (Manitoba) and The Workplace Health and Safety Regulation (Manitoba), The Personal Health Information Act, and The Freedom of Information and Protection of Privacy Act.

1.2 Nothing in this Procedure is intended to detract from the academic freedom of the University's Academic Staff.

1.3 Nothing in this Procedure is intended to detract from the rights and duties of those with supervisory authority to manage, and if necessary to discipline faculty, employees and students, in accordance with applicable legislation or common law, collective agreements or University policies, procedures or bylaws.

1.4 This Procedure is not intended to be an exhaustive list of all issues of conduct which may arise in the University Community.

## Part II: Procedural Content Definitions

2.1 The following terms are defined for the purpose of this Procedure:

(a) "**Academic Staff**" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or department head, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(b) "**Breach**" means any conduct, behaviour, action or omission that is prohibited under the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure, including but not limited to Discrimination, Harassment, Sexual Violence, and Reprisals.

(c) "**College**" means a Professional College as defined under the Definitions of Academic Units policy.

(d) "**Committee**" means the Human Rights Advisory Committee established pursuant to section 2.44 of this Procedure to hear appeals from Preliminary Assessment decisions.

(e) "**Complainant**" means the individual or individuals bringing forward a Formal Complaint of a Breach.

(f) "**Consent**" means the voluntary agreement to engage in physical contact or sexual activity and to continue to engage in the contact or activity. Consent means that all persons involved demonstrate, through words or actions, that they freely and mutually agree to participate in a contact or an activity. More specifically:

- (i) consent must be given at the outset and at all stages of physical contact or sexual activity;
- (ii) it is the responsibility of the initiator to obtain ongoing consent;
- (iii) consent can be withdrawn at any time by any participant;
- (iv) someone who is incapacitated cannot consent;
- (v) there is no consent where one person abuses a position of trust, power, or authority over another person;
- (vi) past consent does not imply future consent;
- (vii) a person cannot give consent on behalf of another person;
- (viii) silence or the absence of "no" is not consent;
- (ix) the absence of perceived resistance is not consent; and

(x) there is no consent when there is coercion, force, threats, or intimidation towards any person, or where there is fraud or withholding of critical information that could affect a person's decision to consent.

(g) "**Designated Officer**" means the Vice-President (Administration), or designate.

(h) "**Disclosure**" means telling someone about an instance of Discrimination, Harassment, or Sexual Violence. For the purpose of this Procedure, Disclosure means telling the Office of Human Rights and Conflict Management. Disclosure does not initiate an Investigation unless a Formal Complaint is made or the University initiates an Investigation in accordance with this Procedure.

(i) "**Discrimination**" has the same meaning as defined in section 2.5 of this Procedure.

(j) "**Faculty**" means a Faculty as defined under the Definitions of Academic Units policy.

(k) "**Formal Complaint**" means a complaint to the Office of Human Rights and Conflict Management under the Respectful Work and Learning Environment Policy or the Sexual Violence Policy that is in writing and contains, at minimum, the following information:

- (i) The name of the Complainant and contact information for the Complainant;
- (ii) A description of the alleged Breach;
- (iii) The approximate date of the alleged Breach;
- (iv) The name of the Respondent;
- (v) Contact information for the Respondent, if known;
- (vi) An indication that the Complainant desires the complaint to be the subject of an Investigation;

(l) "**Harassment**" refers to Personal Harassment or Human Rights Based Harassment, as defined in section 2.10 of this Procedure.

(m) "**Informal Resolution**" means the resolution of a Disclosure or Formal Complaint to the satisfaction of the Complainant and the Respondent, without an Investigation being completed, as per sections 2.23 to 2.32 of this Procedure.

(n) "**Interim Measures**" means changes to a University Member's living, working, or learning environment as per sections 2.49 to 2.55 of this Procedure. Interim Measures are non-disciplinary measures that may be imposed where there is reasonable cause to believe that such measures are necessary in order to protect the safety of the learning, working and living environment, discourage Reprisal, prevent further incidents, or preserve the University's ability to conduct a fair investigation. Where circumstances are urgent or immediate safety measures are required. Interim Measures may be imposed prior to the submission of a Formal Complaint.

(o) "**Intersectionality**" means a framework that promotes an understanding that individuals are shaped by interacting social locations and identities (e.g. race, sexuality, gender etc.).

(p) "**Investigation**" means a formal investigation of an alleged Breach conducted in accordance with this Procedure.

(q) "**Investigation Report**" means a report that is issued by the Investigator at the end of an Investigation, as defined at section 2.71 of this Procedure.

(r) "**Investigator**" means one or more persons appointed as the investigator of an alleged Breach, pursuant to section 2.59 of this Procedure.

(s) "**Office of Human Rights and Conflict Management**" or "**OHRCM**" means the unit appointed by the University of Manitoba to implement this Procedure and its related Policies.

(t) "**Preliminary Assessment**" means the initial review of a Formal Complaint, in accordance with sections 2.36 to 2.41 of this Procedure.

(u) "**Procedure**" refers to this Disclosures and Complaints Procedure.

(v) "**Protected Characteristic**" has the same meaning as defined in section 2.6 of this Procedure.

(w) "**Reasonable Accommodation**" means an accommodation of the special needs of any individual or group, if those special needs are based upon any Protected Characteristic, that is reasonable but not necessarily perfect in the circumstances, that does not cause undue hardship to the University, and does not compromise bona fide and reasonable requirements of the University.

(x) "**Reprisal**" means any of the following measures taken against a Complainant, Respondent, or any other person because they have asked for advice regarding the Respectful Work and Learning Environment Policy or the Sexual Violence Policy, brought forward allegations of a Breach or made a Formal Complaint, cooperated with an Investigation, or rejected a sexual solicitation or advance. Reprisal measures include, but are not limited to:

- (i) Discipline;
- (ii) Academic penalties (in the case of students);
- (iii) Demotion;
- (iv) Termination of employment;
- (v) Termination of an academic appointment;
- (vi) Any other measure which significantly adversely affects their working conditions or educational experience; and
- (vii) A threat to take any of the measures referred to above.

(y) "**Representative**" means:

- (i) in the case of a student, a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the student's immediate family, a lawyer, or support person as may be appropriate;
- (ii) in the case of an employee, a union representative, lawyer, or support person as may be appropriate; and
- (iii) In the case of another member of the University Community, a lawyer or support person as may be appropriate.

(z) "**Respondent**" means an individual or individuals accused of having caused or contributed to a Breach.

(aa) "**School**" means a "School of the University" or a "School of the Faculty", as those terms are defined under the Definitions of Academic Units policy.

(bb) "**Sexual Assault**" has the same meaning as defined in section 2.14 of this Procedure.

(cc) "**Sexual Harassment**" has the same meaning as defined in section 2.15 of this Procedure.

(dd) "**Sexual Violence**" has the same meaning as defined in section 2.13 of this Procedure.

(ee) "**Student Advocate**" is a member of the University's Student Advocacy Office who provides students with information on their rights and responsibilities, as well as assistance with resolving problems or concerns resulting from actions or decisions taken by the University.

(ff) "**Unit**" means a Faculty, College, School, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a Faculty or School is not a Unit as the term is used within this Procedure.

(gg) "**Unit Head**" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents, and Vice-Provosts with respect to their Units.

(hh) "**University**" means The University of Manitoba.

(ii) "**University Community**" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.

(jj) "**University Instituted Investigation**" means an Investigation initiated by the Designated Officer in consultation with the OHRCM as per section 2.56 to 2.58 of this Procedure.

(kk) "**University Matter**" has the same meaning as defined in section 2.3 of this Procedure.

### Scope

2.2 This Procedure applies to members of the University Community in relation to any University Matter.

2.3 "**University Matter**" means any activity, event, or undertaking in which a member of the University Community participates, which has a substantial connection to the University, such as:

- (a) University-related activities or events, including but not limited to:
  - (i) Any activity or event on property owned or controlled by the University;
  - (ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;

- (iii) The offering of any service by the University, including educational services;
- (iv) Student placements, practica, or clinical training;
- (v) University research activities, whether on or off campus;
- (vi) Student and/or employee exchanges arranged in connection with the University;
- (vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;
- (viii) University field trips, travel-study tours, service-learning activities, and similar activities.

(b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:

- (i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;
- (ii) Participation on a committee or board as a representative of the University;
- (iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;
- (iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or
- (v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

### Prohibited Conduct Discrimination

2.4 Subject to section 2.8 of this Procedure, any member of the University Community who commits Discrimination in relation to a University Matter will be subject to discipline.

2.5 "**Discrimination**" means an intentional or unintentional act or omission resulting in:

- (a) Differential treatment of:
  - (i) An individual on the basis of the individual's actual or presumed membership in or association with some class or group of persons, rather than on the basis of personal merit;
  - (ii) an individual or group on the basis of any Protected Characteristic;

(iii) an individual or group on the basis of the individual or group's actual or presumed association with another individual or group whose identity or membership is determined by any Protected Characteristic;

(b) Failure to make Reasonable Accommodation for the special needs of an individual or group, if those needs are based upon a Protected Characteristic.

2.6 "**Protected Characteristic**" means those characteristics listed in The Human Rights Code (Manitoba) (as amended from time to time) as being protected, which at the time of approval of this Procedure include:

- (a) Ancestry, including colour and perceived race;
- (b) Nationality or national origin;
- (c) Ethnic background or origin;
- (d) Religion or creed, or religious belief, religious association or religious activity;
- (e) Age;
- (f) Sex, including sex-determined characteristics or circumstances, such as pregnancy, the possibility of pregnancy, or circumstances related to pregnancy;
- (g) Gender identity;
- (h) Sexual orientation;
- (i) Marital or family status;
- (j) Source of income;
- (k) Political belief, political association or political activity;
- (l) Physical or mental disability or related characteristics or circumstances, including reliance on a service animal, a wheelchair, or any other remedial appliance or device;
- (m) Social disadvantage.

2.7 Examples of Discrimination include, but are not limited to:

- (a) Systemic discrimination resulting from interrelated actions, policies, or rules which together have a discriminatory effect;
- (b) Evaluations of performance based on a Protected Characteristic;
- (c) Establishment of a scholarship, bursary, or other award which provides for differential treatment of a particular group, subject to 2.8 of this Procedure; or
- (d) Failure to provide a Reasonable Accommodation.

2.8 Acts or omissions are not Discrimination and are permitted under this Procedure where:

- (a) There is a bona fide and reasonable cause for the acts or omission.
- (b) The acts or omissions are intended and likely to:
  - (i) Make Reasonable Accommodation for the special needs of an individual or group; or



(ii) Ameliorate the conditions of disadvantaged individuals or groups, including those disadvantaged by a Protected Characteristic.

(c) The acts or omissions are in the context of a research project that has received all required research ethics approvals.

## Harassment

2.9 Any member of the University Community who commits Harassment in relation to a University Matter will be subject to discipline.

2.10 "Harassment" refers to:

(a) "Personal Harassment", which means offensive behaviour directed towards another person and not connected to a Protected Characteristic, including but not limited to:

(i) A severe single incident or a series of incidents of objectionable and unwelcome conduct or comments, directed toward a specific person or group, which does not serve a reasonable work or academic purpose, and objectively would have the effect of creating an intimidating, humiliating, hostile or offensive work or learning environment;

(ii) Verbal or written abuse, threats or intimidation that objectively is humiliating or demeaning;

(iii) Objectionable and unwelcome conduct or comments that objectively would have the effect of impacting the mental or physical health of another person;

(b) "Human Rights Based Harassment", which means offensive behaviour connected to a Protected Characteristic, including but not limited to:

(i) A severe single incident or a series of incidents of objectionable and unwelcome conduct or comments, directed toward a specific person or group, which objectively would have the effect of creating an intimidating, humiliating, hostile or offensive work or learning environment;

(ii) Verbal or written abuse, threats or intimidation that objectively is humiliating or demeaning;

(iii) Objectionable and unwelcome conduct or comments that objectively would have the effect of impacting the mental or physical health of another person;

(iv) Sexual Harassment as per section 2.15 of this Procedure.

2.11 It is not Harassment or otherwise a violation of this Procedure for:

(a) A supervisor or manager to engage in the legitimate evaluation of the performance of an employee or contractor, or otherwise overseeing their work;

(b) Academic Staff to engage in the academic evaluation of a student's work;

(c) A good faith and formal evaluation of an Academic Staff member or supervisor to be conducted;

(d) A legitimate peer review or other critique of research or academic work to be conducted;

(e) A Unit Head to take actions intended to address or deter violent, threatening, or intimidating behaviour, or behaviour which

significantly disrupts the University and members of the University Community.

## Sexual Violence

2.12 Any member of the University Community who commits Sexual Violence in relation to a University Matter will be subject to discipline.

2.13 "Sexual Violence" means any sexual act or act targeting a person's sexuality, gender identity or gender expression, whether the act is physical or psychological in nature, that is committed, threatened or attempted against a person without the person's consent, and includes, but is not limited to, Sexual Assault, Sexual Harassment, stalking, indecent exposure, voyeurism and sexual exploitation. Sexual Violence can occur in many contexts, including in person, in writing, online, on social media, through digital communications, or via other technology.

2.14 "Sexual Assault" means any type of unwanted sexual act done by one person to another that violates the sexual integrity of the victim. Sexual Assault is characterized by a broad range of behaviours that involve the use of force, threats or control towards a person, which makes that person feel uncomfortable, distressed, frightened, threatened, and is carried out in circumstances in which the person has not freely provided Consent, or is incapable of providing Consent.

2.15 "Sexual Harassment" refers to one serious incident or a course of objectionable and unwelcome sexual conduct or comments directed at an individual that includes, but is not limited to:

(a) Unwanted sexual attention, including persistent invitations for dates, by a person who knows or ought reasonably to know that such attention is unwanted or unwelcome;

(b) Gender-based abusive or unwelcome conduct or comments that would objectively have the effect of creating an intimidating, humiliating, hostile or offensive work or learning environment;

(c) Sexist jokes or remarks, including comments regarding a person's appearance or clothing;

(d) Leering, ogling, or other sexually oriented gestures;

(e) Questions about a person's sexual history, sexuality, sexual orientation, or sexual identity by a person who knows or ought reasonably to know that the questions are unwanted or unwelcome;

(f) Offensive physical contact by a person who knows or ought reasonably to know that the contact is unwanted or unwelcome;

(g) A single sexual solicitation or advance or a series of solicitations or advances made by a person who is in a position to confer any benefit on or deny any benefit to the recipient, and who knows or ought reasonably to know that the solicitation or advance was unwanted or unwelcome; or

(h) A Reprisal for rejecting a sexual solicitation or advance.

2.16 The University recognizes that those impacted by Discrimination, Harassment, or Sexual Violence may be reluctant to come forward for fear of being sanctioned for alcohol or other substance use. The University will not subject any individual who makes a Disclosure or files a Formal Complaint to disciplinary action for alcohol or substance use occurring at or near the time of the incident(s), save for remedial measures to assist a University Community Member struggling with responsible alcohol or substance use.

## Disclosures

2.17 University Community members impacted by Discrimination, Harassment, or Sexual Violence are encouraged to Disclose their experiences to the Office of Human Rights and Conflict Management. There is no time limit or limitation period for making a Disclosure. University Community members may choose to make Disclosures for a variety of reasons, including to access supports and resources. University Community members who make Disclosures will have access to supports and resources whether or not they choose to make a Formal Complaint. A Disclosure is not a Formal Complaint and will not ordinarily initiate an Investigation. However, the University may initiate an investigation in response to a Disclosure in accordance with section 2.56 of this Procedure.

2.18 When responding to Disclosures, the Office of Human Rights and Conflict Management will refrain from questions or comments that imply judgment or blaming of the person making the Disclosure (such as questions or comments about the dress, conduct, language, emotional disposition, past sexual history, consumption of alcohol or drugs, or about the timing of the Disclosure).

2.19 A person receiving a Disclosure may be required to share the information they receive if:

- (a) A person is at risk of self-harm or of harming others;
- (b) There is imminent risk of harm to the University Community and/or the broader community;
- (c) A minor or vulnerable person is endangered; or
- (d) Disclosing the information is otherwise required by law.

## Immediate Response to Disclosures

2.20 For students affected by Discrimination, Harassment or Sexual Violence, the University will:

- (a) Provide reasonable academic accommodations (such as extensions on assignments, deferrals of exams, leaves of absences, authorized withdrawals, etc.); and
- (b) Create a safety plan in consultation with the University's Student Support Case Manager, UMSS, and other offices as appropriate.

2.21 For employees affected by Discrimination, Harassment or Sexual Violence, the University will:

- (a) Provide reasonable work accommodations, in consultation with Human Resources; and
- (b) Create a safety plan in consultation with the Unit Head, UMSS, and other offices as appropriate.

2.22 The University will maintain online resources to support those affected by Discrimination, Harassment or Sexual Violence, with links to on-campus and off-campus supports and resources that may be accessed by members of the University Community.

## Informal Resolution

2.23 Subject to section 2.32 of this Procedure, the OHRCM will provide information to both the Complainant and Respondent regarding the opportunities and resources available to facilitate Informal Resolution of an alleged Breach.

2.24 After the OHRCM has received a Disclosure or Formal Complaint, the University may, on its own initiative or at the request of the

Complainant and/or the Respondent, explore proceeding by Informal Resolution. This process may occur before or during an Investigation.

2.25 In order to engage in Informal Resolution, the Complainant(s) and Respondent(s) must all voluntarily agree to the process.

2.26 The University retains the ability to conduct an Investigation even if a Complainant and/or Respondent requests Informal Resolution.

2.27 Informal Resolution may include but is not limited to: a restorative justice process, mediation or facilitated conversation between the participants, conflict coaching, an apology, a recognition of impact statement or letter, or an expectation letter or agreement.

2.28 Information disclosed by participants during the Informal Resolution process will not be made available to Investigators.

2.29 If the Informal Resolution process results in a resolution that the Complainant(s), the Respondent(s), and the University agree to, the terms of resolution will be put in writing. A copy of the terms of resolution will be confidentially retained by the University and will not be placed in official student or employment files except where necessary to enforce the terms of resolution.

2.30 Where an Informal Resolution is conducted during an Investigation and results in terms of resolution, the University will inform the Investigator and terminate the Investigation.

2.31 Where an Informal Resolution is conducted, but does not result in a resolution, a Complainant or the University may continue or pursue a Formal Complaint under this Procedure.

2.32 The OHRCM may decide not to facilitate an Informal Resolution process where:

- (a) Successful resolution is unlikely; or
- (b) A full Investigation would better serve the University and the purposes of the Respectful Work and Learning Environment Policy and/or the Sexual Violence Policy.

## Making a Formal Complaint

2.33 Any person, whether or not a member of the University Community, may contact the OHRCM to make a Formal Complaint regarding Discrimination, Harassment, Sexual Violence, or Reprisal. Any other concerns regarding conduct or conflict that is not supportive of a respectful work and learning environment should be addressed with the appropriate manager, Academic Staff, or Unit Head responsible for the affected environment, in accordance with section 2.6 of the Respectful Work and Learning Environment Policy.

2.34 If a Complainant wishes a Disclosure to be the subject of an Investigation, the Complainant will file a Formal Complaint with the Office of Human Rights and Conflict Management. Complainants are encouraged to file Formal Complaints as soon after the reported incident(s) as possible. Early disclosure can help the University provide Complainants with supports, preserve evidence, better ensure the integrity of an Investigation, and address community safety issues in a timely manner.

2.35 Where the Complainant is not the person against whom the Breach is alleged to have occurred, the OHRCM will have discretion:

(a) Not to accept the Formal Complaint unless the person against whom the Breach is alleged to have occurred consents to the filing of the Formal Complaint; or

(b) To conduct a Preliminary Assessment and/or recommend a University Instituted Investigation.

### **Preliminary Assessment of Formal Complaints**

2.36 The OHRCM or their delegate will conduct a Preliminary Assessment for each Formal Complaint to determine whether or not an Investigation should proceed in accordance with this Procedure. Except in extenuating circumstances, the OHRCM or their delegate will complete a Preliminary Assessment of a Formal Complaint within 30 working days of receiving the Formal Complaint. The person conducting a Preliminary Assessment may not be appointed as an Investigator in that same matter.

2.37 A Formal Complaint will not proceed to Investigation, and no further action is required by the OHRCM or the University, if the Formal Complaint does not meet the requirements of section 2.1(k) of this Procedure.

2.38 Notwithstanding section 2.37 of this Procedure, the OHRCM may exercise its discretion to accept a non-compliant Formal Complaint in extenuating circumstances or to bring a non-compliant Formal Complaint to the attention of the Designated Officer for consideration of a University Instituted Investigation.

2.39 In making their Preliminary Assessment, the OHRCM will consider whether:

(a) The Formal Complaint deals with a Breach to which the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure applies;

(b) The Formal Complaint appears credible and to have been made in good faith;

(c) The issues disclosed by the Formal Complaint have not been or are not in the process of being addressed pursuant to a collective agreement or University policy, procedure or bylaw, which would deal comprehensively with the alleged Breach;

(d) The issues disclosed by the Formal Complaint would more appropriately be dealt with in another forum or through another process;

(e) An Investigation would support the principles under the Respectful Work and Learning Environment Policy and/or the Sexual Violence Policy;

(f) Proceeding to an Investigation would create any issues regarding prejudice or fairness.

2.40 The OHRCM will advise the Complainant in writing of the decision on the Preliminary Assessment. Where the Formal Complaint will not proceed to an Investigation, the OHRCM will include brief reasons for the decision. Where the Preliminary Assessment was not completed within 30 working days, the Complainant will also be informed as to the reason for the delay.

2.41 A Formal Complaint that is not accepted to proceed to an Investigation after Preliminary Assessment and appeal of the Preliminary Assessment, if any, will require no further action by the OHRCM or by the University.

### **Appeal of Preliminary Assessment**

2.42 If a Formal Complaint is dismissed on Preliminary Assessment, the Complainant may appeal the decision by giving notice and submissions in writing to the Designated Officer within 10 working days from the date of receipt of the decision. The submissions must include:

(a) An explanation of the reasons for the appeal, with specific reference to section 2.43 of this Procedure;

(b) A copy of the letter of decision; and

(c) A copy of all of the documentation submitted with the Formal Complaint (no new documentation can be submitted at this time).

2.43 The reasons for an appeal of a Preliminary Assessment include:

(a) Failure to follow the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure;

(b) Failure to reasonably consider all factors relevant to the decision being appealed;

(c) Failure to comply with applicable legislation.

2.44 In the event of an appeal of a Preliminary Assessment, the University will establish the Human Rights Advisory Committee, with a membership consisting of:

(a) The Associate Vice-President (Human Resources) or designate;

(b) The Vice-Provost (Students) or designate; and

(c) The Vice-Provost (Academic Affairs) or designate, provided that the designate holds an academic appointment with the University.

2.45 Members of the Human Rights Advisory Committee will have training in the diverse ways in which trauma and Intersectionality affect individuals.

2.46 The Designated Officer will immediately forward the Complainant's notice and submissions to the Committee, who will make a decision based on the written submissions within 10 working days. The Committee may:

(a) Decide that the Formal Complaint proceed to Investigation; or

(b) Confirm the decision not to proceed to Investigation.

2.47 The Committee will provide brief written reasons for its decision to the OHRCM and the Complainant. The decision of the Committee will be final.

2.48 The Committee may develop and adopt additional guidelines and other documents secondary to and consistent with the Respectful Work and Learning Environment Policy, the Sexual Violence Policy and this Procedure for the process of appeal of a Preliminary Assessment.

### **Interim Measures**

2.49 Interim measures involve the University making changes to a University Member's living, working, and/or learning environment before an investigation is concluded in order to protect the health and safety of all University Community members.

2.50 The need for interim measures, and which measures are imposed, will be determined on a case-by-case basis. This determination will take into account the circumstances of each situation, and where practicable, may include separate consultations with the Respondent and the

Complainant on whether Interim Measures are required and, if so, what Interim Measures would be just and appropriate. This consultation may be conducted by telephone or email, and must proceed expeditiously.

2.51 Interim measures will not be construed as a decision or discipline against the Complainant or Respondent. Interim measures will not be weighed against the Respondent in a disciplinary process.

2.52 A Respondent shall provide in a timely manner to the Designated Officer all documents and any other information on any civil protection orders or criminal charges and conditions, including changes in these orders, charges and conditions such as bail or conditions of release, related to the incidents giving rise to Interim Measures or a Formal Complaint.

2.53 When warranted, the Violent or Threatening Behaviour Policy may be invoked either alone or in conjunction with Interim Measures under this Policy.

2.54 Where Interim Measures are just and appropriate, the University will advise the Complainant and Respondent in writing of the decision to impose Interim Measures and brief reasons for this decision.

2.55 The Complainant or Respondent may apply to the Designated Officer requesting that the Interim Measures be revised or withdrawn if reasonable cause to believe that such measures, as originally imposed, are no longer just and appropriate. The Designated Officer may revise or withdraw Interim Measures and the Complainant and Respondent shall be advised by the Designated Officer of any changes to Interim Measures.

### University Instituted Investigation

2.56 The Designated Officer may at their discretion initiate a University Instituted Investigation.

2.57 When initiating a University Instituted Investigation the Designated Officer will consider situations where:

- (a) A non-compliant Formal Complaint was received, but disclosed a risk to the safety and security of the University Community;
- (b) Matters come to the attention of the Designated Officer that lead them to believe there is risk to the safety and security of the University Community; or
- (c) It would be more practical to conduct a single broad Investigation rather than addressing a series of Formal Complaints from two or more individuals.

2.58 The Designated Officer will be deemed to be the Complainant for the purpose of the University Instituted Investigation. The University Instituted Investigation will proceed in the same manner as an Investigation under this Procedure, with methods of Investigation adapted as necessary to meet the circumstances.

### Appointment of Investigator

2.59 If a Formal Complaint proceeds to an Investigation, the OHRCM will arrange for the appointment of an Investigator. Having regard to the seriousness and nature of the Formal Complaint, the OHRCM may appoint either an employee of the University or an external party to act as the Investigator for a particular Formal Complaint, provided that the Investigator:

- (a) Has skills and/or experience desirable in the circumstances, including trauma-informed investigation training;

(b) Would be able to conduct the Investigation in an unbiased manner; and

(c) Would not be placed in a conflict of interest.

### Investigation

2.60 The Investigator may conduct the Investigation in any manner they deem appropriate, having regard to the nature of the particular Formal Complaint, and any admissions made during the Investigation. This may include some or all of:

- (a) Interviewing witnesses;
- (b) Reviewing documents and records (both paper and electronic);
- (c) Reviewing photographs, audio, and video recordings;
- (d) Examining physical evidence;
- (e) Arranging for testing of physical evidence;
- (f) With the consent of participants, arranging for medical or psychological evaluations; and/or
- (g) Submitting a Third Party Data Access Request Form to Information Services and Technology (IST) regarding accessing electronic systems in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act. IST will consult with Access and Privacy Office to facilitate the request.

2.61 The Complainant and Respondent will cooperate fully with the Investigator and provide any information reasonably required by the Investigator upon request. The Investigator may set reasonable timelines within which individuals must respond to requests for cooperation with the Investigation

2.62 Where an individual does not provide reasonable cooperation with the Investigation due to refusal, retirement, severance of the work or student relationship with the University, or termination of their status as a University Community Member, the Investigator will continue the Investigation and make a determination on the information available.

2.63 The Investigator will conduct the Investigation in accordance with section 2.94 of this Procedure and in accordance with the principles of procedural fairness. The Investigator will ensure that:

- (a) The Complainant is provided an opportunity to explain and provide evidence in support of the Formal Complaint;
- (b) The Respondent is informed of the alleged Breach and provided a copy of the Formal Complaint;
- (c) Complainants and Respondents are provided with a copy of all written replies to their own response, subject to section 2.94 of this Procedure;
- (d) The Respondent is provided a reasonable opportunity to respond to the allegations. The Respondent is provided access to documentary and other evidence as required to ensure procedural fairness, subject to section 2.94 of this Procedure;
- (e) The Respondent is informed that subject to section 2.94 of this Procedure, the Complainant will be provided with a copy of the Respondent's written reply for response;

(f) While strict rules of evidence do not apply, appropriate weight is given to evidence based on its credibility and reliability;

(g) Witnesses (including Complainants and Respondents) may consult with and be accompanied by a Representative; and

(h) No cross-examination is conducted as part of the Investigation.

2.64 An Investigation must normally be completed within 90 working days of the Formal Complaint being assigned to the Investigator. The OHRCM will at all times strive to oversee the completion of an Investigation within a timeline of no more than 90 working days, however in the event of extenuating circumstances the Investigator may make a request to the OHRCM for an extension of time of up to 30 working days. An Investigator may make multiple requests for extensions, but extensions may only be granted if reasonable in the circumstances and at a maximum of 30 working days at a time. The OHRCM will inform the Complainant and Respondent in writing of any extensions granted.

2.65 At the conclusion of an Investigation, the OHRCM will inform the Complainant, Respondent, and witnesses that the Investigation has concluded.

2.66 If, prior to or in the course of an Investigation:

(a) The Complainant, the Respondent, and the University engage in Informal Resolution and agree to signed terms of resolution, the University will inform the Investigator and terminate the Investigation;

(b) The Investigator discovers that another Breach may have occurred, that others may have been involved in the Breach or there has been an allegation or act of Reprisal, the Investigator may make a request to the OHRCM to expand the scope of the Investigation;

(c) A subsequent Formal Complaint, a cross-complaint, allegation or act of Reprisal, or other matters related to a violation of the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure is raised that would most efficiently be dealt with through the same Investigation, the OHRCM may expand the scope of the Investigation; or

(d) It becomes clear that a Formal Complaint would be most efficiently and thoroughly investigated jointly with another organization or institutional partner, the OHRCM may make arrangements for a joint Investigation, so long as reasonable provisions are made to respect confidentiality.

2.67 Nothing in this Procedure is intended to prevent any Unit Head, or member of the University Community in an instructional, supervisory or managerial position, from taking reasonable and immediate steps to:

(a) Address a situation dangerous to the health or safety of the University Community in accordance with University policy, procedure, bylaw, and/or applicable collective agreements;

(b) Protect University funds or assets;

(c) Take interim measures intended to facilitate a thorough Investigation, discourage Reprisal, or prevent future Breaches; and/or

(d) Manage, and if necessary discipline, employees or students in accordance with University policy, procedure, bylaw, and/or applicable collective agreements.

### Confidentiality During an Investigation

2.68 Confidentiality allows for the protection of the integrity of an Investigation, ensuring that it is free of bias. Confidentiality also provides an environment that allows for candid participation, while ensuring the protection of privacy, including the names of the Complainants and Respondents. During an Investigation, the Complainant (except where the Complainant is the Designated Officer), the Respondent, and witnesses involved must keep confidential:

(a) The existence and nature of the Investigation; and

(b) Any information or documentation obtained as a result of the Investigation; which information may only be disclosed to those who reasonably need to know. The confidentiality obligations in this section will continue until the Designated Officer has provided to the Complainant and the Respondent a summary of the Investigator's findings and/or the Investigation Report. This section is not intended to limit the distribution of Investigation Reports as contemplated by this Procedure.

2.69 Notwithstanding section 2.68, the Complainant, the Respondent, and witnesses involved in the Investigation may:

(a) Obtain confidential advice and/or direction in relation to the Formal Complaint from a Representative;

(b) Disclose information to others only to the extent reasonably necessary to gather evidence and, in the case of a Respondent, to make full answer and defense to the allegations; and

(c) Use information obtained independent of the Investigation in any other forum.

### Investigation Reports

2.70 At the conclusion of the Investigation, the Investigator will issue an Investigation Report to the Designated Officer and the OHRCM.

2.71 "**Investigation Report**" means a report that is issued by the Investigator at the end of an Investigation and contains, at a minimum, the following information:

(a) A summary of the Formal Complaint and the alleged Breach;

(b) A summary of the process and key timelines in the Investigation;

(c) A summary of the key evidence obtained through the Investigation, including a summary of the response of the Respondent;

(d) An indication of which key evidence was considered credible and reliable;

(e) A conclusion as to whether, on a balance of probabilities, a Breach has been committed, including identification of which individuals caused or contributed to the Breach;

(f) A summary of the Investigator's reasons for the conclusion. Finding of No Breach of Policy 2.72 If it is determined that no Breach has occurred, the Designated Officer will provide a summary and/or the Investigation Report (either in original or redacted form), within 30 working days of receiving the Investigation Report, to the Complainant and the Respondent and all such other individuals as the Designated Officer reasonably believes necessary to protect or restore the reputation of the Respondent.

2.73 No further action will be taken and no record of the Formal Complaint will be placed on the University's official employment file or student file for the Respondent.

2.74 No record of the Formal Complaint shall be kept in the Complainant's official employment file or student file unless it is determined that the Formal Complaint was frivolous or vexatious. The University may take disciplinary action against a Complainant in cases where frivolous or vexatious Formal Complaints are submitted. A Formal Complaint made in good faith is not frivolous or vexatious because it did not result in a finding of Breach.

### Finding of Breach of Policy

2.75 If it is determined that a Breach has occurred, the Designated Officer will provide a summary and/or the Investigation Report (either in original or redacted form), within 30 working days of receiving the Investigation Report, to:

- (a) The Complainant;
- (b) The Respondent;
- (c) All such individuals as the Designated Officer believes necessary to decide upon and implement discipline, mitigation steps, or remedial measures, in accordance with section 2.80;
- (d) All such individuals as the Designated Officer believes necessary to implement due diligence to prevent similar or related Breaches in the future; and
- (e) Any other person required in order to comply with legal, regulatory, or contractual obligations.

2.76 When determining whether to provide an Investigation Report, a redacted Investigation Report, or a summary of an Investigation Report, the Designated Officer will consider whether the Investigation Report contains private information, including but not limited to personal health information, or sensitive content, including but not limited to the details of an incident of Sexual Violence.

2.77 In each case the summary or Investigation Report will include, at a minimum, a summary of any evidence provided by the recipient and enough information for the recipient to understand the essential nature of the Formal Complaint and whether or not a Breach was found to have occurred. Such information will be provided in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

### Discipline

2.78 Individuals who are found in Breach of the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure will be subject to disciplinary action as follows:

- (a) Where the individual is an employee, the discipline will be implemented in accordance with applicable legislation, common law, collective agreements, and University policies, procedures or bylaws.
- (b) Where the individual is a student, the discipline will be implemented in accordance with the Student Discipline Bylaw and the Student NonAcademic Misconduct and Concerning Behaviour Procedure.
- (c) Where the individual is neither an employee nor a student, the VicePresident (Administration) or designate may make any

determination regarding the individual's continued access to the University in accordance with the Vice-President (Administration) Bylaw.

2.79 When an individual will be subject to discipline under this Procedure, the Designated Officer will deliver the Investigation Report to the appropriate disciplinary authority.

2.80 Before deciding on or implementing any discipline, mitigation steps or other remedial measures, the Designated Officer may seek advice and guidance from appropriate individuals, which may include: the Provost and Vice-President (Academic), the OHRM, the Associate Vice-President (Human Resources), the Vice-Provost (Academic Affairs), the Director of Staff Relations, the Vice-Provost (Students), and legal counsel.

2.81 Anonymous material may only be considered in a disciplinary decision where it would not violate the principles of procedural fairness, and it would not conflict with an applicable collective agreement.

### Appeal of Discipline

2.82 The Respondent may appeal a disciplinary decision made against them as follows:

- (a) If the Respondent is an employee, either in accordance with the appropriate grievance process defined by any applicable collective agreement, or via the Appeals by Academic or Support Staff Excluded From Bargaining Units Policy and Procedures;
- (b) If the Respondent is a student, in accordance with the Student Discipline Bylaw and the Student Discipline Appeal Procedure.

### Protection from Reprisal, Retaliation or Threats

2.83 A Complainant, Respondent, witness, and/or any other person who has sought advice regarding the Respectful Work and Learning Environment Policy, the Sexual Violence Policy or this Procedure, who has brought forward allegations of a Breach, who has made a Formal Complaint, who has cooperated with an Investigation, or who has rejected a sexual solicitation or advance, is entitled to be protected from a Reprisal. An individual may complain about an alleged Reprisal, to the Investigator or to the OHRM.

2.84 Upon observing or being notified of an alleged Reprisal the Investigator may:

- (a) Investigate and include in their Investigation Report information relating to the alleged Reprisal; and
- (b) If the matter is urgent, refer the information regarding an alleged Reprisal to the OHRM.

2.85 Where the Investigator refers an urgent allegation of Reprisal to the OHRM, the OHRM will advise the Designated Officer and any such persons as believed necessary to discuss and implement Interim Measures. Interim Measures may be implemented by the Designated Officer or the Unit Head.

2.86 Notwithstanding the definition of Reprisal at section 2.1(x) of this Procedure, it is not a Reprisal for the University to implement discipline or take other measures against an individual if:

- (a) The individual has interfered or attempted to interfere with an Investigation;
- (b) The person made a Formal Complaint or allegations in bad faith;

(c) The individual has materially breached the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure; or

(d) Discipline is otherwise warranted against the individual under applicable legislation or common law, or University policies, procedures or bylaws.

### Confidentiality

#### Obligations of Confidentiality by University with respect to Allegations of Breach

2.87 The University will not disclose the name of a Complainant, Respondent, or witness or the circumstances related to a Formal Complaint of alleged Breach except in compelling circumstances where disclosure would not be unreasonable, such as when disclosure is:

(a) Necessary to investigate the Formal Complaint or take corrective or interim measures with respect to the Formal Complaint; or

(b) Required by law.

2.88 Notwithstanding section 2.87, in rare cases that involve groups or impact entire Faculties or Departments, the University may disclose limited information regarding the ongoing process to members of the impacted group, Faculty or Department.

#### Obligations of Confidentiality by University with respect to the Findings of an Investigation

2.89 The University will not disclose the name of a Complainant or the circumstances related to the findings of an Investigation except in compelling circumstances where disclosure would not be unreasonable, such as when disclosure is:

(a) Necessary to address a risk to the health or safety of an individual or group;

(b) Necessary to comply with insurance requirements; or

(c) Required by law.

2.90 The University may disclose the name of the Respondent or the circumstances related to the findings of an Investigation for the following purposes:

(a) In order to address a risk to the health or safety of an individual or group;

(b) In order to prevent further or continuing Breaches or other violations of the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure;

(c) In order to obtain confidential professional advice;

(d) In order to report a legal offense to appropriate authorities;

(e) In order to respond to legal or administrative proceedings;

(f) In order to comply with any legal or contractual requirement;

(g) In accordance with the Access and Privacy Policy; or

(h) As otherwise permitted or as necessary to give effect to the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure.

#### Information to be minimum amount necessary for purpose

2.91 Personal information that is disclosed in respect of an alleged Breach or a finding of Breach will be the minimum amount necessary for the purpose.

#### Obligations of Confidentiality by the Complainant, Respondent, and Witnesses

2.92 During an Investigation, the Complainant, Respondent, and witnesses have confidentiality obligations as per section 2.68 of this Procedure.

2.93 Once the Investigation has been concluded, the Complainant, the Respondent, and witnesses involved in the Investigation remain subject to any confidentiality obligations as required by The Freedom of Information and Protection of Privacy Act.

#### Obligations of Confidentiality by the Investigator

2.94 The Investigator, in conducting the Investigation, will comply with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act with respect to personal information and personal health information collected, used and disclosed in the course of the investigation. Where the Investigator is unsure of whether they may disclose particular information, they may seek advice from the University's Access and Privacy Office. The Investigator will further ensure that individuals participating in the Investigation are only provided with such information as they may reasonably need to know to be effective witnesses, or in the case of a Respondent, to address the allegations in accordance with the principles of procedural fairness and natural justice. Subject to section 2.63 of this Procedure, individuals participating in the Investigation may not necessarily be provided with all information, documentation, the names of Complainants or other witnesses, or the full text of the Formal Complaint.

2.95 The Investigator will advise all persons involved with an Investigation as to their obligations regarding confidentiality, and the protections available to them under this Procedure.

#### Records Management

2.96 The University will maintain files with respect to each Formal Complaint in accordance with the Records Management policy and procedure.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Procedure is required.

3.2 The Vice-President (Administration) is responsible for the implementation, administration and review of this Procedure.

3.3 All members of the University Community are responsible for complying with this Procedure.

### Part IV: Review

4.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Procedure is September 29, 2023.

4.2 In the interim, this Procedure may be revised or repealed if:

(a) the Approving Body deems it necessary or desirable to do so;

(b) this Procedure is no longer legislatively or statutorily compliant;

(c) this Procedure is now in conflict with another Governing Document; and/or

(d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

(a) RWLE and Sexual Assault Procedure, effective January 27, 2009, and revised September 1, 2016;

(b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and

(c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI : Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

(a) Respectful Work and Learning Environment Policy

(b) Sexual Violence Policy

(c) Definitions of Academic Units Policy

(d) Records Management Policy and Procedure

(e) Access and Privacy Policy and Procedure

(f) Third Party Data Access Request Form

(g) Student Discipline Bylaw

(h) Student Non-Academic Misconduct and Concerning Behaviour Procedure

(i) Student Discipline – Appeal Procedure

(j) Use of Computer Facilities Policy and Procedure

(k) Violent or Threatening Behaviour Policy and Procedure

(l) Vice-President (Administration) Bylaw

(m) The Human Rights Code, C.C.S.M. c. H175

(n) The Workplace Safety and Health Regulation 217/2006

(o) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175

(p) The Personal Health Information Act, C.C.S.M. c. P33.5

(q) The Advanced Education Administration Act, C.C.S.M. c. A6.3

experienced Sexual Violence or who have received a Disclosure of Sexual Violence;

(c) Set out a consistent process for responding to a Disclosure or Formal Complaint of Sexual Violence that ensures that:

(i) This Policy and the Procedure will be implemented with transparency and fairness;

(ii) Those impacted by Sexual Violence will be treated with respect and compassion, as part of a trauma-informed approach that is rooted in Intersectionality and that is culturally sensitive to a person's background, perceptions and experiences;

(iii) A clear explanation of the process, options available to Complainants, Respondents, and other participants, and potential outcomes of the process are made available through the Office of Human Rights and Conflict Management; and

(iv) Members of the University Community understand their respective rights and obligations when reporting or responding to Sexual Violence;

(d) Reduce instances of Sexual Violence through education and training;

(e) Set out the means by which this Policy will be reviewed and reported; and

(f) Ensure that the University is compliant with relevant legislation, including The Human Rights Code (Manitoba), The Workplace Health and Safety Regulation (Manitoba), The Freedom of Information and Protection of Privacy Act, The Personal Health Information Act, and The Advanced Education Administration Act (Manitoba).

1.2 Guiding Principles:

(a) Sexual Violence is a significant and systemic social issue that can affect anyone at the University. Anyone can experience Sexual Violence, regardless of a person's social position or position within the University structures, hierarchies, and power relations.

(b) Some individuals or groups experience Sexual Violence at higher rates and in different ways. Every effort to address Sexual Violence should be grounded in Intersectionality and an understanding that each person's experience will be affected by many factors.

(c) Sexual Violence does not exist or operate in isolation. Acts of Sexual Violence can also be acts of discrimination. University strategies to address Sexual Violence are therefore informed by broader equity, diversity and anti-discrimination initiatives and goals.

## Sexual Assault Policy

### Part I: Reason for Policy

1.1 The reason for this Policy is to:

(a) Articulate the University's Guiding Principles around Sexual Violence;

(b) Provide a framework for the provision of guidance, assistance and support to members of the University Community who have

## Part II: Policy Content

### Definitions

2.1 The following terms are defined for the purpose of this Policy:

(a) "**Breach**" means any conduct, behaviour, action or omission which is prohibited under this Policy or the Procedure, including but not limited to Sexual Violence and Reprisals.

(b) "**College**" means a Professional College as defined under the Definitions of Academic Units policy.



(c) "**Complainant**" means the individual or individuals bringing forward a Formal Complaint of a Breach.

(d) "**Consent**" means the voluntary agreement to engage in physical contact or sexual activity and to continue to engage in the contact or activity. Consent means that all persons involved demonstrate, through words or actions, that they freely and mutually agree to participate in a contact or activity. More specifically:

- (i) consent must be given at the outset and at all stages of physical contact or sexual activity;
- (ii) it is the responsibility of the initiator to obtain ongoing consent;
- (iii) consent can be withdrawn at any time by any participant;
- (iv) someone who is incapacitated cannot consent;
- (v) there is no consent where one person abuses a position of trust, power, or authority over another person;
- (vi) past consent does not imply future consent;
- (vii) a person cannot give consent on behalf of another person;
- (viii) silence or the absence of "no" is not consent;
- (ix) the absence of perceived resistance is not consent; and
- (x) there is no consent when there is coercion, force, threats, or intimidation towards any person, or where there is fraud or withholding of critical information that could affect a person's decision to consent.

(e) "**Designated Officer**" means the Vice-President (Administration), or designate.

(f) "**Disclosure**" means telling someone about an instance of Sexual Violence. For the purpose of this Policy and the Procedures, a Disclosure means telling the Office of Human Rights and Conflict Management. A Disclosure does not initiate an Investigation unless a Formal Complaint is made or the University initiates an Investigation in accordance with the Procedure.

(g) "**Faculty**" means a Faculty as defined under the Definitions of Academic Units policy.

(h) "**Formal Complaint**" means a complaint to the Office of Human Rights and Conflict Management that is in writing and contains, at minimum, the following information;

- (i) The name of the Complainant and contact information for the Complainant;
- (ii) A description of the alleged Breach;
- (iii) The approximate date of the alleged Breach;
- (iv) The name of the Respondent;
- (v) Contact information for the Respondent, if known; and
- (vi) An indication that the Complainant desires the Formal Complaint to be the subject of an Investigation.

(i) "**Informal Resolution**" means the resolution of an alleged Breach to the satisfaction of the Complainant and the Respondent, without

an Investigation being completed, as per sections 2.23 to 2.32 of the Procedure.

(j) "**Intersectionality**" means a framework that promotes an understanding that individuals are shaped by interacting social locations and identities (e.g. race, sexuality, gender etc.).

(k) "**Investigation**" means a formal investigation of an alleged Breach conducted in accordance with the Procedure.

(l) "**Investigator**" means one or more persons appointed as the investigator of an alleged Breach, pursuant to section 2.59 of the Procedure.

(m) "**Office of Human Rights and Conflict Management**" or "**OHRCM**" means the unit appointed by the University of Manitoba to implement this Policy and the Procedure.

(n) "**Policy**" means this Sexual Violence policy.

(o) "**Preliminary Assessment**" means the initial review of a Formal Complaint, in accordance with sections 2.36 to 2.41 of the Procedure.

(p) "**Procedure**" means the Disclosures and Complaints Procedure.

(q) "**Reprisal**" means any measures taken against a Complainant, Respondent, or any other person because they have asked for advice regarding this Policy or Procedure, brought forward allegations of a Breach or made a Formal Complaint, cooperated with an Investigation, or rejected a sexual solicitation or advance. Reprisal measures include, but are not limited to:

- (i) Discipline;
- (ii) Academic penalties (in the case of students);
- (iii) Demotion;
- (iv) Termination of employment;
- (v) Termination of an academic appointment;
- (vi) Any other measure which significantly adversely affects working conditions or educational experience; and
- (vii) A threat to take any of the measures referred to above.

(r) "**Respondent**" means an individual or individuals accused of having caused or contributed to a Breach.

(s) "**School**" means a "School of the University" or a "School of the Faculty", as those terms are defined under the Definitions of Academic Units policy.

(t) "**Sexual Assault**" means any type of unwanted sexual act done by one person to another that violates the sexual integrity of the victim. Sexual Assault is characterized by a broad range of behaviours that involve the use of force, threats or control towards a person, which makes that person feel uncomfortable, distressed, frightened, threatened, and is carried out in circumstances in which the person has not freely provided Consent, or is incapable of providing Consent.

(u) "**Sexual Harassment**" refers to one serious incident or a course of objectionable and unwelcome sexual conduct or comments directed at an individual that includes, but is not limited to:

- (i) Unwanted sexual attention, including persistent invitations for dates, by a person who knows or ought reasonably to know that such attention is unwanted or unwelcome;
- (ii) Gender-based abusive or unwelcome conduct or comments that would objectively have the effect of creating an intimidating, humiliating, hostile or offensive work or learning environment;
- (iii) Sexist jokes or remarks, including comments regarding a person's appearance or clothing;
- (iv) Leering, ogling, or other sexually oriented gestures;
- (v) Questions about a person's sexual history, sexuality, sexual orientation, or sexual identity by a person who knows or ought reasonably to know that the questions are unwanted or unwelcome;
- (vi) Offensive physical contact by a person who knows or ought reasonably to know that the contact is unwanted or unwelcome;
- (vii) A single sexual solicitation or advance or a series of solicitations or advances made by a person who is in a position to confer any benefit on or deny any benefit to the recipient, and who knows or ought reasonably to know that the solicitation or advance was unwanted or unwelcome; or
- (viii) A Reprisal for rejecting a sexual solicitation or advance.

(v) "**Sexual Violence**" means any sexual act or act targeting a person's sexuality, gender identity or gender expression, whether the act is physical or psychological in nature, that is committed, threatened or attempted against a person without the person's consent, and includes, but is not limited to, Sexual Assault, Sexual Harassment, stalking, indecent exposure, voyeurism and sexual exploitation. Sexual Violence can occur in many contexts, including in person, in writing, online, on social media, through digital communication or via other technology.

(w) "**UMSS**" means the University of Manitoba's Security Services.

(x) "**University**" means The University of Manitoba.

(y) "**University Community**" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.

(z) "**University Instituted Investigation**" means an Investigation initiated by the Designated Officer in consultation with the OHRM, pursuant to sections 2.56 to 2.58 of the Procedure.

(aa) "**University Matter**" has the same meaning as defined in section 2.3 of the Procedure.

## Responsibilities of the University and University Community University Commitments

2.2 The University of Manitoba is committed to maintaining a healthy and safe work, learning, living and social environment for all members of the University Community. The University is therefore committed to:

- (a) Making available and actively promoting programs to educate and train University Community Members on the prevention of and response to Sexual Violence;
- (b) Encouraging individuals to bring concerns about an alleged Breach to an appropriate authority, and protecting those who bring forward such allegations against Reprisal;
- (c) Supporting those impacted by Sexual Violence through academic, nonacademic, workplace, medical and other supports or accommodations as required;
- (d) Ensuring a trauma-informed and Intersectional approach to the implementation of this Policy and the Procedure;
- (e) Ensuring barriers to the application of this Policy are reduced, including that individuals will not be asked to repeat their accounts more than is necessary for the implementation of this Policy or the Procedure;
- (f) Ensuring that following a Disclosure or Formal Complaint of Sexual Violence, all University Community members are treated with compassion, dignity and respect, and provided with support throughout the process;
- (g) Responding to Sexual Violence in a manner that minimizes retraumatization and promotes recovery, empowerment, and selfdetermination, subject to the limits of confidentiality and the University's community safety obligations as set out in this Policy and the Procedure. This includes providing options to those impacted by Sexual Violence on how to access supports, and allowing them to determine whether or not to proceed with a Formal Complaint process;
- (h) Providing information and exploring opportunities to engage in Informal Resolution where appropriate, and in matters involving members of a collective bargaining unit, where permissible under collective agreements.
- (i) Investigating Formal Complaints of Sexual Violence when appropriate, and ensuring that Investigations represent a fair process for all Complainants, Respondents and other participants; that they respect procedural fairness; and where applicable, are in accordance with the collective agreement provisions;
- (j) Respecting the privacy of those impacted by Sexual Violence in accordance with the Procedure;
- (k) Implementing appropriate interim measures that ensure fairness;
- (l) Monitoring and updating University Policies and protocols to ensure that they remain effective and in line with other existing Policies and best practices; and
- (m) Implementing this Policy and the Procedure with transparency and accountability, including applying this Policy to all members of the University Community regardless of a person's social position, or position within the University structures or hierarchies.

### University Community Responsibilities

2.3 Promoting a safe work and learning environment is a responsibility of all members of the University Community. The University calls for all members of the University Community especially those in instructional, supervisory, or managerial positions to:

- (a) Practise consent and respect, and create a culture in which consent and respect are foundational principles and practices;
- (b) Bring forward evidence of a Breach of which they become aware to the OHRCM;
- (c) Deal appropriately with allegations regarding Breaches or other violations of this Policy or Procedure;
- (d) Provide reasonable cooperation in an Investigation of a Breach;
- (e) Be aware of their responsibilities and educate themselves as to the expectations and reporting requirements under this Policy and the Procedure; and
- (f) Educate those for whom they are responsible regarding expectations for safe and respectful conduct, including this Policy and Procedure.

### Education, Training and Support Education and Training

2.4 Education is a fundamental aspect of the University's commitment to preventing and addressing Sexual Violence. The University will provide access to coordinated education and training programs pertaining to preventing, responding to, and raising awareness about Sexual Violence. Proactive measures that will be taken by the University will be grounded in the Guiding Principles of this Policy, and include implementing and actively promoting education, awareness, prevention, and training programs, in multiple fully accessible formats and tailored to multiple audiences.

### Sexual Violence Steering Committee

2.5 The University will establish an institution-wide committee comprising representatives from various stakeholder groups within the University Community in order to advise the University on issues relating to Sexual Violence, including training programs and educational initiatives.

### Supports

2.6 The University will communicate and provide resources to support Complainants, Respondents, witnesses, and those affected by Sexual Violence, including online resources with links to on-campus and off-campus supports and resources that may be accessed by members of the University Community.

### Autonomy in Disclosure and/or Formal Complaints

2.7 A person who has made a Disclosure and/or Formal Complaint of Sexual Violence has autonomy in decision-making, and in particular with respect to whom to Disclose, whether to make a Formal Complaint, whether to pursue recourse to the criminal or civil justice systems, and whether to access available supports and accommodations.

2.8 Notwithstanding section 2.7, the University also has an obligation to protect the University Community from harm. The University reserves the right to initiate a University Instituted Investigation in accordance with the Procedure, and/or to report the incident to local police services, even without the consent of the Complainant, if it believes that the safety of the University Community is at risk or if reporting is required by law (for example, in the case of a minor). In cases where actions are

taken without the consent of the Complainant, reasonable efforts will be made to preserve the anonymity of the Complainant. In addition, the Complainant will be notified of the actions the University intends to take in order that the Complainant can work with the University to take any additional safety precautions that may be required as a result of the University's actions.

### Investigations and Discipline Investigation

2.9 The University will investigate allegations of Sexual Violence in relation to a University Matter in accordance with the Procedure.

### Discipline

2.10 Any member of the University Community who breaches this Policy or the Procedure in relation to a University Matter will be subject to discipline under the Procedure.

### Annual Report

2.11 The OHRCM will produce and provide an annual report to the Designated Officer, outlining:

- (a) Information on activities undertaken to raise awareness and contribute to prevention, including the type of activity and the number of students and staff who attend;
- (b) De-identified data regarding the number and types of Disclosures and Formal Complaints received;
- (c) De-identified data on process factors such as the number and types of Investigations conducted and whether they resulted in a finding of Breach or No Breach;
- (d) Aggregate anonymized data on Complainant and Respondent roles at the University;
- (e) De-identified data on fairness factors such as time to process and the identity of investigators;
- (f) Lessons learned flowing from after-action reviews;
- (g) Information regarding observable trends and commentary on the implementation and effectiveness of the Policy; and
- (h) Other relevant information which may further the implementation of the Policy and its Procedures.

2.12 The annual report will be made available to the University Community.

### Additional Protections

2.13 The OHRCM will provide Complainants with a clear explanation of the available processes and options. Nothing in this Policy or the Procedure is intended to discourage or prevent a member of the University Community, including students and employees, from filing a complaint with, for example, the Winnipeg Police Service, the Manitoba Human Rights Commission, professional regulatory bodies, or from exercising any other legal rights pursuant to any other law.

2.14 In addition, nothing in this Policy or the Procedure is intended to limit the rights of an employee governed by a collective agreement. If there is any ambiguity or conflict between this Policy or the Procedure, and a collective agreement, the collective agreement will prevail.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Policy is required.

3.2 The Vice-President (Administration) is responsible for the implementation, administration and review of this Policy.

3.3 All members of the University Community are responsible for complying with this Policy.

### Part IV: Authority to Approve Procedures

4.1 The Vice-President (Administration) may approve procedures, if applicable, which are secondary to and comply with this Policy, including but not limited to:

- (a) A procedure to supplement existing policies, procedures or bylaws, by providing a mechanism for the Investigation of an alleged Breach, including regarding:
  - (i) Receipt and review of complaints;
  - (ii) The circumstances under which an Investigation should take place;
  - (iii) Appointment of Investigators;
  - (iv) Conduct of an Investigation, in accordance with the principles of procedural fairness and natural justice;
  - (v) Respecting the confidentiality of information collected in relation to Formal Complaints, Disclosures and Investigations;
  - (vi) Protecting individuals against Reprisal;
  - (vii) Protecting individuals against unfounded allegations of a Breach;
  - (viii) Producing a report at the conclusion of an Investigation; and
  - (ix) Providing information to appropriate disciplinary authorities, if necessary.
- (b) Generally defining the responsibility, authority and accountability of members of the University Community under this Policy.

### Part V: Review

5.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Policy is September 29, 2023.

5.2 In the interim, this Policy may be revised or repealed by the Approving Body if:

- (a) The Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;
- (b) The Policy is no longer legislatively or statutorily compliant; and/or
- (c) The Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) Comply with the revised Policy; or

- (b) Are in turn repealed.

### Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Sexual Assault Policy effective September 1, 2016;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

### Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Disclosures and Complaints Procedure
- (b) Respectful Work and Learning Environment Policy
- (c) Definitions of Academic Units Policy
- (d) Access and Privacy Policy and Procedure
- (e) Records Management Policy and Procedure
- (f) Student Discipline Bylaw
- (g) Student Non-Academic Misconduct and Concerning Behaviour Procedure
- (h) Student Discipline Appeal Procedure
- (i) Use of Computer Facilities Policy and Procedure
- (j) Violent or Threatening Behaviour Policy and Procedure
- (k) Criminal Code, RSC 1985, c C-46
- (l) The Human Rights Code, C.C.S.M. c. H175
- (m) The Workplace Safety and Health Regulation 217/2006
- (n) The Advanced Education Administration Act, C.C.S.M. c. A6.3
- (o) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175
- (p) The Personal Health Information Act, C.C.S.M. c. P33.5

## Responsibilities of Academic Staff with Regard to Students Policy and Procedure

### Responsibilities of Academic Staff with Regard to Students Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

## Part I: Reason for Policy

1.1 The purpose of this Policy is to identify the responsibilities and the discharge of responsibilities of Academic Staff with regard to Students.

1.2 Some of the responsibilities and discharge of responsibilities with regard to Students will rest with the individual Academic Staff member, while others are collective responsibilities to be exercised at the Unit level.

1.3 This Policy and its related Procedures will identify and differentiate the responsibilities and discharge of responsibilities of Academic Staff at the individual and at the Unit level.

## Part II: Policy Content

### Definitions

2.1 The following terms are defined for the purpose of this Policy and related Procedures:

(a) "Academic Administrator(s)" refers to the senior academic administrative positions having direct management authority over a Unit and the primary responsibility for the management functions of planning, directing, controlling and evaluating a large group of the University's resources within that Unit, including people, budgets and facilities. This category includes, without limitation, a dean, director, associate dean, assistant dean, chair or head of department, insofar as they perform managerial duties.

(b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(c) "Policy" means this Responsibilities of Academic Staff with regard to Students Policy.

(d) "Procedure" means the Responsibilities of Academic Staff with regard to Students Procedure.

(e) "Student" or "Students" refer to any person or group of people registered as a student at the University of Manitoba.

(f) "Unit" refers to a department, centre, institute, college, faculty, school, or other academic division to which Academic Staff is assigned to teach Students.

(g) "University" refers to the University of Manitoba.

### Individual Responsibilities of Academic Staff

2.2 The responsibilities of Academic Staff with regard to Students are primarily instructional and scholarly, and secondarily administrative. They may include:

- (a) Undergraduate, graduate, and continuing education instruction;
- (b) Scholarly attainment through personal study and research, including:

- (i) study for purposes of academic self-improvement or course improvement; and

- (ii) keeping abreast of new developments, and research that leads to a useful or original contribution toward the advancement of knowledge and understanding;

- (c) Administrative work as required for instructional and scholarly activities including committee work at various levels (departmental, faculty, university) as it pertains directly or indirectly to Students.

2.3 In discharging their instructional responsibilities, Academic Staff shall act with academic integrity, scholarly competence and pedagogic effectiveness by providing Students with pertinent materials in a timely manner, by maintaining familiarity with current policies and responsibilities regarding privacy, copyright and human rights, and by adhering to regulations pertaining to instruction, reporting and evaluation at the University.

2.4 Academic Staff are to provide an effective learning environment and to endeavor to ensure fair and consistent treatment of Students by periodically reviewing and updating all course content and outlines.

### Collective Responsibilities of Academic Staff

2.5 The collective responsibilities of the Academic Staff shall be exercised through the actions of the Unit's administrators and councils, including:

- (a) Periodically reviewing all courses and programs, including course descriptions, to ensure that the material to be presented is current and appropriate and the academic calendar information is clear and accurate;

- (b) Ensuring that the Unit's policies, regulations and procedures provide for fair and consistent treatment of Students;

- (c) Ensuring the academic calendar reflects any Unit-specific policies that may affect the Student's academic progress;

- (d) Making available on the University's website and providing for convenient student access to information on supplemental Unit-specific regulations, policies and procedures; and

- (e) Providing the names of instructors assigned to teach particular courses and sections at the earliest possible opportunity.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) is responsible for the implementation, administration and review of this Policy.

3.3 Academic Staff and Academic Administrators are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) or the Approving Body may approve Procedures, if applicable, which are secondary to and comply with this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Responsibilities of Academic Staff with Regard to Students Policy, revised June 25, 1998;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Responsibilities of Academic Staff with Regard to Students Procedure;
- (b) Conflict of Interest Policy;
- (c) Conflict of Interest between Evaluators and Students due to Close Personal Relationships Policy;
- (d) Electronic Communication with Students Policy;
- (e) Final Examination and Final Grades Policy;
- (f) Grade Point Averages Policy;
- (g) Intellectual Property Policy
- (h) Multi-Sectioned Courses Policy;
- (i) Respectful Work and Learning Environment Policy;
- (j) Sexual Assault Policy;
- (k) Responsible Conduct of Research Policy;
- (l) Student Advocacy Office Policy;
- (m) Student Discipline Bylaw;
- (n) Student Academic Misconduct Procedure;

(o) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(p) Student Discipline Appeal Procedure;

(q) Teaching Evaluation Policy;

(r) The University of Manitoba Accessibility Policy;

(s) University Health Services Policy;

(t) Voluntary Withdrawal Policy.

## Responsibilities of Academic Staff with Regard to Students Procedure

### Part I: Reason for Policy

1.1 To set out Procedures secondary to the Policy entitled "Responsibilities of Academic Staff with Regard to Students".

### Part II: Procedural Content

#### Definitions

2.1 These procedures are to be read in conjunction with the Responsibilities of Academic Staff with regard to Students policy, and all capitalized terms used herein shall have the meaning given to them in the Policy. In addition, the following definitions shall apply:

(a) "Academic Administrator(s)" refers to the senior academic administrative positions having direct management authority over a Unit and the primary responsibility for the management functions of planning, directing, controlling and evaluating a large group of the University's resources within that Unit, including people, budgets and facilities. This category includes, without limitation, a dean, director, associate dean, assistant dean, chair or head of department, insofar as they perform managerial duties.

(b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(c) "Calendar" means the University of Manitoba's official Academic Calendar under which the course is taught.

(d) "Policy" means the Responsibilities of Academic Staff with regard to Students policy.

(e) "Procedure" means this Responsibilities of Academic Staff with regard to Students procedure.

(f) "Student" or "Students" refer to any person or group of people registered as a student at the University of Manitoba.

(g) "Unit" refers to a department, centre, institute, college, faculty, school, or other academic division to which Academic Staff is assigned to teach Students.

(h) "Working Days" will mean Monday through Friday excluding days in which the University is closed.

## Individual Responsibilities of Academic Staff

### 2.2 Course Content

Academic Staff shall teach their courses with due alignment to Calendar descriptions.

### 2.3 Policies

Academic Staff will maintain familiarity with current University, faculty, school, college and/or department policies regarding plagiarism and cheating, examination impersonations, student access to final examination scripts, student discipline, grade appeals, copyright and intellectual property, and the University policy regarding the respectful work and learning environment, as posted on the University's "Governing Documents" website;

### 2.4 Regulations

Academic Staff will adhere to regulations pertaining to the format, content and conduct of courses and laboratories, including regulations pertaining to examinations, term work, grades, and related matters as outlined in University and Unit guidelines.

### 2.5 Course Outline

Academic Staff shall provide a course outline to every Student registered in their class and review its content within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time). The course outline will contain at minimum the following information:

- (a) Name of Academic Staff;
- (b) Office number, telephone number and email address;
- (c) A list of the learning materials that the Student is required to obtain including the appropriate referencing style guide(s) acceptable to the Academic Staff and/or discipline in courses where it is relevant;
- (d) A course description outlining the topics to be covered and goals of the course, which could include the bona fide academic requirements and learning outcomes for the course;
- (e) Expectations for class attendance and penalties, if any, for non-compliance;
- (f) A description of the evaluation procedure and methods that will be used, including:
  - (i) The weighting of the components that will contribute to the final grade;
  - (ii) A description of how the numeric grade will be converted to the University's letter grade system; and
  - (iii) An indication of whether specific assignment instructions, grading rules, or rubrics will be provided.

**Note:** It is understood by Senate that the provision of this information is not intended to affect the question of equity in multi-sectioned courses in any way.
- (g) An indication of how evaluative feedback will be given to the student, including:

(i) The form of evaluative feedback [formative (e.g. comments) or summative (e.g. grade)];

(ii) When summative feedback will be distributed in relation to the voluntary withdrawal deadline, Unit guidelines, and section 2.9(f) of this Procedure; and

(iii) The method in which evaluative feedback will be delivered (for example, via paper or electronic method);

(h) A schedule of the Academic Staff member's availability for individual student consultation, in accordance with section 2.9(d);

(i) A schedule of term assignments and tests;

(j) A statement of the practice to be followed regarding late submission of assignments and missed term tests;

(k) A statement outlining parameters for the use of electronic and mechanical devices and course technology that may be required (for example, cellphones, laptops, tablets);

(l) A statement regarding recording of classes, with reference to any University policies that might apply;

(m) A statement referring Students with disabilities to Student Accessibility Services to facilitate the implementation of accommodations, and a statement communicating willingness to meet with Students to discuss the accommodations recommended by Student Accessibility Services; and

(n) A statement regarding academic integrity, including "plagiarism and cheating" and "examination impersonation" as described in the Calendar and, where appropriate, references to specific course requirements for individual work and group work, such as:

(i) Group projects are subject to the rules of academic dishonesty;

(ii) Group members must ensure that a group project adheres to the principles of academic integrity.

(iii) Students should also be made aware of any specific instructions concerning study groups and individual assignments;

(iv) The limits of collaboration on assignments should be defined as explicitly as possible; and

(v) All work is to be completed independently unless otherwise specified.

### 2.6 Policy and Resource Document

Academic Staff shall provide to every student the information on University support offices and policies outlined in Schedule "A" to this Procedure, within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time).

### 2.7 Learning Materials

Academic Staff shall specify learning materials in accordance with announced purchasing deadlines.

## 2.8 Changes to Course Outline and Timing Requirements

Academic Staff who wish to make changes to the method of evaluation or format of assignments in the course outline after it has been distributed to the class shall proceed as follows:

- (a) Academic Staff shall, in a timely fashion:
  - (i) Discuss the proposed changes (e.g. in the class and/or through UM Learn) and encourage Students to provide feedback to the Academic Staff if there are any issues with the proposed changes;
  - (ii) Provide the revised outline to the Academic Administrator of the Unit; and
  - (iii) Confirm the changes in writing by providing the revised course outline to every Student registered in the course within the first week following the change, either through a paper copy and via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by University administration from time to time).
- (b) In circumstances where weighting of assignments is changed retroactively, a Student who wishes to be graded according to the original course outline must advise the Academic Staff within at least five (5) Working Days of receiving the revised outline, failing which the Student will be graded according to the revised outline. Academic Staff shall advise Students of the deadline when they provide the revised outline.

## 2.9 Interactions with Students

In their interactions with Students, Academic Staff shall:

- (a) not deny registration for instruction in those courses for which the permission of the Academic Staff is required, except where the Student lacks appropriate qualifications or where an approved policy on limited enrolment is in effect;
- (b) comply with existing human rights legislation;
- (c) not accept money or other goods or services from Students for assistance with any course offered by the University. This clause, however, shall not prevent student teaching assistants or other Academic Staff from accepting payment for tutoring in courses/sections which do not fall within the scope of their University employment;
- (d) be available for a reasonable amount of time, on a known and posted basis, for individual consultation with Students registered in their courses or laboratories;
- (e) evaluate student academic performance in a fair and reasonable manner, and by means of appropriate academic criteria;
- (f) provide early evaluative feedback as specified in the course outline (see section 2.5(g));
- (g) foster an exchange of ideas between themselves and their Students in the classroom and allow Students the freedom to take legitimate exception to the data, views, or methods presented;
- (h) respect the confidentiality of information about Students;
- (i) keep confidential any information about the academic performance of a Student, unless release is authorized by the

Student, required by his/her instructional team, or requested by an administrative officer in accordance with the University policy on the release of information;

- (j) explicitly acknowledge in written or oral presentations any contribution of student research or assistance;
- (k) not obtain any improper personal advantage from a Student or Student work; and
- (l) not retaliate against a student who has filed a complaint, whether the complaint was substantiated or unsubstantiated.

## 2.10 Instruction

Academic Staff are responsible for:

- (a) the organization, preparation and delivery of course material, the evaluation of student academic progress;
- (b) the reporting of such evaluation in accordance with approved policies and schedules; and
- (c) consultation with Students out of class or laboratory hours, and supervision of student research and thesis preparation.

## 2.11 Scheduled Classes

Academic Staff shall not cancel, miss, terminate or shorten scheduled instruction except for good reasons. Whenever a scheduled period of instruction is cancelled, the Academic Staff shall:

- (a) inform the class at the earliest possible time;
- (b) inform the Academic Administrator of his/her Unit at the earliest possible time; and
- (c) where possible, ensure that appropriate substitution or make-up instruction is provided.

## 2.12 Evaluation

Academic Staff shall adhere to the relevant Senate-approved policy regarding professor-course evaluation.

## 2.13 Reporting Student Grades

Academic Staff who provide instruction shall comply with the schedules and formats for reporting student grades, as established by their Unit and the Registrar's Office. Where such grades are reviewed by Unit committees, Academic Staff should be available for the duration of the committees' work. Academic Staff must also correct any grade errors of which they become aware in a timely manner and notify the Student accordingly.

## 2.14 Term Work

Academic Staff shall adhere to Unit-specific policies regarding return and/or retention of term work. In the absence of Unit-specific policies, all term work shall be returned to the Student. Any unclaimed term work will be held by the Unit for 4 months from the end of the term in which the work was assigned. At the conclusion of this time, all unclaimed term work will become property of the Unit and be destroyed according to the University's common records schedule, using confidential measures for disposal.

## 2.15 Class Size

Where necessitated by large class sizes or other circumstances, the Unit shall ensure that Academic Staff and/or designated substitutes are available for individual consultation with Students for a reasonable amount of time on a known and posted basis.



## Collective Responsibilities of Academic Staff

### 2.16 Course Descriptions

Through their Unit councils, Academic Staff members should review program and course descriptions periodically to ensure that the material to be presented is current and appropriate and that the Calendar information is clear and accurate.

### 2.17 Materials

The following material must be kept on file in the Unit's general offices and made available to Students:

- (a) University and Unit policy and procedures regarding class attendance and penalties, if any, for non-compliance;
- (b) the information described in section 2.5 of this Procedure in regards to materials to be provided to Students by the Academic Staff of each course section;
- (c) University and Unit policy and procedures regarding the evaluation of professors and courses by Students;
- (d) University and Unit policy and procedures regarding student access to final examination scripts;
- (e) University policy and procedures on student discipline;
- (f) University and Unit policy and procedures regarding grade appeals;
- (g) University policy and related procedures on the Responsibilities of Academic Staff with regard to Students;
- (h) University policy and protocol regarding responding to sexual assault;
- (i) University policy and related procedures on Respectful Work and Learning Environment;
- (j) University policy and related procedures on Accessibility for Students with Disabilities; and
- (k) University policy and related procedures on Intellectual Property.

### 2.18 Instruction

The Unit should ensure the provision of names of Academic Staff assigned to teach particular courses and sections at the earliest possible opportunity;

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Procedure is required.

3.2 The Vice-Provost (Academic Affairs) is responsible for the implementation, administration and review of this Procedure.

3.3 Academic Staff and Academic Administrators are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2026.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or Approving Body deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) Responsibilities of Academic Staff with regard to Students Policy, effective July 4, 1979 and revised June 25, 1998;
- (b) Cancellation of Scheduled Classes Policy, effective November 30, 1971 and revised November 29, 1988;
- (c) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (d) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Responsibilities of Academic Staff with Regard to Students Policy;
- (b) Schedule "A": Policy and Resource Document;
- (c) Conflict of Interest Policy;
- (d) Conflict of Interest between Evaluators and Students due to Close Personal Relationships Policy;
- (e) Electronic Communication with Students Policy;
- (f) Final Examination and Final Grades Policy;
- (g) Grade Point Averages Policy;
- (h) Intellectual Property Policy;
- (i) Multi-Sectioned Courses Policy;
- (j) Respectful Work and Learning Environment Policy;
- (k) Sexual Assault Policy;
- (l) Responsible Conduct of Research Policy;
- (m) Student Advocacy Office Policy;
- (n) Student Discipline Bylaw;
- (o) Student Academic Misconduct Procedure;
- (p) Student Non-Academic Misconduct and Concerning Behaviour Procedure;
- (q) Student Discipline Appeal Procedure;
- (r) Teaching Evaluation Policy;

- (s) The University of Manitoba Accessibility Policy;
- (t) University Health Services Policy;
- (u) Voluntary Withdrawal Policy.

## Schedule "A": Policies and Resources

1. In accordance with section 2.6 of the Responsibilities of Academic Staff with Regard to Students procedure, Academic Staff shall provide the following information to every student within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time):

- (a) A list of academic supports available to Students, such as the Academic Learning Centre, Libraries and other supports as may be appropriate;
- (b) A statement regarding mental health that includes referral information to resources and student supports, such as Student Counselling Centre, University Health Services and other supports as may be appropriate;
- (c) A notice to respect copyright, with a reference directing Students to the University's Copyright Office;
- (d) A statement directing the Student to University and Unit policies, procedures and supplemental regulations available online, with special direction to review the University's policies and procedures regarding:
  - (i) Academic Dishonesty: plagiarism, cheating and examination impersonation;
  - (ii) Student access to final examination scripts;
  - (iii) Student discipline;
  - (iv) Grade appeals;
  - (v) Student advocacy;
  - (vi) Respectful Work and Learning Environment;
  - (vii) Sexual Assault; and
  - (viii) Intellectual Property.

2. The University's Centre for Advancement Teaching and Learning will compile sample language and templates for Academic Staff to use in fulfilling the above requirements.

## Self-Declaration for Brief and Temporary Student Absences Policy and Procedure

### Self-Declaration for Brief and Temporary Student Absences Policy

#### Reason for Policy

1.1 To allow students to provide a self-declaration form in lieu of a medical note (or other documentation) when a student is unable to

complete a scheduled test, assignment or exam, due to a brief absence caused by Extenuating Circumstances.

1.2 To minimize costs to students and unnecessary use of public health resources for the purpose of obtaining a 'medical note'.

## Policy Content

### Definitions

2.1 The following terms are defined for the purpose of this Policy and the Procedure:

- (a) **Bona Fide Academic Requirements (BFARs):** are the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.
- (b) **Extenuating Circumstances:** a situation outside of a student's control such as a medical event or condition, that temporarily affects their ability to fulfill their academic obligations and requirements. A scheduled vacation or holiday is not an extenuating circumstance.
  - (i) **Other brief and temporary circumstances may include:** Religious Observance, or participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event. Students are recommended to consult with their Program/Faculty/College for approved events.
- (c) **Good Faith:** means acting under an honest belief or purpose, engaging in a faithful performance of responsibilities, with an absence of fraudulent intent. University community members must not lie or otherwise knowingly mislead each other about matters directly linked to this Policy and Procedure.
- (d) **University:** means the University of Manitoba

### Commitments and Objectives

2.2 The University recognizes that students may have Extenuating Circumstances that temporarily affect their ability to fulfill their academic obligations and requirements. Any academic arrangement offered to a student must not compromise the learning objectives, essential skills and abilities, or Bona Fide Academic Requirements of the course or program.

2.3 This policy only governs the process by which academic considerations are made, it does not change or over-ride academic requirements as stated in course outlines, program policies, and University governing documents (e.g., ROASS).

2.4 The institutional response to requests for academic consideration due to Extenuating Circumstances is based on the principle of Good Faith. University staff and faculty members are to assume that student circumstances and documented requests are legitimate unless there is compelling evidence to suggest otherwise. Similarly, students are to assume that University staff and faculty members will provide academic considerations that they deem to be reasonable and in the best interest of the student, taking into account academic progress, essential skills and abilities, and Bona Fide Academic Requirements.

2.5 Privacy and confidentiality are to be respected, protected and maintained throughout the academic consideration process. Students should not be required to disclose specific details to instructors regarding the circumstances resulting in their request for academic consideration.

2.6 The University is committed to responding to students in a fair and consistent manner; however, academic considerations may be

individualized due to the nature of each student's specific circumstances, and differing program requirements.

2.7 Academic units may request further documentation in cases in which a student has made multiple requests for temporary absences. Medical documentation is required for longer term absences as required by the Authorized Withdrawal Policy and Procedure, faculty-specific Leaves of Absence policies (if applicable), or when requesting accommodations under the Accessibility Policy and Procedure.

2.8 The use of this Policy or its Procedures to provide false or misleading information constitutes academic misconduct and students will be subject to the University's Student Discipline By-Law.

## Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice- President Academic that a formal review of this Policy is required.

3.2 The Vice-Provost (Students) is responsible for the implementation, administration and review of this Policy.

3.3 Students, Academic Advisors, and Academic Staff are responsible for complying with this Policy.

## Authority to Approve Procedures

4.1 The Provost and Vice-President Academic may approve Procedures, if applicable, which are secondary to and comply with this Policy

## Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is [Click here to enter a date](#).

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President Academic or the Senate deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

(a) Student Discipline By-Law ([https://umanitoba.ca/admin/governance/governing\\_documents/students/student\\_discipline.html](https://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html))

(b) Deferred and Supplemental Examination Procedures ([https://umanitoba.ca/admin/governance/media/Deferred\\_and\\_Supplemental\\_Examinations\\_Procedures\\_-\\_2013\\_11\\_25\\_RF.pdf](https://umanitoba.ca/admin/governance/media/Deferred_and_Supplemental_Examinations_Procedures_-_2013_11_25_RF.pdf))

(c) Accessibility Policy and Procedure ([https://umanitoba.ca/admin/governance/governing\\_documents/students/accessibility.html](https://umanitoba.ca/admin/governance/governing_documents/students/accessibility.html))

(d) Authorized Withdrawal Policy ([https://umanitoba.ca/admin/governance/governing\\_documents/academic/authorized\\_withdrawal.html](https://umanitoba.ca/admin/governance/governing_documents/academic/authorized_withdrawal.html)) and Procedure

(e) Responsibilities of Academic Staff with Regard to Students (<https://umanitoba.ca/governance/governing-documents-students/#responsibilities-of-academic-staff-with-regard-to-students-roass>) (ROASS)

(f) Records Management Policy ([https://umanitoba.ca/governance/sites/governance/files/2021-06/Records%20Management%20Policy%20-%202016\\_08\\_04.pdf](https://umanitoba.ca/governance/sites/governance/files/2021-06/Records%20Management%20Policy%20-%202016_08_04.pdf))

# Self- Declaration for Brief and Temporary Student Absences Procedure

## Part I- Reason for Procedure

1.1 To create fairness and consistency across courses, Programs, Departments, and Faculties when considering arrangements for academic work when students are temporarily unable to meet obligations on a particular date or by a given deadline, due to Extenuating Circumstances.

(a) Establish the use of a "Self-Declaration Form for Brief or Temporary Absence" for students to submit when requesting academic consideration due to a brief or temporary absence affecting their academic obligations.

(i) Identify key responsibilities for students and for university staff and faculty members to implement the Policy and these Procedures.

## Part II- Procedural Content

### Definitions

2.1 The following terms are defined for the purpose of the Policy and this Procedure:

(a) **Bona Fide Academic Requirements (BFARs):** are the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

(b) **Extenuating Circumstances:** a situation outside of a student's control such as a medical event or condition, that temporarily affects their ability to fulfill their academic obligations and requirements. A scheduled vacation or holiday is not an extenuating circumstance.

(i) **Other brief and temporary circumstances may include:** Religious Observance, or participation in an inter-university, provincial, inter- provincial, national or international scholastic

or athletic event. Students are recommended to consult with their Program/Faculty/College for approved events.

(c) **Good Faith:** means acting under an honest belief or purpose, engaging in a faithful performance of responsibilities, with an absence of fraudulent intent. University community members must not lie or otherwise knowingly mislead each other about matters directly linked to this Policy and Procedure.

(d) **University:** means The University of Manitoba

## Implementation and Responsibilities

### 2.2 Responsibilities of Students:

(a) For Term Work, notify the instructor as soon as possible (or according to timelines listed in the course outline or Faculty regulations for excused absences) but no later than 48 hours after the end of a brief or temporary absence, if due to extenuating circumstances you:

- (i) will be absent;
- (ii) were absent and must make up the time;
- (iii) will be unable to complete any portion of the course work;
- (iv) will be unable to complete course work on time; or
- (v) were unable to submit course work on time.

(b) For Final Exams scheduled during the official final exam period set by the Office of the Registrar and Enrollment Services, contact an academic advisor in your faculty of registration according to the Deferred and ([https://umanitoba.ca/admin/governance/media/Deferred\\_and\\_Supplemental\\_Examinations\\_Procedures\\_-\\_2013\\_11\\_25\\_RF.pdf](https://umanitoba.ca/admin/governance/media/Deferred_and_Supplemental_Examinations_Procedures_-_2013_11_25_RF.pdf)) Supplemental Exams Procedures ([https://umanitoba.ca/admin/governance/media/Deferred\\_and\\_Supplemental\\_Examinations\\_Procedures\\_-\\_2013\\_11\\_25\\_RF.pdf](https://umanitoba.ca/admin/governance/media/Deferred_and_Supplemental_Examinations_Procedures_-_2013_11_25_RF.pdf)).

(c) Complete and submit a "Self-Declaration Form for Brief or Temporary Absence" to the appropriate staff/office. Although students can submit a medical document, this form is the recommended documentation for this process.

(d) Submit additional documentation if requested.

(e) Locate and familiarize yourself with the relevant course/placement/faculty procedures (e.g., course outline, faculty handbook, etc.).

(f) Complete and submit academic work or write a deferred quiz/test as per the academic consideration granted (or in the case of a deferred final examination, write the exam at the scheduled date and time).

### 2.3 Responsibilities of University Staff and Faculty Members:

(a) Familiarize themselves with this Policy and related procedures, as well as Departmental/Faculty/College/School policies and procedures.

(b) Recognize the University's Good Faith approach when responding to requests for academic consideration.

(c) Accept documentation from students (e.g., Self-Declaration for Brief or Temporary Absence Form) and maintain in accordance with

the University Records Management policy. Faculty members can consult with their Academic Unit if they have concerns regarding a student's request.

(d) Privacy and confidentiality are to be respected, protected and maintained throughout the academic consideration process. Students should not be required to disclose specific details to instructors regarding the circumstances resulting in their request for academic consideration.

(e) Communicate and work with the student to determine appropriate academic considerations.

(f) If needed, Faculty members may consult with Student Accessibility Services and/or Academic Units, for clarification on how to facilitate academic consideration arrangements.

(g) Assure students experiencing extenuating circumstances that reasonable academic consideration will be implemented, as appropriate, while ensuring learning objectives, essential skills and ability requirements, and Bona Fide Academic Requirements are met.

## Part III- Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice- President Academic that a formal review of this Procedure is required.

3.2 The Vice-Provost (Students) is responsible for the implementation, administration and review of this Procedure.

3.3 Students, Academic Advisors, and Academic Staff are responsible for complying with this Procedure.

## Part IV- Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is [Click here to enter a date](#).

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the Provost and Vice-President Academic or Senate deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

## Part V- Effects on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI- Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Student Discipline By-Law ([https://umanitoba.ca/admin/governance/governing\\_documents/students/student\\_discipline.html](https://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html))
- (b) Deferred and Supplemental Examination Procedures ([https://umanitoba.ca/admin/governance/media/Deferred\\_and\\_Supplemental\\_Examinations\\_Procedures\\_-\\_2013\\_11\\_25\\_RF.pdf](https://umanitoba.ca/admin/governance/media/Deferred_and_Supplemental_Examinations_Procedures_-_2013_11_25_RF.pdf))
- (c) Accessibility Policy and Procedure ([https://umanitoba.ca/admin/governance/governing\\_documents/students/accessibility.html](https://umanitoba.ca/admin/governance/governing_documents/students/accessibility.html))
- (d) Authorized Withdrawal Policy and Procedure ([https://umanitoba.ca/admin/governance/governing\\_documents/academic/authorized\\_withdrawal.html](https://umanitoba.ca/admin/governance/governing_documents/academic/authorized_withdrawal.html))
- (e) Responsibilities of Academic Staff with Regard to Students ([https://umanitoba.ca/governance/governing\\_documents-students/#responsibilities-of-academic-staff-with-regard-to-students-roass](https://umanitoba.ca/governance/governing_documents-students/#responsibilities-of-academic-staff-with-regard-to-students-roass)) (ROASS)
- (f) Records Management Policy ([https://umanitoba.ca/governance/sites/governance/files/2021-06/Records%20Management%20Policy%20-%202016\\_08\\_04.pdf](https://umanitoba.ca/governance/sites/governance/files/2021-06/Records%20Management%20Policy%20-%202016_08_04.pdf))

## Student Discipline Bylaw and Procedure

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

Students are expected to conduct themselves responsibly with due regard for the rights of others and to maintain a high level of personal and academic integrity. Students who transgress these standards, whether expressed in policy or implied in generally accepted codes of conduct, can expect disciplinary action. Penalties arising from disciplinary actions may include fines, withholding of student privileges, suspension or expulsion from programs, or some other action specific to the situation. Penalties may also affect student eligibility to continue in their programs or to graduate.

## Student Discipline Bylaw

### Part I: Reason for Bylaw

1.1 The reason for this Bylaw is to outline the Disciplinary Actions available to Disciplinary Authorities and the subsequent appeal process available to Students for findings of Academic Misconduct and Non-Academic Misconduct.

### Part II: Policy Content

#### Definitions

2.1 The following terms are defined for the purpose of this Bylaw:

- (a) "Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Academic Misconduct Procedure.
- (b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those

academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(c) "Appeal Procedure" means the Student Discipline – Appeal Procedure.

(d) "Bylaw" means the Student Discipline Bylaw.

(e) "College" means a Professional College as defined under the Definitions of Academic Units Policy.

(f) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3: Disciplinary Actions and Disciplinary Authorities.

(g) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline under:

(i) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct; or

(ii) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct.

(h) "Expulsion" has the same meaning as defined under section 2.16 of this Bylaw.

(i) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(j) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(k) "Reprimand" has the same meaning as defined under section 2.6 of this Bylaw.

(l) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(m) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving Suspension due to academic or discipline;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(n) "Suspension" has the same meaning as defined in section 2.8 of this Bylaw.

(o) Table 1" refers to Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct, which follows the Bylaw.

(p) "Table 2" refers to Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct, which follows the Bylaw.

(q) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(r) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a Faculty/College/School is not a Unit as the term is used within this Bylaw.

(s) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(t) "University" means The University of Manitoba.

(u) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers.

(v) "UDC" means the University Discipline Committee composed under section 2.53 of the Appeal Procedure.

### Disciplinary Actions

2.2 Students will be subject to Disciplinary Action under this Bylaw for acts of Academic Misconduct and for acts of Non-Academic Misconduct.

2.3 The Disciplinary Actions available to a Disciplinary Authority are set out in Table 3.

2.4 Once a Disciplinary Action has been implemented, no further Disciplinary Action may be imposed for the same matter except as a result of an appeal by the Student.

### Student Academic History/Transcript with regard to Disciplinary Actions

2.5 Disciplinary Actions implemented shall not ordinarily be recorded on the Student's academic history / transcript except in the following:

(a) if the Student receives Suspension or Expulsion under sections 16, 17, 20 or 26 of Table 3; or

(b) a Reprimand has been ordered recorded on a Student's academic history / transcript under section 2 of Table 3.

### Reprimand

2.6 "Reprimand" means an action intended to convey stern disapproval to a Student by means of recording their Academic Misconduct or Non-Academic Misconduct on their Student's academic history / transcript for a period of up to five (5) years.

2.7 Where a Reprimand has been ordered to be recorded on the Student's academic history / transcript (see section 2 of Table 3), the Reprimand shall be removed:

(a) Following the elapse of the specified period of time, upon the written request of the Student to the Registrar; or

(b) Earlier, upon a written order from the Disciplinary Authority that implemented the Disciplinary Action.

### Suspensions

2.8 "Suspension" means any withdrawal of one or more rights or privileges for a definite or indefinite period of time.

2.9 A Student may receive Suspension from the following:

(a) a particular course or courses;

(b) a department;

(c) a Faculty/College/School;

(d) the University; or

(e) a Residence.

2.10 Students who have been suspended for a definite period of time shall, upon the lifting of the Suspension, have the rights or privileges that were suspended automatically reinstated, subject to any conditions attached to the Disciplinary Action proscribing future conduct.

2.11 Suspension for an indefinite period of time shall be dealt with as follows:

(a) In the case of Suspension for an indefinite time by the Executive Director of Enrolment Services, the Suspension may be lifted by the Executive Director of Enrolment Services upon consideration at the written request of the Student, after consultation with the Unit Head(s) of the Unit(s) concerned.

(b) In the case of Suspension for an indefinite period of time by a Disciplinary Authority other than the Executive Director of Enrolment Services, the Student may apply to the Disciplinary Authority that imposed the final penalty for a lifting of the Suspension. If the Suspension is lifted, the Student will have the rights or privileges that were suspended automatically reinstated, subject to any conditions attached to the Disciplinary Action proscribing future conduct.

2.12 Where a Student has received a Suspension pursuant to sections 2.9(c) or 2.9(d) of this Bylaw, any academic credits earned by the Student at the University or at any academic institution during the period of Suspension shall not be counted as credit toward any degree or program offered by the University, unless at the time of the imposition of the Suspension, the Disciplinary Authority stipulates otherwise.

2.13 Where the Student has received Suspension from a Faculty/College/School of the University, any other Faculty/College/School may refuse to register the Student for any course or courses or refuse to accept the Student into their programs, provided that prior to such refusal, the other Faculty/College/School has:

(a) obtained and considered a written report from the Disciplinary Authority that implemented the Suspension, outlining the circumstances surrounding the Disciplinary Action;

(b) provided the Student a copy of the report; and

(c) given the Student an opportunity to respond to the report.

2.14 A Suspension will appear on the Student's academic history / transcript until such time as the Suspension period has elapsed, when it shall be removed upon the written request of the Student to the Registrar.

2.15 In the case of Suspension for supplying false or misleading information in connection with an application for admission (see sections

23 and 24 of Table 3), any notation on the Student's academic history / transcript may only be removed:

- (a) For undergraduate students, by the Registrar upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.
- (b) For graduate students, by the Registrar in consultation with the Dean, Faculty of Graduate Studies, upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.

### Expulsions

2.16 "Expulsion" means a withdrawal of all rights or privileges available to Students for either a definite or indefinite period of time.

2.17 A Student may receive Expulsion from the following:

- (a) a Faculty/College/School;
- (b) the University; or
- (c) a Residence.

2.18 In the case of an Expulsion for a definite period of time, upon expiration of such time, in order to be readmitted, the Student must reapply for admission through normal channels to the appropriate authority having jurisdiction over admission.

2.19 In the case of an Expulsion for an indefinite period of time the Student may apply to the Disciplinary Authority that imposed the final penalty for a lifting of the Expulsion. If the Expulsion is lifted, the Student, in order to be readmitted, must reapply for admission through normal channels to the authority having jurisdiction over admission.

2.20 Where a Student has received an Expulsion pursuant to sections 2.17(a) or 2.17(b) of this Bylaw, any academic credits earned by the Student at the University or at any academic institution during the period of Expulsion shall not be counted as credit toward any degree or program offered by the University, unless at the time of the imposition of the Expulsion, the Disciplinary Authority stipulates otherwise.

2.21 Where the Student has received Expulsion from a Faculty/College/School of the University, any other Faculty/College/School may refuse to register the Student for any course or courses or refuse to accept the Student into their programs, provided that prior to such refusal, the other Faculty/College/School has:

- (a) obtained and considered a written report from the Disciplinary Authority that implemented the Expulsion, outlining the circumstances surrounding the Disciplinary Action;
- (b) provided the Student a copy of the report; and
- (c) given the Student an opportunity to respond to the report.

2.22 An Expulsion shall appear on the Student's academic history / transcript and may only be removed by the Registrar upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.

### Appeals

2.23 Students have a right to appeal decisions made by a Disciplinary Authority, excluding the following decisions which are final:

- (a) Any decision of the UDC.

(b) The discretionary decision of a Disciplinary Authority to lift a suspension or an expulsion under section 2.11 or section 2.19 of this Bylaw;

(c) The decision of a Faculty/College/School to refuse a Student under section 2.21;

(d) Any finding of fact under the Respectful Work and Learning Environment Policy or the Sexual Violence Policy.

2.24 Appeals shall be conducted in accordance with the Appeal Procedure.

2.25 Subject to section 2.26 of this Bylaw, no Disciplinary Action shall be implemented and Students shall be permitted to continue in their courses or program until the time for appeal has elapsed or until the Student has waived in writing the right to appeal, whichever occurs first. The Disciplinary Authority must ensure that the Student's work continues to be graded normally and is unaffected until the appeal period has lapsed or the appeal process is complete.

2.26 Section 2.25 of this Bylaw does not apply in the following circumstances:

- (a) Where the Disciplinary Action would be entered on the academic history / transcript of the Student, the Registrar shall be notified by the Disciplinary Authority implementing such Disciplinary Action, and shall not issue any academic transcripts until the appeal period has elapsed or the appeal process is complete;
- (b) Where the Disciplinary Action relating to academic dishonesty or academic fraud may result in a change to the Student's transcript, the Registrar shall be notified by the Disciplinary Authority implementing such Disciplinary Action, and shall not issue any transcripts until the appeal period has elapsed or the appeal process is complete;
- (c) Where changes in the Student's courses and/or program are directly related to the matter under disciplinary consideration, such changes shall not be permitted;
- (d) Where if the Disciplinary Action were not implemented, the safety of members of the University Community would be compromised.

### Confidentiality

2.27 All matters relating to student discipline or appeal must be kept confidential in accordance with applicable University policies and procedures, and The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

### Annual Reports

2.28 The Annual Report of the UDC will contain all the disciplinary matters that have occurred on campus from September 1 to the following August 31 of each Calendar year.

2.29 Academic Staff and department heads who have dealt with a disciplinary matter shall report to the Dean/Director of the Faculty/College/School to which each Student belongs, setting out the nature of the offence and particulars of the penalty and the Student's identification number if applicable. The Student's identification number is only used for administrative purposes to reduce the possibilities of errors in duplicate reporting and will not be included in the Annual Report.

2.30 Disciplinary Authorities, except members of the Academic Staff and department heads, shall report all disciplinary matters considered by or reported to them to the Chair of the UDC by October 1 of each year. The report shall contain the number of disciplinary matters referred to such person or body, the nature of the offences and particulars of the dispositions, and such further matters as may be required by the UDC.

2.31 The recording secretary of the UDC shall prepare and the Chair shall submit a report to the University President by December 1 in each year setting out both a summary of the reports submitted to the Chair of the UDC as well as particulars of the number, nature and disposition of cases appealed to the UDC.

2.32 Members of the University Community, shall be kept informed of the nature and disposition of cases dealt with under this Bylaw as the Annual Report shall be presented to the both the Senate and the Board of Governors annually. The names of Students disciplined shall not normally be made public.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Policy is required.

3.2 The President is responsible for the implementation, administration and review of this Policy.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Policy.

### Part IV: Secondary Documents

4.1 The President or Approving Body may approve Regulations, Policies and Procedures which are secondary to and comply with this Bylaw.

### Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Bylaw is September 1, 2026.

5.2 In the interim, this Bylaw may be revised or repealed if:

- (a) The President or Approving Body deems it necessary or desirable to do so;
- (b) The Bylaw is no longer legislatively or statutorily compliant; and/or
- (c) The Bylaw is now in conflict with another Governing Document.

5.3 If this Bylaw is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:

- (a) comply with the revised Bylaw; or
- (b) are, in turn, rescinded.

### Part VI: Effect on Previous Statements

6.1 This Bylaw supersedes:

- (a) Student Discipline Bylaw, dated January 1, 2009;
- (b) all previous Board/Senate Bylaws, Regulations, Rules, Policies and Procedures, and resolutions on the subject matter contained herein; and

(c) the previous Faculty/College/School Council Bylaw, Regulations, Procedures, and resolutions on the subject matter contained herein.

## Part VII Cross References

7.1 Cross referenced to:

- (a) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;
- (b) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;
- (c) Table 3: Disciplinary Actions and Disciplinary Authorities;
- (d) Student Discipline – Appeal Procedure;
- (e) Student Academic Misconduct Procedure;
- (f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;
- (g) Definitions of Academic Units Policy;
- (h) Final Examinations and Final Grades Policy and Procedures;
- (i) Respectful Work and Learning Environment Policy;
- (j) Sexual Assault Violence Policy;
- (k) Disclosures and Complaints Procedure;
- (l) Use of Computer Facilities Policy and Procedure;
- (m) Violent or Threatening Behaviour Policy and Procedure;
- (n) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175;
- (o) The Personal Health Information Act, C.C.S.M. c. P33.5

## Student Discipline Appeal Procedures

### Part I: Reason for Procedures

1.1 These Appeal Procedures are secondary to the Student Discipline Bylaw and are intended to establish a process for appeals to be heard, and to provide guidance to the members of appeal panels, to the student and to the Faculty/College/School representatives in relation to appeal hearings.

### Part II: Procedures

#### Definitions

2.1 The following terms are defined for the purpose of this Bylaw and related Procedures:

- (a) "Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Academic Misconduct Procedure.
- (b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic



appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(c) "Appeal Body" means the appropriate persons or bodies as identified in sections 2.9 to 2.14.

(d) "Appeal Procedure" means this Student Discipline – Appeal Procedure.

(e) "Appellant" means the Student appealing a Disciplinary Action taken against him or her.

(f) "Bylaw" means the Student Discipline Bylaw.

(g) "College" means a Professional College as defined under the Definitions of Academic Units Policy.

(h) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3 of this Bylaw.

(i) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Academic Misconduct or Non-Academic Misconduct.

(j) "Discrimination" has the same meaning as defined under the Respectful Work and Learning Environment Policy.

(k) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(l) "Local Disciplinary Committee" or "LDC" means the standing or, from time to time, ad hoc committee appointed to hear and determine disciplinary matters under section 2.24 of this Appeal Procedure.

(m) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(n) "Notice of Appeal" means the appeal documentation that must be filed by the Student under section 2.16.

(o) "Respondent" means the Disciplinary Authority whose decision is being appealed.

(p) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(q) "Sexual Assault" has the same meaning as defined under the Sexual Assault Policy.

(r) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension due to academic or discipline;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(s) "Student Advocate" is a member of the University's Student Advocacy Office who provides students with information on their rights and responsibilities, as well as assistance with resolving problems or concerns resulting from actions or decisions taken by the University.

(t) "Table 3" means Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(u) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a faculty or school is not a Unit as the term is used within this Procedure.

(v) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(w) "University" means The University of Manitoba.

(x) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, Students, volunteers, external parties, contractors and suppliers.

(y) "UDC" means the University Discipline Committee composed under section 2.53 of this Appeal Procedure.

### Appeals Generally

2.2 Students have a right to appeal Disciplinary Actions made by a Disciplinary Authority, subject to section 2.23 of the Bylaw.

2.3 Only the Student who has been the subject of a Disciplinary Action has the right to appeal.

2.4 An Appeal Body may dispose of the matter by instituting any Disciplinary Action authorized to it under Table 3. The resulting disposition may be the same, more severe or less severe than the original Disciplinary Action and the Appellant must be so informed of this possibility prior to the commencement of an appeal hearing.

2.5 When an appeal is heard by an Appeal Body, the Appellant must be invited to attend the hearing and, if in attendance, be permitted to ask questions and offer an explanation. Every reasonable attempt should be made to schedule the hearing at a time and place that permits the Appellant's participation.

2.6 If the Appellant, Respondent or their respective representatives are unable to attend the hearing in person, the use of a digital communication, such as audio or video conferencing, may be used with prior consent of the chair of the Appeal Body, provided that such means enable all parties to clearly communicate. A request for such a meeting must be made at least one week in advance of the hearing date.

2.7 Subject to sections 2.40 and 2.74 of this Appeal Procedure, the Appellant may appear in person and be represented by a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for

appearing, or a member of the Appellant's immediate family. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.8 Subject to sections 2.40, 2.45, 2.76, and 2.83 of this Appeal Procedure, a representative designated in writing by the Appellant may:

- (a) attend any disciplinary hearing; and
- (b) participate in any disciplinary hearing to the extent of asking questions of anyone in attendance and making submissions to any Appeal Body.

### Appeal Routes

2.9 If the Appellant wishes to appeal the Disciplinary Action of a member of the Academic Staff (except for suspension from attendance for the balance of the meeting of one class), or the decision of a department head, the Notice of Appeal must be delivered to the appropriate Unit Head in the Unit offering course(s) and the Unit Head in the Unit in which the Appellant is registered, with a copy to the Academic Staff or department head, as the case may be.

2.10 If an Appellant is appealing within a Unit that does not have department heads, then the first level of decision will be the Unit Head of that respective Unit and the next level of appeal will be as set out in section 2.11 of this Procedure.

2.11 If the Appellant wishes to appeal the Disciplinary Action of a Unit Head, or the Director of Student Residences, the Notice of Appeal must be delivered to the appropriate Local Disciplinary Committee in care of the respective Unit Head or Director of Student Residence.

2.12 If the Appellant wishes to appeal the Disciplinary Action of the University Librarian (other than as a delegate of the President), a delegate of the University Librarian, or an ad hoc committee appointed by the University Librarian, the Notice of Appeal must be delivered to the Chair of the Senate Committee on Libraries, with a copy to the person or ad hoc committee which made the initial disciplinary decision. Within ten (10) working days of receipt of the Notice of Appeal, the Chair of the Senate Committee on Libraries will appoint a Library Appeals Committee to hear the appeal.

2.13 If the Appellant wishes to appeal the disciplinary decision of any of the following Disciplinary Authorities or appeal any Disciplinary Action related to Sexual Violence or Discrimination, the Notice of Appeal must be delivered to the UDC in care of the Secretary of the UDC (University Secretary):

- (a) the decision of an LDC or the Library Appeals Committee;
- (b) the decision of the Executive Director of Enrolment Services;
- (c) the decision of the Dean of the Faculty of Graduate Studies in relation to fraudulent documents submitted for admission to the Faculty;
- (d) the decision of the Executive Director of Enrolment Services or the Associate Vice-President (Administration) or an ad hoc committee appointed by either of these persons;
- (e) the decision of the Chief Information Officer of Information Services and Technology (IST);
- (f) the decision of the Registrar;

(g) the decision of the Vice-President (Administration);

(h) the decision of the Vice-Provost (Students); or

(i) the decision of the President or delegate.

2.14 If the disciplinary matter involved two or more Students and two or more Students appeal:

- (a) The Students must have separate hearings, but the members of the Appeal Body may be the same for each hearing, subject to sections 2.33 and 2.67 of this Procedure;
- (b) The Respondents may bring in relevant information on the other Student(s) as it pertains to each appeal; and
- (c) Every effort must be made to protect the identity of the other Student(s).

### Filing an Appeal

2.15 The Appellant must deliver the Notice of Appeal to the appropriate Appeal Body within ten (10) working days as of the date on the letter notifying the Appellant of the Disciplinary Action from the lower body.

2.16 The Notice of Appeal must include:

- (a) such appeal application form, with current mailing address and telephone numbers, as may be required by the Appeal Body;
- (b) copies of such written materials as the Appellant wishes considered in connection with the appeal;
- (c) copies of the letter indicating the lower level decision, if not a first level appeal;
- (d) A letter clearly outlining the reason for the appeal and the remedy sought, including an indication of whether the Appellant is appealing the decision on:
  - (i) the finding of facts; where permitted subject to s. 2.23 of the Student Discipline Bylaw;
  - (ii) the Disciplinary Action imposed by the Disciplinary Authority; or
  - (iii) both the facts and the Disciplinary Action, where permitted subject to s. 2.23 of the Student Discipline Bylaw; and
- (e) the name and contact information of any representative that the Appellant wishes to have present at the appeal hearing, subject to subject to sections 2.7, 2.39 and 2.74 of this Appeal Procedure.
- (f) In the case of an appeal to the LDC or UDC, a listing of all resources or witnesses the Appellant wants in attendance at the hearing and their relevance. The scheduling of witnesses and resource people is the responsibility of the Appellant.

2.17 Subject to section 2.18, if an appeal is not received by the next level Appeal Body by the deadline set out in section 2.15, the Disciplinary Action against the Student will be implemented.

2.18 The time for delivery of a Notice of Appeal may be extended by the Appeal Body, or by the chair of the Appeal Body where the Appeal Body is the LDC or the UDC.

2.19 The Disciplinary Action implemented may be put on hold if the Appeal Body receiving the next level of appeal deems the lateness

acceptable and grants the Appellant permission to proceed with the appeal after deadline.

2.20 The Appellant and the designated representative of the Appellant must receive the same notices of hearings held by the LDC and the UDC as the Respondents.

### **Responsibilities of Respondents**

2.21 The Respondent will be given ten (10) working days to respond to the Notice of Appeal.

2.22 Respondents must submit the following:

- (a) A written response to the Appellant's Notice of Appeal;
- (b) All relevant documentation the Respondents will rely on as support for their position regarding the appeal; and
- (c) In the case of an appeal to the LDC or UDC, a listing of all resource people or witnesses they want in attendance at the hearing and their relevance. The scheduling of witnesses and resource people is the responsibility of the Respondent.
- (d) All the above documents must be filed within the time set out in section 2.21. If the Respondent had not received permission for an extension, a written request must be submitted to the Appeal Body to determine whether the Respondent's submission will be accepted.

2.23 If no response is received from the Respondent by the date requested by the office coordinating the appeal, a hearing may be set.

### **Local Discipline Committee (LDC)**

#### **LDC Jurisdiction**

2.24 Each Faculty/College/School, and the University Student Residences under the jurisdiction of the Office of Student Residences, must establish a standing or, from time to time, ad hoc committee to hear and determine disciplinary matters appealed to it by Students from a decision of the Dean/Director of that Faculty/College/School, or the Director of Student Residences for the University Residences under the Office of Student Residences' jurisdiction.

2.25 The LDC and the hearing panels thereof must exercise disciplinary authority on all Students that are appealing a decision from the Dean or Director of the Faculty/College/School or University Student Residence.

2.26 The Disciplinary Actions available to the LDC are set out in Table 3.

#### **LDC Composition**

2.27 In Faculties/Colleges/Schools, the LDC must be composed of an equal number of faculty members and students with a minimum of eight (8) members.

2.28 In the case of University Student Residences, the LDC must be composed of an equal number of residence staff and students with a minimum of eight (8) members. Members must be appointed by the Director of Student Residences with the advice of the appropriate Residence Students' Association.

2.29 The chair of the LDC must be elected by and from the membership of the LDC.

2.30 A quorum must be half the members, with a minimum of four (4) members, ensuring at least one (1) student and one (1) faculty member are present.

2.31 Where the Disciplinary Action relates to two (2) or more Faculties, Colleges or Schools, the LDC hearing panel must contain at least one (1) student and one (1) faculty member from each Faculty/College/School.

2.32 The chair must only vote in the case of a tie.

2.33 The Appellant, or the Appellant's representative, if any, and Respondent must have the right to challenge for cause any member of the LDC, the validity of the challenge to be judged by the remainder of the LDC. Such cause may include current teacher-student relationship, bias, or any factor likely to prejudice a fair hearing. Any person, who was directly involved in the original Disciplinary Action, either as a principal in the case or as a Disciplinary Authority, must be automatically removed from any hearing panel regarding the appeal.

#### **LDC Hearing Procedures**

2.34 The Appellant must be presumed innocent until the evidence presented indicates that, on the balance of probabilities Disciplinary Action is warranted. The LDC, in weighing the balance of probabilities, must consider the severity of the alleged incident.

2.35 The hearing must be by way of a trial de novo unless the appeal has been made only in relation to the severity of the Disciplinary Action imposed.

2.36 Hearings must be closed unless the Appellant requests in writing at least forty-eight (48) hours before the hearing that a hearing be open and there is no reasonable objection to an open hearing.

2.37 If the appeal hearing is in closed session, no observers may be present in the room. If the appeal hearing is in open session, any observers present will not be allowed to contribute in any way to the proceedings. Regardless of open or closed status, no electronic or other recording devices will be permitted.

2.38 Regardless of section 2.36, hearings related to discipline under the Respectful Work and Learning Environment Policy and/or discipline under the Sexual Violence Policy must be closed.

#### **Representatives at LDC Hearing**

2.39 At the LDC hearing, the Appellant may appear in person and be represented by a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, or a member of the Student's immediate family. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.40 If the Appellant or the Respondent wishes to have a lawyer present, the lawyer(s) present may only be a non-participating observer(s) at hearings of the LDC, but may represent the Appellant or Respondent at hearings of the UDC.

#### **Failure to Attend LDC Hearing**

2.41 An Appellant who fails to attend a scheduled appeal hearing may have the appeal considered on the basis of the Appellant's written submission, the presentation of the Appellant's designated representative, if any, and the verbal and written submissions made by the Respondent.

2.42 The Appellant shall be advised that the LDC has made a decision regarding the appeal and that the Appellant has ten (10) days to provide reasons for missing the hearing prior to the implementation of the decision. The LDC Chair will determine whether the hearing should be re-scheduled based on any submission from the Appellant. A reasonable

attempt will be made to reconvene the same members should the hearing be re-scheduled.

### Evidence at LDC Hearing

2.43 The Appellant and the Appellant's designated representative, if any, and the Respondent or the Respondent's representative, will receive in writing, at least five (5) working days before the date set for the hearing, the names of the members of the LDC hearing panel who will hear the appeal and the information that has been submitted to the LDC hearing panel by both relevant parties, in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

2.44 The Appellant, or the Appellant's designated representative, if any, and the Respondent, or the Respondent's representative, if any, may call witnesses and submit other evidence. The Appellant, the Appellant's representative, if any, and the Respondent, or Respondent's representative, if any, are responsible for arranging their own witnesses. If witnesses are to be called, a witness list must be provided by the Appellant or the Appellant's representative, if any, in their original appeal package provided to the Chair and a witness list must be provided by the Respondent or the Respondent's representative, if any, with their response to the appeal.

2.45 The Appellant must not be required to testify, but if the Appellant elects to do so, then the Appellant may be cross-examined by the Respondent, or the Respondent's representative, if any.

2.46 The Appellant or the Appellant's designated representative, if any, and the Respondent, must have the right to cross-examine witnesses.

2.47 The LDC may consider confidential information from the University Health Service, Counselling Service, University Chaplains and other similar services which are submitted by these services to the LDC at the request of the Appellant. Such confidential information submitted to the LDC may only be used for the purpose of the appeal.

### Adjournments of LDC Hearing

2.48 Requests for adjournment must be granted within reason.

### Disposition of LDC Hearing

2.49 A decision to uphold or deny an appeal, in whole or in part, and a decision to take different Disciplinary Action, in whole or in part, requires a simple majority of LDC Committee members present and voting. The results of the hearing must be conveyed in writing, in a timely fashion, by the Chair of the LDC to the Appellant or the Appellant's designated representative, if any and to the Respondent or the Respondent's designated representative, as the case may be.

2.50 If, after hearing all the evidence, the LDC is satisfied on the evidence presented that the Appellant has committed Academic Misconduct or Non-Academic Misconduct, the LDC may dispose of the matter by instituting any Disciplinary Action set out in the column entitled "Deans, Directors or LDC" in Table 3.

## University Discipline Committee (UDC) UDC Terms of Reference

2.51 The UDC must:

- (a) Report annually to the President.
- (b) Establish procedures, consistent with this Bylaw, for hearing panels.

(c) Hear appeals, either as a committee of the whole or through a hearing panel, from decisions of Disciplinary Authorities.

(d) Review the Bylaw and related procedures periodically and, if necessary, to recommend changes to them.

### UDC Jurisdiction

2.52 The UDC and the hearing panels thereof shall exercise Disciplinary Authority on behalf of the Board of Governors on all Students that are appealing a decision from the Disciplinary Authorities that are set out in section 2.13 of this document.

### UDC Composition

2.53 The UDC shall be composed of nineteen (19) members. The nineteen (19) shall include:

- (a) eight (8) faculty members nominated by the Senate Nominating Committee and appointed by the Board of Governors;
- (b) seven (7) students nominated by the Student Senate Caucus and appointed by the Board of Governors;
- (c) the President of the University of Manitoba (or designate), as an ex-officio member;
- (d) the President of the University of Manitoba Students' Union (or designate), as an ex-officio member;
- (e) the President of the University of Manitoba Graduate Students' Association (or designate), as an ex officio member; and
- (f) the Chair appointed pursuant to section 2.57. The Chair must only vote in the event of a tie.

2.54 Positions for which no nomination had been received from the Student Senate Caucus by September 15th shall be nominated by the Senate Nominating Committee.

2.55 The terms of office shall be three (3) years for academic staff, and one (1) year for students, from June 1 to May 31 (academic staff), and October 14 to October 13 (students). A member whose term of office has expired in any year shall continue in office until a successor has been appointed and shall be eligible for reappointment.

2.56 A quorum must be nine (9) the members, where a minimum of one (1) student and one (1) academic are present.

2.57 A Chair will be appointed by the Board of Governors for a three (3) year term.

2.58 The Vice-Chair shall be elected from and by the members of the UDC for a three (3) year term.

### UDC Hearing Panels

2.59 When a matter has been appealed to the UDC, the Chair must either convene the UDC or convene a hearing panel thereof to hear the appeal.

2.60 A quorum shall be a minimum of four (4) members, ensuring at least one (1) student and one (1) faculty member are present including the Chair.

2.61 The Chair may vote only if there is a tie.

2.62 UDC members who have a conflict of interest in a particular case, or have a temporary work conflict, or are otherwise unable to sit, may disqualify themselves from hearing an appeal.

2.63 Notwithstanding the foregoing, the Chair of the UDC may, in a particular case, require that a larger hearing panel be convened to consider the matter, provided that such a larger hearing panel maintains the proportional representation as set out in section 2.60.

2.64 The Chair of the UDC may use his/her discretion to reject an appeal if the appeal appears to be clearly outside the jurisdiction of the UDC, (for example, matters not dealing with discipline nor related Disciplinary Actions taken by a lower Appeal Body).

2.65 When an appeal is received based on a fine or the amount ordered, the only decision from which an appeal is taken is the amount levied by way of fine or the amount ordered to be paid by way of restitution; then, if such fine or restitution does not exceed \$500.00, the Chair may, at the Chair's discretion, personally decide the matter, or may convene a hearing panel to hear the appeal.

2.66 A staff member from the Office of the University Secretary, will serve as recording secretary for the hearings.

2.67 The Appellant, or the Appellant's representative, if any, and the Respondent must have the right to challenge for cause any member of the UDC hearing panel, the validity of the challenge to be judged by the remainder of the UDC hearing panel if such a challenge is made at this time. Such cause may include current teacher-student relationship, bias, or any other factor likely to prejudice a fair hearing. Any person who was directly involved in the original Disciplinary Action, either as a principal in the case or as a Disciplinary Authority, must be automatically removed from any hearing panel regarding the appeal. The Office of the University Secretary after consultation with the Chair will make every reasonable attempt to address any concerns made prior to the hearing date regarding bias by either the Appellant or the Respondent.

#### **UDC Hearing Procedures**

2.68 The Appellant must be presumed innocent until the evidence presented indicates that, on the balance of probabilities Disciplinary Action is warranted. The UDC, in weighing the balance of probabilities, must consider the severity of the alleged incident.

2.69 The hearing before the UDC hearing panel must be by way of a trial de novo except where the appeal has been made only in relation to the severity of the Disciplinary Action imposed, such as appeals of Disciplinary Action imposed in relation to the Respectful Work and Learning Environment Policy or the Sexual Violence Policy.

2.70 After an appeal hearing has commenced, the appeal may be withdrawn by the Appellant only with leave of the UDC hearing panel.

2.71 Hearings must be closed unless the Appellant requests in writing at least forty-eight (48) hours before the hearing that a hearing be open and there is no reasonable objection to an open hearing.

2.72 If the appeal hearing is in closed session, no observers may be present in the room. If the appeal hearing is in open session, any observers present will not be allowed to contribute in any way to the proceedings. Regardless of open or closed status, no electronic or other recording devices will be permitted.

2.73 Regardless of section 2.71, hearings related to discipline under the Respectful Work and Learning Environment Policy and/or discipline relating to Sexual Violence must be closed.

#### **Representatives at UDC Hearing**

2.74 At the UDC hearing, the Appellant may appear in person and may be represented by a Student Advocate, a representative from the University

of Manitoba Student's Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, a member of the Appellant's immediate family, or a lawyer. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.75 At the UDC hearing, the Respondent may be represented by a lawyer from the University of Manitoba's Office of Legal Counsel.

2.76 If any party intends to have a lawyer present at the hearing, that party must notify the Chair of the UDC at least seven (7) working days prior to the hearing. In that event, the UDC hearing panel may also retain the services of legal counsel. A rescheduling of the hearing may be required for all parties to retain legal counsel.

2.77 Subject to the notice provision in section 2.76, a representative designated in writing by any party may:

(a) attend the disciplinary hearing; and

(b) participate in any disciplinary hearing to the extent of asking questions of anyone in attendance and making submissions to the UDC.

2.78 The Appellant and the Appellant's designated representative, if any, and the Respondent and the Respondent's representative, if any, shall be entitled to receive in writing, at least five (5) working days before the date set for the hearing, the information that has been submitted to the previous Appeal Body by the parties in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

#### **Failure to Attend UDC Hearing**

2.79 An Appellant who fails to attend a scheduled appeal hearing may have the appeal considered on the basis of the Appellant's written submission, the presentation of the Appellant's designated representative, if any, and the verbal and written submissions made by the Respondent.

2.80 The Appellant must be advised that the UDC has made a decision regarding the appeal and that the Appellant has ten (10) days to provide reasons for missing the hearing prior to the implementation of the decision. The Chair must determine whether the hearing should be re-scheduled based on any submission from the Appellant. A reasonable attempt will be made to reconvene the same members should the hearing be re-scheduled.

#### **Evidence at UDC Hearing**

2.81 The Appellant, or the Appellant's representative, if any, and the relevant Respondent, or the Respondent's representative, if any, may call witnesses and submit other evidence. The Appellant, or the Appellant's representative, if any, and the relevant Respondent, or the Respondent's representative, if any, are responsible for arranging their own witnesses. If witnesses are to be called, a witness list must be provided by the Appellant or the Appellant's representative, if any, in their original appeal submission provided to the Chair and a witness list must be provided by the relevant Respondent, or the Respondent's representative, if any, with their response to the appeal.

2.82 The Appellant or the Appellant's designated representative, if any, and the Respondent, or the Respondent's representative, if any, must have the right to cross-examine witnesses.

2.83 The Appellant must not be required to give testimony but if the Appellant elects to do so, the Appellant may be cross-examined.

2.84 The UDC may consider confidential information from the University Health Service, Counselling Service, University Chaplains and other similar services which are submitted by these services to the UDC at the request of the Appellant. Such confidential information submitted to the UDC may only be used for the purpose of the appeal and will be treated as other documentation submitted for the appeal hearing as set out in section 2.87.

2.85 Appellants may not appeal the disposition of a finding under the Respectful Work and Learning Environment Policy or under the Sexual Violence Policy, but may appeal disciplinary action based on that finding. Where an appeal of disciplinary action has been initiated and upon the written request of the Chair of the UDC, the Vice-President (Administration) shall forward to the UDC the report of the investigator for consideration in the disposition of the appeal. Such confidential information submitted to the UDC may only be used for the purpose of the appeal and will be treated as other documentation submitted for the appeal hearing as set out in section 2.87.

2.86 Subject to section 2.78, the Appellant, the Appellant's representative and the relevant Disciplinary Authority normally must have the right to receive a copy of any university document that the UDC or hearing panel considers in relation to the appeal. The Chair of the Committee must make the final determination on this matter.

2.87 All members of the UDC and/or hearing panel will keep all materials and information used for the appeal in strict confidence and surrender such materials to the recording secretary who will have the materials destroyed by way of confidential shredding.

### Adjournments

2.88 Requests for adjournment shall be granted within reason.

### Disposition

2.89 A decision to uphold or deny an appeal, in whole or in part, and a decision to take different Disciplinary Action, in whole or in part, requires a simple majority.

2.90 If, after hearing all the evidence, the UDC is satisfied on the evidence presented that the Appellant has committed Academic Misconduct or Non-Academic Misconduct, the UDC may dispose of the matter by instituting any Disciplinary Action set out in the column entitled "UDC" in Table 3.

2.91 The Chair of the UDC or hearing panel must, after a decision has been made, report the results of that decision in writing to:

- (a) the Appellant or the designated representative of the Appellant, if any;
- (b) the Respondent, or the Respondent's representative, if any, from whose decision the appeal has been heard;
- (c) the Dean/Director of the Faculty/College/School involved; or the Associate Vice-President (Administration), the Director of Student Residences, or the Chief Information Officer (CIO) of IST, as the case may be;
- (d) the Registrar;
- (e) the Vice-President (Administration);

- (f) the Vice-Provost (Students); or
- (g) any others as deemed relevant.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Appeal Procedure is required.

3.2 The President or his or her delegate is responsible for the implementation, administration and review of this Appeal Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Appeal Procedure.

## Part IV: Review

4.1 Governing Document reviews must be conducted every ten (10) years. The next scheduled review date for this Appeal Procedure is September 1, 2026.

4.2 In the interim, this Appeal Procedure may be revised or repealed if:

- (a) the Approving Body deems it necessary or desirable to do so;
- (b) the Appeal Procedure is no longer legislatively or statutorily compliant;
- (c) the Appeal Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Appeal Procedure supersedes all of the following:

- (a) Student Discipline Procedure, effective January 1, 2009, revised January 26, 2010.
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Appeal Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Student Discipline Bylaw;
- (b) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;
- (c) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;
- (d) Table 3: Disciplinary Actions and Disciplinary Authorities;
- (e) Student Academic Misconduct Procedure;
- (f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;
- (g) Definitions of Academic Units Policy;
- (h) Final Examinations and Final Grades Policy and Procedures;

- (i) Respectful Work and Learning Environment Policy;
- (j) Sexual Violence Policy;
- (k) Disclosures and Complaints Procedure;
- (l) Use of Computer Facilities Policy and Procedure;
- (m) Violent or Threatening Behaviour Policy and Procedure;
- (n) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175;
- (o) The Personal Health Information Act, C.C.S.M. c. P33.5.

(h) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(i) "Procedure" means this Student Academic Misconduct Procedure.

(j) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(k) "Student" means any of the following individuals:

- (i) Admitted – an individual who has accepted an offer of admission to the University;
- (ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension;
- (iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(l) "Student Advocate" is a member of the University's Student Advocacy Office who provides Students with information on their rights and responsibilities, as well as assistance with resolving problems or concerns resulting from actions or decisions taken by the University.

(m) "Table 1" refers to Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct, which follows the Bylaw.

(n) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(o) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a Faculty/College/School is not a Unit as the term is used within this Procedure.

(p) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(q) "University" refers to the University of Manitoba.

(r) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers.

(s) "UMSS" means the University of Manitoba Security Services.

## Student Academic Misconduct Procedure

### Part I: Reason for Procedure

1.1 The University of Manitoba emphasizes the importance of academic integrity and works diligently to uphold a rigorous and ethical academic environment.

1.2 The reason for this Procedure is to:

- (a) Articulate the University's expectation that all Students maintain the highest standards of integrity;
- (b) Outline the jurisdiction for each Disciplinary Authority dealing with the Academic Misconduct of Students; and
- (c) Provide a fair and thorough investigation process into allegations of Academic Misconduct.

### Part II: Procedure Content

#### Definitions

2.1 The following terms are defined for the purpose of this Procedure:

- (a) "Academic Misconduct" has the same meaning as defined in section 2.5 of this Procedure.
- (b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.
- (c) "Appeal Procedure" means the Student Discipline – Appeal Procedure.
- (d) "Bylaw" means the Student Discipline Bylaw.
- (e) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (f) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3.
- (g) "Disciplinary Authority" means the disciplinary authority designated to determine a matter of student discipline for Academic Misconduct under Table 1.

#### Scope

2.2 This Procedure applies to Student's academic conduct in relation to any University Matter.

2.3 "University Matter" means any activity, event, or undertaking in which a member of the University Community participates which has a substantial connection to the University, such as:

- (a) University-related activities or events, including but not limited to:
  - (i) Any activity or event on property owned or controlled by the University;
  - (ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;
  - (iii) The offering of any service by the University, including educational services;
  - (iv) Student placements, practica, or clinical training;
  - (v) University research activities, whether on or off campus;
  - (vi) Student and/or employee exchanges arranged in connection with the University;
  - (vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;
  - (viii) University field trips, travel-study tours, service-learning activities, and similar activities;
- (b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:
  - (i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;
  - (ii) Participation on a committee or board as a representative of the University;
  - (iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;
  - (iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or
  - (v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

### Academic Misconduct

2.4 As members of the University Community, Students have an obligation to act with academic integrity. Any Student who engages in

Academic Misconduct in relation to a University Matter will be subject to discipline.

2.5 "Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the academic integrity of the University, including but not limited to:

- (a) Plagiarism – the presentation or use of information, ideas, sentences, findings, etc. as one's own without appropriate attribution in an assignment, test or final examination.
- (b) Cheating on Quizzes, Tests or Final Examinations – the circumventing of fair testing procedures or contravention of exam regulations. Such acts may be premeditated/planned or may be unintentional or opportunistic.
- (c) Inappropriate collaboration – when a Student and any other person work together on assignments, projects, tests, labs or other work unless authorized by the course instructor.
- (d) Duplicate Submission – cheating where a Student submits a paper/assignment/test in full or in part, for more than one course without the permission of the course instructor.
- (e) Personation – writing an assignment, lab, test, or examination for another Student, or the unauthorized use of another person's signature or identification in order to impersonate someone else. Personation includes both the personator and the person initiating the personation.
- (f) Academic Fraud – falsification of data or official documents as well as the falsification of medical or compassionate circumstances/documentation to gain accommodations to complete assignments, tests or examinations.

2.6 Students will be subject to Disciplinary Action for any instance of Academic Misconduct, regardless of whether such behaviour is covered by other University policies, procedures or bylaws. Matters relating to certain Academic Misconduct may also be subject to additional policies, such as the Responsible Conduct of Research Policy and related procedures.

### Jurisdiction of Disciplinary Authority

2.7 The specific jurisdiction of each Disciplinary Authority designated to determine an allegation of Academic Misconduct is set out in Table 1.

2.8 For matters involving the Academic Misconduct of an undergraduate Student, the Disciplinary Authority with the closest connection to the particular alleged Academic Misconduct has jurisdiction over the matter, subject to section 2.10 of this Procedure. However, the Disciplinary Authority must inform the Unit Head of the Student's home Faculty/ College/School prior to any investigation.

2.9 Matters involving Academic Misconduct of a graduate Student must be referred directly to the Dean of the Faculty of Graduate Studies who shall, in turn, inform the department head or Unit Head of the Student's home department or Unit prior to any investigation and Disciplinary Action.

2.10 When the alleged Academic Misconduct, if proven on a balance of probabilities, would:

- (a) Constitute a second instance of Academic Misconduct by the Student; or



(b) Be of such severity as to warrant a Disciplinary Action that is not available to the Disciplinary Authority with the closest connection to the matter under Table 1 (e.g. Department Head); the matter shall be referred to the next appropriate Disciplinary Authority under Table 1 (e.g. Dean/Director) for investigation and decision.

2.11 If a question arises as to which Disciplinary Authority should hear a particular case, the question must be referred to the President for resolution.

2.12 If the Academic Misconduct relates to a criminal offence, the Disciplinary Authority must provide relevant information to UMSS for potential follow-up by the appropriate policing authority.

### Notice to the Student

2.13 If the Disciplinary Authority determines that there is sufficient evidence to initiate an investigation into the allegation of Academic Misconduct under this Student Academic Misconduct Procedure, the Student who is the subject of a disciplinary matter will be informed in writing by the Disciplinary Authority (with a copy to the University's Registrar) that:

(a) An investigation is proceeding in accordance with this Procedure, the nature of the matter being investigated, that the Student may be subject to Disciplinary Action and that a hold will be placed on the Student's record in accordance with section 2.14 of this Procedure until the allegation is investigated;

(b) The Student will be given an opportunity to respond to the allegation and, if a meeting is scheduled, notice will be provided as to who will be present on behalf of the University at the meeting;

(c) The Student may seek advice and representation from a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, a member of the Student's immediate family or other support person as may be appropriate. It is the sole responsibility of the Student to determine the adequacy of the Student's representation;

(d) Failure to respond by a specified date will result in the matter being considered without the Student's response;

(e) The Student may obtain a copy of this Procedure, the Bylaw and related procedures. These documents are available online or from the Office of the University Secretary or the Student Advocacy office;

(f) The Student has a right to appeal in accordance with the Bylaw and Appeal Procedure.

### Student Records

2.14 The Disciplinary Authority will request that the Registrar place a hold on the Student's record to prevent the issuance of transcripts, transfers between Faculty/College/School and changes in registrations until the alleged Academic Misconduct is investigated. Until a decision has been made and any appeal process available under the Bylaw has concluded, the Student shall be permitted to continue in the course or program until the case is heard and the Disciplinary Authority must ensure the Student's work continues to be graded normally and is unaffected by the allegation of Academic Misconduct, subject to sections 2.25 and 2.26 of the Bylaw.

### Investigation Procedure

2.15 Subject to section 2.16 of this Procedure, the Disciplinary Authority will, either personally or through a designate, conduct an investigation into the allegations of Academic Misconduct in any manner that he or she deems appropriate to the nature of the circumstances and the seriousness of the issues involved and any admissions made during the investigation. This may include some or all of:

- (a) Interviewing witnesses;
- (b) Reviewing documents and records (both paper and electronic);
- (c) Reviewing photographs, audio, and video recordings;
- (d) Examining physical evidence;
- (e) Arranging for testing of physical evidence;
- (f) With the consent of participants, arranging for medical or psychological evaluations; and/or
- (g) Submitting a Third Party Data Access Request Form to IST regarding accessing electronic systems and consulting with Access and Privacy Office as required to facilitate the request.

2.16 The Disciplinary Authority may choose not to personally investigate where the issue has been or may be investigated pursuant to another University policy, procedure or bylaw.

2.17 The Disciplinary Authority will conduct the investigation in accordance with the principles of procedural fairness and natural justice. In particular, the Disciplinary Authority will ensure that:

- (a) The Student must be informed of the allegations against him or her, including, subject to section 2.26 of this Procedure, having access to all documentary and other evidence relied upon by the Disciplinary Authority and knowing the identity of the complainant;
- (b) The Student must be provided an opportunity to respond to the allegations;
- (c) While strict rules of evidence do not apply, appropriate weight must be given to evidence based on its credibility and reliability; and
- (d) Witnesses may wish to consult with or respond through an advocate (which may include legal counsel, a union representative, or a Student Advocate, as may be appropriate).

2.18 The Disciplinary Authority (or designate) may meet with the Student to present the facts/evidence concerning the allegation and to give the Student an opportunity to respond to the allegation and present his/her explanation of the matter. The Disciplinary Authority will give notice to the Student as to who will be present on behalf of the University at such a meeting.

### Decision

2.19 The Disciplinary Authority will inform the Student that a written decision letter will be sent normally within five (5) working days of receiving the Student's response. If the Student does not respond within a reasonable time, the Disciplinary Authority will consider the matter and make a decision in the absence of the Student's response and based on the information that is available.

2.20 At the conclusion of the investigation, the Disciplinary Authority will inform the Student of his or her decision in writing and will include, at minimum, the following:

- (a) A summary of the allegation of Academic Misconduct;
- (b) A summary of the process and key timelines in the investigation;
- (c) A summary of the key evidence obtained through the investigation, including the response of the Student to the allegation;
- (d) An indication of which key evidence was considered credible and reliable;
- (e) A conclusion as to whether, on a balance of probabilities, the Academic Misconduct occurred;
- (f) A summary of the reasons for the conclusion;
- (g) A summary of any Disciplinary Action instituted in accordance with the Bylaw and section 2.21 of this Procedure; and
- (h) If Disciplinary Action is taken, information about the right to appeal, the time period for appeal, and the person and contact information for the submission of an appeal, in accordance with the Bylaw.

2.21 Where there is a finding of Academic Misconduct, the Disciplinary Authority will consider any previous findings of Academic Misconduct before determining the appropriate Disciplinary Action under the Bylaw.

In the case where the Disciplinary Authority is not the Unit Head of the Faculty/College/School in which the Student is registered, the Disciplinary Authority will determine the appropriate Disciplinary Action in consultation with the Unit Head of that Faculty/College/School.

2.22 The Disciplinary Authority will send a copy of their decision to the Registrar and to the Unit Head of the Faculty/College/School in which the Student is registered.

### Appeals

2.23 Students have a right to appeal Disciplinary Actions in accordance with the Bylaw and Appeal Procedure.

### Obligations of Confidentiality by the University

2.24 In respect of an incidence of Academic Misconduct, the University will not disclose the name of the complainant, the Student, or the circumstances related to the complaint to any person, other than where the disclosure is:

- (a) Necessary to investigate the complaint or take corrective action with respect to the complaint; or
- (b) Required by law.

2.25 Personal information that is disclosed under section 2.24 above in respect of an incidence of Academic Misconduct will be the minimum amount necessary for the purpose.

### Obligations of Confidentiality by the Disciplinary Authority

2.26 The Disciplinary Authority, in conducting the investigation, will comply with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act with respect to personal information and personal health information collected, used and disclosed in the course of the investigation. Where a Disciplinary

Authority is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.27 The Disciplinary Authority will advise all persons involved with an investigation as to their obligations regarding confidentiality, and the protections available to them under this Procedure.

### Obligations of Confidentiality by the Others

2.28 All persons involved in an investigation of an incident of Non-Academic Misconduct or Concerning Behaviour, whether as a witness or retrieving relevant information or documents, must keep confidential:

- (a) The existence and nature of the investigation; and
- (b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.29 Notwithstanding section 2.28, the Complainant, the Respondent, and witnesses involved in the investigation may:

- (a) Obtain confidential advice (including advice from a Student Advocate or lawyer, as may be appropriate);
- (b) Disclose information to others only to the extent reasonably necessary to gather evidence and, in the case of an accused Student, to make full answer and defense to the allegations; and
- (c) Use information obtained independent of the investigation in any other forum.

### Records Management

2.30 The Disciplinary Authority will maintain files with respect to each complaint in accordance with the Records Management Policy and Procedure.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Procedure is required.

3.2 The President is responsible for the implementation, administration and review of this Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2026.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the President or the Approving Body deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Student Discipline Bylaw;
- (b) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;
- (c) Table 3: Disciplinary Actions and Disciplinary Authorities;
- (d) Student Discipline - Appeal Procedure;
- (e) Definitions of Academic Units Policy;
- (f) Responsible Conduct of Research Policy and Procedures;
- (g) Records Management Policy and Procedure;
- (h) Use of Computer Facilities Policy and Procedure;
- (i) Third Party Data Access Request Form;
- (j) Student Advocacy Office Policy;
- (k) The Freedom of Information and Protection of Privacy Act, CCSM c. F175;
- (l) The Personal Health Information Act, CCSM c. P33.5.

# Student Non-Academic Misconduct and Concerning Behaviour Procedures

## Part I: Reason for Procedure

1.1 The reason for this Procedure is to:

- (a) Articulate the University's expectation that all Students act in a fair and reasonable manner toward their peers, the faculty, staff, administration and the physical property of the University;
- (b) Outline the jurisdiction for each Disciplinary Authority dealing with the Non-Academic Misconduct of Students;
- (c) Provide a fair and thorough investigation process for allegations of Non-Academic Misconduct;
- (d) Coordinate an action plan for Students exhibiting Concerning Behaviour that includes supports and a clear referral mechanism for members of the University Community.

## Part II: Procedure Content

### Definitions

2.1 The following terms are defined for the purpose of this Procedure:

- (a) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic

rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(b) "Appeal Procedure" means the Student Discipline – Appeal Procedure.

(c) "Bylaw" means the Student Discipline Bylaw.

(d) "College" means a Professional College as defined under the Definitions of Academic Units Policy.

(e) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3.

(f) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Non-Academic Misconduct under Table 2.

(g) "Discrimination" has the same meaning as defined in section 2.3 of the Disclosures and Complaints Procedure.

(h) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(i) "Harassment" refers to Personal Harassment, Human Rights Based Harassment, and/or Sexual Harassment as defined in section 2.10 of the Disclosures and Complaints Procedure.

(j) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of this Procedure.

(k) "Procedure" means this Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(l) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(m) "Sexual Violence" has the same meaning as defined in the Sexual Violence Policy.

(n) "STATIS" means the Student/Staff Threat Assessment Triage Intervention Support team established pursuant to section 2.11 of the Violent or Threatening Behaviour Procedure.

(o) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(p) "Student Advocate" is a member of the University's Student Advocacy Office who provides Students with information on their rights and responsibilities, as well as assistance with resolving problems or concerns resulting from actions or decisions taken by the University.

(q) "Table 2" refers to Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct, which follows the Bylaw.

(r) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(s) "UMSS" means the University of Manitoba's Security Services.

(t) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a Faculty/College/School is not a Unit as the term is used within this Procedure.

(u) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(v) "University" refers to the University of Manitoba.

(w) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers.

(x) "University Matter" has the same meaning as defined in section 2.3 of this Procedure.

(y) "Violence" means:

- (i) The attempted or actual exercise of physical force against a person; or
- (ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

## Scope

2.2 This Procedure applies to a Student's non-academic conduct in relation to any University Matter.

2.3 "University Matter" means any activity, event, or undertaking in which a member of the University Community participates which has a substantial connection to the University, such as:

(a) University-related activities or events, including but not limited to:

- (i) Any activity or event on property owned or controlled by the University;
- (ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;
- (iii) The offering of any service by the University, including educational services;
- (iv) Student placements, practica, or clinical training;

(v) University research activities, whether on or off campus;

(vi) Student and/or employee exchanges arranged in connection with the University;

(vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;

(viii) University field trips, travel-study tours, service-learning activities, and similar activities;

(b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

## Non-Academic Misconduct

2.4 Any Student who engages in Non-Academic Misconduct in relation to a University Matter will be subject to discipline.

2.5 "Non-Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the integrity or proper functioning of the University or the health, safety, rights or property of the University or members of the University Community, such as:

(a) Threats of harm or actual harm by any means (including electronic means) to another person, including but not limited to:

- (i) Discrimination;
- (ii) Hazing;
- (iii) Harassment;
- (iv) Possession or use of dangerous objects, in violation of any applicable law;
- (v) Sexual Violence;

(vi) Stalking behaviour, including repetitive behaviour directed at a specific person which reasonably causes that person alarm, distress, fear or a change of normal behavior;

(vii) Violence;

(b) Property-related misconduct, including but not limited to:

(i) Theft;

(ii) Threats to or damage of University property;

(iii) Vandalism;

(c) Inappropriate or disruptive behavior, including but not limited to:

(i) Actions which habitually interfere with the learning environment or requires the inordinate time and attention of faculty and staff;

(ii) Alcohol or substance abuse;

(iii) Disorderly behaviour;

(iv) Indecent exposure;

(v) Unprofessional conduct;

(d) Abuse of the process of University policies, procedures or regulations, including but not limited to:

(i) Abuse of computer privileges;

(ii) Breach of student residence rules or regulations;

(iii) Failure to comply with a previously imposed Disciplinary Action;

(iv) Frivolous or vexatious complaints or appeals.

2.6 Students will be subject to Disciplinary Action for any instance of Non-Academic Misconduct, regardless of whether such behaviour is covered by other University policies, procedures or bylaws. Matters relating to certain Non-Academic Misconduct may also be subject to additional policies, such as:

(a) The Respectful Work and Learning Environment Policy and the Complaints and Disclosures Procedure when the matter relates to Discrimination, or Harassment;

(b) The Sexual Violence Policy and the Complaints and Disclosures Procedure when the matter relates to Sexual Violence;

(c) The Violent or Threatening Behaviour Policy and Procedure when the matter relates to Violence, hazing, stalking behaviour, or the possession or use of dangerous objects in violation of any applicable law;

(d) The Use of Computer Facilities Policy and Procedure when the matter relates to abuse of computer privileges;

(e) The Campus Alcohol Policy and Procedure when the matter relates to alcohol or substance abuse;

(f) The student Residence Contract when the matter relates to a breach of student residence rules or regulations.

### **Jurisdiction of Disciplinary Authority**

2.7 The specific jurisdiction of each Disciplinary Authority designated to determine an allegation of Non-Academic Misconduct is set out in Table 2.

2.8 For matters involving the Non-Academic Misconduct of an undergraduate Student, the Disciplinary Authority with the closest connection to the particular alleged Non-Academic Misconduct has jurisdiction over the matter, subject to section 2.10 of this Procedure.

However, the Disciplinary Authority must inform the Unit Head of the Student's home Faculty/College/School, and the Vice-Provost (Students), prior to any investigation.

2.9 Matters involving Non-Academic Misconduct of a graduate Student must be referred directly to the Dean of the Faculty of Graduate Studies who shall, in turn, inform the department head of the Student's program, and the Vice-Provost (Students), prior to any investigation.

2.10 When the alleged Non-Academic Misconduct, if proven on a balance of probabilities, would:

(a) Constitute a second instance of Non-Academic Misconduct by the Student; or

(b) Be of such severity as to warrant a Disciplinary Action that is not available to the Disciplinary Authority with the closest connection to the matter under Table 2 (e.g. Department Head); the matter shall be referred to the next appropriate Disciplinary Authority under Table 2 (e.g. Dean/Director) for investigation and decision.

2.11 If a question arises as to which Disciplinary Authority should hear a particular case, the question must be referred to the President for resolution.

2.12 If the Non-Academic Misconduct relates to a criminal offence, the Disciplinary Authority must provide relevant information to UMSS for potential follow-up by the appropriate policing authority.

### **Notice to Vice-Provost (Students)**

2.13 Before initiating an investigation, the Disciplinary Authority will advise the Vice-Provost (Students) of the following:

(a) An allegation of Non-Academic Misconduct has been received;

(b) The nature of the Non-Academic Misconduct;

(c) The name of the Student alleged to have committed the Non-Academic Misconduct; and

(d) The intention of the Disciplinary Authority to initiate an investigation in accordance with this Procedure.

2.14 The Vice-Provost (Students) will review this information and advise the Disciplinary Authority if he or she feels the matter should be referred to STATIS before the investigation is conducted.

### **Notice to the Student**

2.15 After consultation with the Vice-Provost (Students), the Student who is the subject of a disciplinary matter will be informed in writing by the Disciplinary Authority (with a copy to the University's Registrar) that:

(a) An investigation is proceeding in accordance with this Procedure, the nature of the matter being investigated, that the Student may be subject to Disciplinary Action, and that a hold will

be placed on the Student's record in accordance with section 2.16 of this Procedure until the allegation is investigated;

(b) The Student will be given an opportunity to respond to the allegation and, if a meeting is scheduled, notice will be provided as to who will be present on behalf of the University at the meeting;

(c) The Student may seek advice and representation from a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, a member of the Student's immediate family, or other support person as may be appropriate. It is the sole responsibility of the Student to determine the adequacy of the Student's representation;

(d) Failure to respond by a specified date will result in the matter being considered without the Student's response;

(e) The Student may obtain a copy of this Procedure, the Bylaw and related procedures. These documents are available online or from the Office of the University Secretary or the Student Advocacy office;

(f) The Student has a right to appeal in accordance with the Bylaw and Appeal Procedure.

### Student Records

2.16 The Disciplinary Authority will request that the Registrar place a hold on the Student's record to prevent the issuance of transcripts, transfers between Faculty/College/School and changes in registrations until the alleged Non-Academic Misconduct is investigated. Until a decision has been made and any appeal process available under the Bylaw has concluded, the Student shall be permitted to continue in the course or program and the Disciplinary Authority must ensure the Student's work continues to be graded normally and is unaffected by the allegation of Non-Academic Misconduct, subject to sections 2.25 and 2.26 of the Bylaw.

### Investigation Procedure

2.17 Subject to section 2.18 of this Procedure, the Disciplinary Authority will, either personally or through a designate, conduct an investigation into the allegations of Non-Academic Misconduct in any manner that he or she deems appropriate to the nature of the alleged Non-Academic Misconduct, the seriousness of the issues involved, and any admissions made during the investigation. This may include some or all of:

- (a) Interviewing witnesses;
- (b) Reviewing documents and records (both paper and electronic);
- (c) Reviewing photographs, audio, and video recordings;
- (d) Examining physical evidence;
- (e) Arranging for testing of physical evidence;
- (f) With the consent of participants, arranging for medical or psychological evaluations; and/or
- (g) Submitting a Third Party Data Access Request Form to IST regarding accessing electronic systems and consulting with Access and Privacy Office as required to facilitate the request.

2.18 The Disciplinary Authority may choose not to personally investigate where the issue has been or may be investigated pursuant to another University policy, procedure or bylaw.

2.19 The Disciplinary Authority will conduct the investigation in accordance with the principles of procedural fairness and natural justice. In particular, the Disciplinary Authority will ensure that:

- (a) The Student must be informed of the allegations against him or her, including, subject to section 2.34 of this Procedure, having access to all documentary and other evidence relied upon by the Disciplinary Authority and knowing the identity of the complainant;
- (b) The Student must be provided an opportunity to respond to the allegations;
- (c) While strict rules of evidence do not apply, appropriate weight must be given to evidence based on its credibility and reliability; and
- (d) Witnesses may wish to consult with or respond through an advocate (which may include legal counsel, a union representative, or a Student Advocate, as may be appropriate).

2.20 The Disciplinary Authority (or designate) may meet with the Student to present the facts/evidence concerning the allegation and to give the Student an opportunity to respond to the allegation and present his/her explanation of the matter. The Disciplinary Authority will give notice to the Student as to who will be present on behalf of the University at such a meeting.

### Decision

2.21 The Disciplinary Authority will inform the Student that a written decision letter will be sent normally within five (5) working days of receiving the Student's response. If the Student does not respond within a reasonable time, the Disciplinary Authority will consider the matter and make a decision in the absence of the Student's response and based on the information that is available.

2.22 At the conclusion of the investigation, the Disciplinary Authority will inform the Student of his or her decision in writing and will include, at minimum, the following:

- (a) A summary of the allegation of Non-Academic Misconduct;
- (b) A summary of the process and key timelines in the investigation;
- (c) A summary of the key evidence obtained through the investigation, including the response of the Student to the allegation;
- (d) An indication of which key evidence was considered credible and reliable;
- (e) A conclusion as to whether, on a balance of probabilities, the Non-Academic Misconduct occurred;
- (f) A summary of the reasons for the conclusion;
- (g) A summary of any Disciplinary Action instituted in accordance with the Bylaw and section 2.23 of this Procedure; and
- (h) If Disciplinary Action is taken, information about the right to appeal, the time period for appeal, and the person and contact information for the submission of an appeal, in accordance with the Bylaw.

2.23 Where there is a finding of Non-Academic Misconduct, the Disciplinary Authority will consider any previous findings of Non-Academic Misconduct before determining the appropriate Disciplinary Action under the Bylaw. In the case where the Disciplinary Authority is not the Unit Head of the Faculty/College/School in which the Student is registered, the Disciplinary Authority will determine the appropriate Disciplinary Action in consultation with the Unit Head of that Faculty/College/School.

2.24 The Disciplinary Authority will send a copy of their decision to the Registrar, to the Vice-Provost (Students), and to the Unit Head of the Faculty/College/School in which the Student is registered.

### Appeals

2.25 Students have a right to appeal Disciplinary Actions in accordance with the Bylaw and the Appeal Procedure.

### Concerning Behaviour

2.26 "Concerning Behaviour" means any behaviour that, while not indicative of a clear immediate threat, gives rise to a reasonable apprehension that the Student may engage in conduct harmful to him- or herself or to others, including but not limited to:

- (a) Threats of self-harm;
- (b) Worrisome behavioral changes in an individual, such as changes in appearance, social withdrawal or isolation, apparent detachment from reality, or inordinate interest in or discussion of violent themes or events.

2.27 Where a Student is exhibiting Concerning Behaviour, members of the University Community must report such behaviour to their Unit Head, a member of STATIS, and/or UMSS. The Unit Head of the Student's Faculty/College/School of registration must be consulted and that Unit Head should, where appropriate:

- (a) Ensure the Student receives timely voluntary counselling referrals through existing support services at the University, such as the Student Support Case Manager, Student Counselling Centre, University Health Services, and/or the Faculty Counselling Services (College of Medicine);
- (b) Use this Procedure, the Student Discipline Bylaw and other policies, procedures and bylaws as appropriate where additional action is necessary to deal with Concerning Behaviour.

2.28 Members of the University Community must report incidents of Concerning Behaviour to UMSS and STATIS where a Student's Concerning Behaviour is affecting the various services and administration offices of the University, or where the Concerning Behaviour is of a nature or quality that likely will result in:

- (a) Serious harm to the Student or substantial deterioration of the Student's health; or
- (b) Serious harm to another person or property;

2.29 When reporting concerns to STATIS or UMSS, individuals should attempt to provide the following information:

- (a) Description of the Concerning Behaviour;
- (b) Name of the Student exhibiting the Concerning Behaviour; and

(c) Indication of what action has been taken to date (if applicable), including a description of any meetings with the Student and any assistance provided, including referrals.

2.30 Information regarding Concerning Behaviour that is received during the Student application process must be referred to the Executive Director of Enrolment Services or the Dean of Graduate Studies, as appropriate. If the information is of serious concern to the respective Executive Director of Enrolment Services or the Dean of Graduate Studies, he/she may seek the advice of the University Legal Counsel and may initiate a staff conference of STATIS.

2.31 If a Student does not accept personal responsibility for their Concerning Behaviour or will not accept appropriate referral for voluntary counselling, the Unit Head should proceed as follows:

- (a) Advise the Student to seek professional help; and
- (b) Contact the Executive Director of Student Support if the Student refuses to voluntarily seek professional help. The Executive Director of Student Support may consult with colleagues to determine whether or not an involuntary psychiatric assessment is advisable according to mental health legislation and regulations.

### Confidentiality

#### Obligations of Confidentiality by the University

2.32 In respect of an incidence of Non-Academic Misconduct or Concerning Behaviour, the University will not disclose the name of the complainant, the Student, or the circumstances related to the complaint to any person, other than where the disclosure is:

- (a) Necessary to investigate the complaint or take corrective action with respect to the complaint;
- (b) Necessary to coordinate an action plan for a Student exhibiting Concerning Behaviour that includes supports and a clear referral mechanism for the Student; or
- (c) Required by law.

2.33 Personal information that is disclosed under section 2.32 above in respect of an incidence of Non-Academic Misconduct or Concerning Behaviour will be the minimum amount necessary for the purpose.

#### Obligations of Confidentiality by the Disciplinary Authority

2.34 The Disciplinary Authority, in conducting the investigation, will comply with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act with respect to personal information and personal health information collected, used and disclosed in the course of the investigation. Where a Disciplinary Authority is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.35 The Disciplinary Authority will advise all persons involved with an investigation as to their obligations regarding confidentiality, and the protections available to them under this Procedure.

#### Obligations of Confidentiality by the Others

2.36 All persons involved in an investigation of an incident of Non-Academic Misconduct or Concerning Behaviour, whether as a witness or retrieving relevant information or documents, must keep confidential:

- (a) The existence and nature of the investigation; and
- (b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those

who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.37 Notwithstanding section 2.36, the Complainant, the Respondent, and witnesses involved in the investigation may:

- (a) Obtain confidential advice (including advice from a Student Advocate or lawyer, as may be appropriate);
- (b) Disclose information to others only to the extent reasonably necessary to gather evidence and, in the case of an accused Student, to make full answer and defense to the allegations; and
- (c) Use information obtained independent of the investigation in any other forum.

### Records Management

2.38 The Disciplinary Authority will maintain files with respect to each complaint in accordance with the Records Management Policy and Procedure.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Procedure is required.

3.2 The President is responsible for the implementation, administration and review of this Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2026.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the President or the Approving Body deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Student Discipline Bylaw;
- (b) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;

(c) Table 3: Disciplinary Actions and Disciplinary Authorities;

(d) Student Discipline - Appeal Procedure;

(e) Respectful Work and Learning Environment Policy;

(f) Sexual Violence Policy;

(g) Complaints and Disclosures Procedure;

(h) Residence Contract;

(i) Violent or Threatening Behaviour Policy and Procedure;

(j) Campus Alcohol Policy and Procedure;

(k) Definitions of Academic Units Policy;

(l) Records Management Policy and Procedure;

(m) Use of Computer Facilities Policy and Procedure;

(n) Third Party Data Access Request Form;

(o) Student Advocacy Office Policy;

(p) The Freedom of Information and Protection of Privacy Act, CCSM c. F175;

(q) The Personal Health Information Act, CCSM c. P33.5.

## University Parking Regulations

The Policy and Procedure is available online at [http://umanitoba.ca/admin/governance/governing\\_documents#university-community](http://umanitoba.ca/admin/governance/governing_documents#university-community) ([http://umanitoba.ca/admin/governance/governing\\_documents/#university-community](http://umanitoba.ca/admin/governance/governing_documents/#university-community)).

## Parking

### Part I: Reason for Regulation

1.1 The University of Manitoba recognizes that at any given time there is a large number of Motor Vehicles driving and parking on campus. In order for the University to maintain orderly conduct of parking of Motor Vehicles, Parking Regulations must be established. Furthermore, as an ancillary service, parking must be operated on a cost recovery basis. These regulations set out the rules, fees and remedies available in association with parking on University Property, and they apply to all staff, students, and the general public. The University of Manitoba Act, which is an act of legislature, empowers the University of Manitoba to govern parking on University Property and to make parking regulations. This includes fees and charges for parking violations and actions taken for failure to pay fees and charges.

### Part II: Regulation Content

#### Introduction

2.1 Responsibility for the overall administration and implementation of the Parking Regulations (the "Regulations") of the University of Manitoba (the "University") rests with the Vice-President (Administration), who may from time to time delegate to others aspects of the administration or implementation of the Regulations.

2.2 All members of the University community and persons attending on University Property are required to familiarize themselves and comply with the Regulations.



2.3 The Regulations are in addition to any bylaws of the City of Winnipeg and any legislation and regulations of the Province of Manitoba regulating the operation or use of Motor Vehicles or regulating the crossing of or walking upon roadways by pedestrians.

2.4 Nothing contained in these Regulations shall be deemed to limit the University's remedies or actions, either at law or through the University's policies, in respect of any matter arising under these Regulations.

### General Definitions

2.5 The following terms have the following defined meaning for the purpose of this Regulation:

- (a) Designated Accessible Parking Area means a parking space designated for individuals with physical disabilities.
- (b) Event means any event being held at the Investors Group Field with an expected attendance of 15,000 or more individuals.
- (c) Event Day shall mean the date on which there is a scheduled Event at the Investors Group Field.
- (d) Investors Group Field Event Designated Parking Lots shall mean any parking lot on University Property, on Event Day, designated and posted by the University as such, and shall not include University Designated Parking Lots.
- (e) Motor Vehicles includes reference to motorcycles, mopeds and scooters, and where appropriate, snowmobiles, bicycles, golf carts and all-terrain vehicles.
- (f) Parkade means a multilevel structure located on University property designed for the parking of Motor Vehicles
- (g) Parking Fee means the fee corresponding to the rates set annually by the Vice-President (Administration) or designate for all available parking permits.
- (h) Parking Services means the persons or administrative unit of the University to whom the Vice-President (Administration) may from time to time delegate responsibility for administration of parking permits and for the designation and assigning of parking areas.
- (i) Public Pay Parking Area means any parking area on University Property, excluding the Parkade, designated by the University with signage as visitor or casual parking with a parking meter, pay and display dispenser, pay-by-plate parking meter, or mobile payment application, or such other similar technology as may become available.
- (j) Reserved Parking Areas means areas designated by the University as reserved 24 hour parking areas located in various parking lots on University Property.
- (k) University Designated Parking Lots shall mean any parking lot on University Property, on Event Day, designated and posted by the University as such, and all shall not include Investors Group Field Event Designated Parking Lots.
- (l) University Property means property owned and occupied or under the charge or control of the University, including roadways and including property at Investors Group Field and SmartPark.
- (m) University Security Services means the administrative unit of the University, the members of which are provincially licensed security guards and may include others contracted by the Vice-

President (Administration) from time to time to assist in the implementation of the Regulations.

(n) Violation Notice means a notice or form issued by the University to any operator or owner charged with violation of any of the provisions of this Regulation.

### Headings of Paragraphs

2.6 All headings in the Regulations are inserted solely for convenience of reference and shall not be deemed in any way to limit or affect the provisions to which they relate.

### Scope of Regulations

2.7 The Regulations, without any exceptions, apply to:

- (a) all persons who park, stop or leave a Motor Vehicle on University Property; and
- (b) all owners of Motor Vehicles which are parked, stopped or left on University Property.

### Procedure Where No Assigned Parking Space Available

2.8 Subject to sections 2.36-2.38 on Event Parking, holders of a valid staff parking permit who find their assigned parking area fully occupied may park in the next most convenient parking area (other than a reserved parking area, an accessible parking area, a residence student parking area, a metered parking area, a Public Pay Parking Area or a Parkade) and must immediately report the matter to Parking Services. The report should include the Motor Vehicle license number and staff permit number.

2.9 Subject to sections 2.36-2.38 on Event Parking, holders of any other valid parking permit who find their assigned parking area fully occupied should contact Parking Services for directions on where to park without penalty.

### Rates

2.10 Rates for all forms of available parking permits at the University (including rates for parking permit replacements) are set annually by the Vice-President (Administration) or designate and are posted at [umanitoba.ca/parking](https://umanitoba.ca/parking) (<https://umanitoba.ca/parking/>).

### Parking Permits – General Eligibility and Priority

2.11 All persons are eligible to apply for a parking permit as hereinafter provided. Priority in allocation of parking permits will be given to full-time staff members and students of the University. Any person applying for a parking permit may be required to provide identification in order to establish eligibility.

### Authorization

2.12 On Monday to Friday from 7:30 a.m. to 4:30 p.m, a parking permit is required for any Motor Vehicle parked or left on University Property in an assigned parking area, unless the Motor Vehicle is otherwise parked at a meter, Public Pay Parking Area or Parkade in compliance with the Regulations. A parking permit conveys the authorization by the University for a specific Motor Vehicle, registered with Parking Services, to be parked in an assigned parking area. Registration includes an application form and payment of the Parking Fee. Each permit will indicate the category of parking authorized and, if appropriate, the area on campus where that Motor Vehicle is authorized to park.

### Reserved Twenty-Four (24) Hour Parking

2.13 Subject to sections 2.36-2.38 on Event Parking, certain areas in various parking lots will be designated by the University as Reserved

Parking Areas. Parking in a Reserved Parking Area is limited to Motor Vehicles displaying a valid parking permit for that specific Reserved Parking Area. Reserved Parking Areas are appropriately signed and identified.

### Alternate Parking Permit

2.14 Effective September 13, 2013, alternate parking permits will no longer be issued by Parking Services. All current alternate permit holders may keep their eligibility until such time as they cancel their parking privileges or their termination of employment with the University. Eligible staff members who may be using an alternate vehicle on University Property and previously applied for alternate parking permits may retain their alternate permit upon payment of the appropriate fee in effect at the time of application and provided the second Motor Vehicle is registered and the staff member complies with any University policies, procedures, regulations and other rules then in effect. Where an alternate parking permit has been issued, only one (1) registered Motor Vehicle at any time is authorized to park on University Property at any given time (unless the second registered Motor Vehicle is otherwise parked at a metered or Public Pay Parking Area or Parkade in compliance with the Regulations).

### Affixing or Displaying Parking Permits

2.15 Parking permits must be properly affixed or displayed on the Motor Vehicle as follows:

- (a) parking permit decals issued by the University must be affixed on the lower corner of the front windshield on the driver's side of the Motor Vehicle. The backing must be removed from the permit and the permit affixed to the glass using the adhesive which is on the permit; and,
- (b) parking permit hang tags issued by the University must be displayed according to directions printed on the permit.

2.16 Expired, invalid and cancelled parking permits must be removed from Motor Vehicles immediately after the expiry, invalidation or cancellation date and not displayed in conjunction with a valid parking permit.

### Parking Permit Replacement

2.17 Parking permit replacements may be issued, at a predetermined rate, to eligible permit holders when parking permits have been lost or stolen.

2.18 Parking permit replacements may be issued, at no cost, to eligible permit holders where parking permits, through weather damage or fading, are in need of replacement, as determined by Parking Services.

2.19 Where a parking permit replacement is issued, the original parking permit must be returned to Parking Services, unless lost or stolen. If the parking permit has been lost or stolen, an affidavit will be required from the permit holder.

### Term of Permit

2.20 Parking permits are issued for a specified period of time, but immediately become invalid upon the happening of any of the following events:

- (a) on the date of expiration shown on the parking permit (if applicable);
- (b) when the parking permit is displayed on a Motor Vehicle other than the Motor Vehicle for which it was issued;
- (c) when the parking permit is not legible or has been altered;

(d) when the parking permit has been cancelled or revoked;

(e) when the parking permit is lost or stolen;

(f) when the Motor Vehicle for which the parking permit is issued has been placed on the University's tow away list;

(g) when the applicant for a parking permit gives false or incorrect information at the time of application; and

(h) when a residence student of the University vacates or is required to vacate a residence located on University Property (even if the property is leased from the University).

### Permits Not Transferable

2.21 Parking permits are not transferable and may be used only for the Motor Vehicle in which the permit was issued unless otherwise authorized in writing by Parking Services. Parking permits remain the property of the University and must be destroyed when the permit expires or becomes invalid.

### Permits for Persons with Physical Disabilities

2.22 Any persons with physical disabilities may apply to Parking Services for a parking permit for Designated Accessible Parking Areas as determined by Parking Services. In order to qualify for a parking permit for Designated Accessible Parking Areas, a valid Society for Manitobans with Disabilities ("SMD") parking permit must be presented by the permit applicant. The SMD permit expiry date will be relied upon by Parking Services to determine the length of time for which the parking permit for Designated Accessible Parking Areas is required.

2.23 Holders of valid University accessible parking permits who find no signed Designated Accessible Parking Area is available, may park in the next most convenient parking area (other than a residence student parking area, or parking lots N, O and V, as designated by the University) and must immediately report the matter to Parking Services. The report should include the vehicle license number and accessible parking permit number.

### Bicycles

2.24 Bicycles should be parked only in proper University bicycle racks or the University Parkade Bike Station. Parking and storing of bicycles inside any University building, or in any manner which may create a problem related to pedestrian safety, building access or maintenance, as determined by the University, is prohibited. Bicycles parked in such a fashion are subject to removal by the University and their owners may be subject to a fee or charge, at rates established by the University, from time to time.

### Rights of Cancellation

2.25 Notwithstanding any other provision of these Regulations, the University may withdraw areas normally used for parking and cancel any parking permit if the parking area referred to therein is required for construction or other purposes. If the assigned parking area or any portion thereof for which the parking permit is valid is deemed by the University to be required for other purposes and if alternative parking is not provided by the University, the unearned portion of the Parking Fee, minus any amounts due and owing to the University as fees or charges incurred as a result of parking or leaving Motor Vehicles on University Property in contravention of the Regulations, will be refunded to the registered parking permit holder.

**Staff and Student Parking****Application for Parking**

2.26 Staff members intending to park a Motor Vehicle, other than a bicycle, on University Property must apply for assigned parking at Parking Services, unless the Motor Vehicle is otherwise parked at a metered parking area, Public Pay Parking Area or Parkade in compliance with the Regulations.

2.27 Students intending to park a Motor Vehicle on University Property must apply for assigned parking at Parking Services or through any other valid registration system authorized by the University, unless the Motor Vehicle is otherwise parked at a metered parking area, Public Pay Parking Area or Parkade in compliance with the Regulations.

**Conditions of Parking**

2.28 Parking permits authorize the registered permit holder to park in the parking area designated by the parking permit in accordance with the terms and conditions displayed on the parking permit or in the parking contract signed by the permit holder.

2.29 In some parking areas, electricity is supplied to electrical outlets depending on climatic conditions.

**Summer Parking Permits**

2.30 Summer parking permits may be issued upon application and authorize the registered permit holder to park in the parking area designated by the parking permit during the period of May 1 to August 31 upon payment of fees, to be set by the University and posted on [www.umanitoba.ca/parking](http://www.umanitoba.ca/parking) (<http://www.umanitoba.ca/parking/>).

**Residence Student Parking**

2.31 Residence student parking areas are reserved on a twenty-four (24) hour basis for residence students of the University. Residence students who own and operate a Motor Vehicle, while maintaining approved residence on University Property, may apply for available residence parking permits and must submit proof of ownership of the Motor Vehicle acceptable to Parking Services. These permits will be withdrawn by the University if the residence student vacates or is required to vacate residence on University Property, and the unearned portion of the Parking Fee, minus any amounts due and owing to the University as fees or charges incurred as a result of parking or leaving Motor Vehicles on University Property in contravention of the Regulations, will be refunded to the registered parking permit holder.

**Visitor Parking****Visitors**

2.32 Subject to sections 2.36-2.38 on Event Parking, and unless otherwise posted by the University, visitors may park in metered and Public Pay Parking Areas or a Parkade at the posted rate, on Monday to Friday from 7:30 a.m. to 4:30 p.m. Monday to Friday from 4:30 p.m. to 7:30 a.m. and on Saturdays and Sundays, visitors may park in all parking areas without charge, unless otherwise posted by the University. Visitors must at all times comply with the Regulations.

2.33 Any visitor (including contractors, trades people, and persons attending conferences and seminars) who wishes to park other than at a metered parking area, Public Pay Parking Area or Parkade must obtain written parking authorization through Parking Services in advance and must comply with the Regulations.

2.34 On an Event Day, visitors may not park or leave a Motor Vehicle in any parking area or parkade, except as designated by the University with signage and/or on [www.umanitoba.ca/parking](http://www.umanitoba.ca/parking) ([http://](http://www.umanitoba.ca/parking/)

[www.umanitoba.ca/parking/](http://www.umanitoba.ca/parking/)), beginning ninety (90) minutes before an Event until one (1) hour after an Event.

**Couriers**

2.35 Courier companies making deliveries to the University are to use designated building loading zones and must comply with the Regulations. Parking is not to exceed the posted allowable time in duration and courier vehicles must be visibly identified as such.

**Event Day Parking****Investors Group Field event Designated Parking Lots**

2.36 Notwithstanding anything else in these Regulations, beginning ninety (90) minutes before the scheduled start of an Event and until one (1) hour after the end of any Event, no person shall stop, park or leave any Motor Vehicle in any Investors Group Field Event Designated Parking Lot, except in accordance with the authorization granted by a valid Investor's Group Field parking pass or paid Event parking ticket.

**University Designated Parking Lots**

2.37 Notwithstanding anything else in these Regulations, beginning ninety (90) minutes before the scheduled start of an Event and until one (1) hour after the end of any Event, no person shall stop, park or leave any Motor Vehicle in any University Designated Parking Lot without displaying a valid University of Manitoba parking permit. University Designated Parking Lots will be available to University of Manitoba parking permit holders on a first-come, first served basis and space will not be guaranteed.

**Visitor Parking on Event Day**

2.38 Notwithstanding anything else in these Regulations, visitor parking areas at the University of Manitoba during Events will be temporarily unavailable except as designated by the University with signage and/or on [www.umanitoba.ca/parking](http://www.umanitoba.ca/parking) (<http://www.umanitoba.ca/parking/>). This will include all Public Pay Parking Areas, metered areas and Parkades.

**Stalls Equipped With Heater Plugs****Restriction on Use of Power**

2.39 No person shall use any plug except for the sole purpose of drawing power for a Motor Vehicle block heater or to charge an electric vehicle in the appropriately designated stall and no device may be used to supply power to another Motor Vehicle.

**Faulty Heater Plugs**

2.40 Faulty plugs should be reported as soon as possible to the University's Physical Plant Department, or such other or substitute office as may be instituted in its place by the University from time to time.

**Liability**

2.41 The University, its employees, servants and agents assume no responsibility for any inconvenience, loss of, or damage to, a Motor Vehicle or its contents while on University Property, including, but not limited to any inconvenience, loss or damage caused by or attributable to fire, theft, collision electrical surges or interruptions of the supply of electricity or otherwise.

**Parking and Operation of Motor Vehicles****Prohibitions**

2.42 No person shall stop, park or leave any Motor Vehicle, except for bicycles, upon any part of University Property except in accordance with the authorization granted by a valid parking permit and the Regulations provided that, bicycles shall remain subject to all other Regulations and policies of the University.

2.43 Except as specifically authorized by a valid parking permit, no person shall stop, park or leave a Motor Vehicle alongside any building on University Property.

2.44 No person shall stop, park, leave or operate a Motor Vehicle on sidewalks, paths, loading zones, landscaped areas or within three (3) meters of a fire hydrant on University Property except in the course of the performance of essential University business.

2.45 No person shall stop, park or leave a Motor Vehicle in specific areas and roadways on University Property identified and signed as fire lanes.

2.46 No person shall stop, park or leave a Motor Vehicle in a metered space on University Property when the meter at that space is hooded.

2.47 No person shall stop, park or leave a Motor Vehicle idling in an area designated by the University as a "No Idling" Zone, on University Property as indicated by appropriate signage.

2.48 No person shall stop, park or leave a Motor Vehicle in a metered space, Public Pay Parking Area, Parkade or in any parking stall on University Property in such a manner that the Motor Vehicle is not wholly within the metered space or parking stall.

2.49 No person shall move, disfigure, or in any way tamper with any parking control signs posted or erected on University Property.

2.50 No person shall stop, park, leave or operate a snowmobile on University Property, unless specifically authorized by the Vice-President (Administration), or designate, who may set terms and conditions in connection with such authorization wherever appropriate.

2.51 No person shall stop, park or leave a Motor Vehicle in a reserved parking area, a signed Designated Accessible Parking Area or a residence parking area at any time without a valid parking permit for that area unless otherwise posted.

2.52 No person shall permit a Motor Vehicle to be stopped, parked or left in a metered space on University Property when the violation signal of the meter indicates a violation or when the pay parking ticket has expired.

2.53 No person shall stop, park or leave a Motor Vehicle within a Public Pay Parking Area, a metered space or a Parkade, without purchasing parking from a pay & display parking dispenser, parking meter, or mobile payment application on University Property.

2.54 No person shall stop, park or leave a Motor Vehicle from 7:30 a.m. to 4:30 p.m., Monday through Friday, in a signed parking area on University Property, without displaying a valid parking permit for that area.

2.55 Prohibitions 2.42 through 2.50 and 2.56 through 2.59 shall be in effect at all times. Prohibitions 2.51 through 2.54 shall apply at all times except on Saturday, Sunday and holidays, unless otherwise posted or noted in the Regulations.

#### Theft of Service

2.56 No person shall deposit or cause to be deposited in a single or multi-space parking meter, parking pay station or pay & display machine, any substitute for a coin of Canada; or, deface, damage, tamper or impair the working of any single or multi-space parking meter, meter pole, electronic parking pay station, pass card reader, transponder or reader, Parkade ticket terminal, pay & display machine or pay parking lot gate.

2.57 No operator of a Motor Vehicle shall, during the hours of operation, on entry into a Parkade, proceed without first obtaining a pay parking ticket from either the attendant or the automated ticket dispenser for that

Parkade. On exiting from that Parkade, no Motor Vehicle operator shall proceed to exit without stopping and submitting the pay parking ticket to either the attendant or an automated pay station or terminal and paying the required fee.

2.58 No operator of a Motor Vehicle shall, during the hours of operation, as posted by the University, on entry into a Public Pay Parking Area, or a multi-space meter area, park without first paying for parking from either the attendant or the automated machine for that area.

2.59 No operator of a Motor Vehicle shall, during the hours of operation, display an altered, forged, copied or stolen parking permit and/or pay & display receipts or any other type of ticket normally issued for parking on University Property.

#### Parking Signs

2.60 Operators of Motor Vehicles shall obey any parking signs on University Property erected by either the University or with the consent of the University.

#### Temporary "No Parking" Signs

2.61 Where it is necessary to erect temporary "No Parking" signs in areas normally allotted for parking under the Regulations for such reasons as snow removal, cleaning, construction, special events or other good reasons, as same may be deemed by the University, such "No Parking" signs shall be observed and have priority over normal parking privileges. Wherever possible, persons temporarily displaced by the erection of such emergency signs will be assigned to other locations.

#### Fees and Charges

2.62 Authority. Pursuant to subsection 16(1) of The University of Manitoba Act, the University is authorized to impose fees and charges to be paid by owners or operators of Motor Vehicles stopped, parked in or left on University Property in contravention of the Regulations.

2.63 Notice of Parking Violation. A Violation Notice may be issued by the University to any operator or owner charged with violation of any of the provisions hereof. The owner of a Motor Vehicle may be responsible for payment of any fees or charges in connection with the Violation Notice issued to that vehicle unless the owner can prove to the satisfaction of the University that the Motor Vehicle was not being operated by and/or was not parked or left by the owner or by any other person with the owner's express or implied consent

2.64 Failure to Pay Fees or Charges. Violation Notices must be settled within ten (10) days from the date of issue, failing which the University shall proceed to take all necessary legal action to receive payment of such fees and charges together with any costs incurred by the University in taking such legal action.

2.65 Service of Violation Notices. A Violation Notice shall be sufficiently served if served in any of the following ways:

- (a) by being handed to the operator of the Motor Vehicle;
- (b) by being mailed, either by regular mail or by electronic mail, to the address of the person registered as the owner of the Motor Vehicle concerned; or,
- (c) by such violation notice being attached to, or left under, the windshield wiper or attached to the windshield of the Motor Vehicle.

2.66 Content of Violation Notice. The Violation Notice shall have endorsed thereon the following:

(a) "This parking violation is issued pursuant to section 16 of The University of Manitoba Act by authority of the Board of Governors of the University, or such other substitute office as may be instituted in its place by the University, from time to time, for a contravention of the Parking Regulations".

2.67 Amount of Fees and Charges. Fees and charges for parking violations are as follows:

(a) for all violations other than those listed in subsections (b) to (h):

(i) Option "A" – **Thirty Five Dollars (\$35.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **Seventy Dollars (\$70.00)** if paid thereafter.

(b) for possession and/or display of a stolen altered, copied or forged parking permit or pay & display parking ticket or receipt or any other type of ticket normally issued for parking on University Property – **Three Hundred and Fifty Dollars (\$350.00)** and a charge in an amount equal to the costs that would have been incurred for the purchase of a parking permit or pay parking ticket for the period during which the stolen or forged parking permit or pay parking ticket was being used upon order of the Vice-President (Administration) under section 2.74;

(c) for a violation of sections 2.56 through 2.58 - **Three Hundred and Fifty Dollars (\$350.00)** and such amount as the University may deem appropriate in order to compensate the University for losses suffered as a result of damage to property caused by the person, upon order of the Vice-President (Administration) under section 2.75;

(d) for stopping or parking in an Accessible Parking Space:

(i) Option "A" – **One Hundred and Fifty Dollars (\$150.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **Three Hundred Dollars (\$300.00)** if paid thereafter;

(e) for stopping or parking in a fire lane:

(i) Option "A" – **Fifty Dollars (\$50.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **One Hundred Dollars (\$100.00)** if paid thereafter; and

(f) for violations of sections 2.36 and/or 2.37:

(i) Option "A" – **Fifty Dollars (\$50.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" **Seventy Five Dollars (\$75.00)** if paid thereafter.

(g) for displaying an invalid permit or pay parking ticket:

(i) Option "A" – **Seventy Five Dollars (\$75.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" **One Hundred and Fifty Dollars (\$150.00)** if paid thereafter.

(h) for violations of section 2.48:

(i) Option "A" – **Twenty Dollars (\$20.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **Forty Dollars (\$40.00)** if paid thereafter.

The University may require payment of fees and/or charges for parking violations under more than one of the above noted subsections, with respect to a single incident, as the University, within its sole discretion may determine is appropriate.

2.68 Voluntary Payment. Any fees or charges issued under sections 2.42-2.59 on Prohibitions may be paid within the time limit indicated on the notice thereof as follows:

(a) by on-line payment, on a twenty-four (24) hour basis, by visiting the University's website at [www.umanitoba.ca/parking](http://www.umanitoba.ca/parking) (<http://www.umanitoba.ca/parking/>);

(b) by mail or after hours deposit (cheques only) at Parking Services at the Welcome Centre, 423 University Crescent, or such other location as the office may be located in from time to time;

(c) in person Monday to Friday, between the hours of 8:00 a.m. and 4:30 p.m. at Parking Services at the Welcome Centre, 423 University Crescent, or such other location as the office may be located in from time to time.

2.69 An administration fee will be assessed by the University for all returned NSF cheques and stop payments.

2.70 Stolen, Altered, Copied or Forged Parking Permits and Pay Parking Tickets. Where a person has been found in possession of and/or displaying a stolen, altered, copied or forged parking permit or pay parking ticket any other type of ticket normally issued for parking on University Property:

(a) the unauthorized parking permit or pay parking ticket shall be confiscated;

(b) the person shall pay a fine in accordance with section 2.67 of:

(i) Option "A" - **Seventy Five Dollars (\$75.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **One Hundred and Fifty Dollars (\$150.00)** if paid thereafter; and

(c) upon the order of the Vice-President (Administration), the person:

(i) shall pay a fee of **Three Hundred and Fifty Dollars (\$350.00)**;

(ii) shall be required to make payment to the University in an amount equal to the costs that would have been incurred for the purchase of a parking permit or pay parking ticket for the period during which the stolen or forged parking permit or pay parking ticket was being used or in order to compensate the University for losses suffered as a result of damage to property caused by the person that violated one or more of sections 2.56-2.59; and

(iii) shall not be entitled to, and shall be prohibited from, parking a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be towed away and impounded

under Sections 2.76-2.79 on Removal, Impoundment and Liability.

2.71 Violation of Sections 2.56 - 2.59. Where a person has violated one or more of sections 2.56 – 2.59:

(a) the person shall pay a fine in accordance with section 2.67 of:

(i) Option “A” - **Seventy Five Dollars (\$75.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option “B” – **One Hundred and Fifty Dollars (\$150.00)** if paid thereafter; and

(b) upon the order of the Vice-President (Administration), the person:

(i) shall pay a fee of **Three Hundred and Fifty Dollars (\$350.00)**;

(ii) shall pay such amount as the University may deem appropriate in order to compensate the University for losses suffered as a result of damage to property caused by the person that violated one or more of sections 2.56-2.59; and

(iii) shall not be entitled to, and shall be prohibited from, parking a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be towed away and impounded under Sections 2.76-2.79 on Removal, Impoundment and Liability.

### Appeals and Extenuating Circumstances

2.72 Those persons wishing to appeal and outline extenuating circumstances, or appeal a Parking Fee or Violation Notice issued under section 2.67 (excluding clauses e-f of section 2.73), may do so as follows:

(a) with respect to fees or charges for parking in contravention of the Regulations – attend to Parking Services at the Welcome Centre, 423 University Crescent, (or such other location as the office may be located in from time to time), Monday through Friday, 8:00 a.m. to 4:30 p.m. respecting a fee or charge; or

(b) with respect to appeals of decisions under (a) above and with respect to the other decisions issued under sections 2.71 through 2.73 inclusive – appeal to the Vice-President (Administration) or such person or body designated by the Vice-President (Administration) in accordance with procedures established from time to time.

### Revocation of Parking Permits

2.73 Revocation of Parking Permit. In addition to any other fees or charges provided by the Regulations, a parking permit of an individual violating the Regulations, may be revoked by the Vice-President (Administration) at his/her sole discretion.

2.74 Prohibition from Parking on University Property. Any person whose parking permit is revoked may also be prohibited by the Vice-President (Administration) from parking, stopping or leaving a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be removed and impounded under sections 2.76-2.79 on Removal, Impoundment and Liability.

### Failure to Pay

2.75 Failure to Pay Fees or Charges. Where a person does not pay the fees or charges owing under sections 2.67, 2.70 or 2.71, any one (1) or more of the following actions may be taken by the University:

- (a) discipline (including dismissal) of faculty and staff members;
- (b) discipline of students under the Student Discipline Bylaw;
- (c) withholding of examination marks, transcripts, diplomas, or denying registration and registration materials until the outstanding fees or charges have been paid in full or other arrangements have been made which are satisfactory to the University;
- (d) revocation of a parking permit under section 2.71 and prohibition from parking on University Property under section 2.72;
- (e) withholding of the issuance of any new parking permits;
- (f) removal and impoundment of a Motor Vehicle under sections 2.76-2.79 on Removal, Impoundment and Liability; and
- (g) collection activities by the University or by others at the request of the University, including the issuance of a Statement of Claim in a civil court against the owner or operator of a Motor Vehicle for the amount of the fee or charge and all costs relating to and including the costs of removal, impoundment and storage of the Motor Vehicle, as well as any legal costs incurred by the University in taking such collection activities and/or legal action.

### Removal, Impoundment and Liability

2.76 Motor Vehicles parked or left on University Property may be removed, impounded and stored if such Motor Vehicles are considered by the University to be impeding snow removal operations or any other essential operation whatsoever or where removal or impoundment of the Motor Vehicle is deemed to be reasonable in the sole discretion of the University.

2.77 Motor Vehicles parked or left on University Property on an Event Day may be removed, impounded and stored if such Motor Vehicles are parked in in contravention of these Regulations, as determined by the University in its sole discretion.

2.78 In addition to any other fee, charge or consequence provided by these Regulations, a Motor Vehicle removed and impounded under these Regulations shall be at the owner's risk. The owner or operator shall be responsible for the charges incurred for removal, impoundment and storage, which charges must be paid before the Motor Vehicle will be released.

2.79 Neither the University, nor its employees, servants or agents, shall be liable in any way whatsoever for such damage or inconvenience in the event of any damage or inconvenience caused by reason of any Motor Vehicle being towed away, removed, stored or impounded in accordance with these Regulations.

### Liability for Lost, Stolen or Damaged Property

2.80 Neither the University, nor its employees, servants or agents, shall be liable in any way whatsoever for any lost, stolen or damaged property contained within the Motor Vehicle or any loss, damage or theft to the Motor Vehicle, notwithstanding that the loss, theft or damage may have occurred while on University Property.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Vice-President (Administration) that a formal review of this Regulation is required.

3.2 The Manager, Parking Services is responsible for the implementation, administration and review of this Regulation.

3.3 Students, External Parties and All Employees are responsible for complying with this Regulation.

### Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Regulation is March 20, 2022.

4.2 In the interim, this Regulation may be revised or repealed if:

- (a) the Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;
- (b) the Regulation is no longer legislatively or statutorily compliant; and/or
- (c) the Regulation is now in conflict with another Governing Document.

4.3 If this Regulation is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Regulation; or
- (b) are in turn repealed.

### Part V: Effect on Previous Statements

5.1 This Regulation supersedes all of the following:

- (a) Parking for Invited Guests, Visitors, Conference and Special Events Policy;
- (b) Parking Regulations (2011)
- (c) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (d) all previous Administration Governing Documents on the subject matter contained herein.

### Part VI: Cross References

6.1 This Regulation should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) <http://www.umanitoba.ca/parking> (<http://www.umanitoba.ca/parking/>)

## Violent or Threatening Behaviour Policy and Procedure

The Policy and Procedure are available online at [http://www.umanitoba.ca/admin/governance/governing\\_documents#students](http://www.umanitoba.ca/admin/governance/governing_documents#students). ([http://www.umanitoba.ca/admin/governance/governing\\_documents/#students](http://www.umanitoba.ca/admin/governance/governing_documents/#students))

## Violent or Threatening Behaviour Policy

### Part I: Reason for Policy

1.1 The purpose of this Policy is to:

- (a) Outline the University's commitment to creating and maintaining a safe, positive and productive work and learning environment that is free of Violence; and
- (b) Set out the actions and measures that the University will take to address the risk of Violence within the University.

### Part II: Policy Content

#### Definitions

2.1 The following terms are defined for the purpose of this Policy and related Procedures:

- (a) "Policy" means this Violent or Threatening Behaviour Policy.
- (b) "Procedure" means the Violent or Threatening Behaviour Procedure.
- (c) "University" means The University of Manitoba.
- (d) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.
- (e) "University Matter" has the same meaning as defined in section 2.3 of this Policy.
- (f) "Violence" means:
  - (i) The attempted or actual exercise of physical force against a person; or
  - (ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

#### Scope

2.2 This Policy applies to members of the University Community in relation to any University Matter. Nothing in this Policy is intended to detract from the academic freedom of the University's academic staff.

2.3 "University Matter" means any activity, event, or undertaking in which a member of the University Community participates, which has a substantial connection to the University, such as:

- (a) University-related activities or events, including but not limited to:
  - (i) Any activity or event on property owned or controlled by the University;
  - (ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;
  - (iii) The offering of any service by the University, including educational services;
  - (iv) Student placements, practica, or clinical training;
  - (v) University research activities, whether on or off campus;

(vi) Student and/or employee exchanges arranged in connection with the University;

(vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;

(viii) University field trips, travel-study tours, service-learning activities, and similar activities;

(b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

### Policy Statement

2.4 Individuals who commit Violence in relation to a University Matter will be subject to discipline under the Procedure.

2.5 The University will establish a protocol in accordance with the Procedure for reporting and responding to incidents of Violence and to provide a mechanism to support the maintenance of a safe work and learning environment. The University will make the protocol easily and readily available to the University Community.

2.6 This Policy and the Procedure are not intended to discourage or prevent a complainant from reporting instances of Violence to the police or exercising any other rights, actions or remedies that may be available to him or her under any other law.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Vice-President (Administration) that a formal review of this Policy is required.

3.2 The Vice-President (Administration) is responsible for the implementation, administration and review of this Policy.

3.3 Board of Governors members, Senate members, faculty/college/school councils, employees, anyone holding an appointment with

the University, Students, volunteers, external parties, contractors and suppliers are responsible for complying with this Policy.

### Part IV: Authority to Approve Procedures

4.1 The Vice-President (Administration) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

### Part V: Review

5.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Policy is June 22, 2019.

5.2 In the interim, this Policy may be revised or repealed by the Approving Body if:

(a) the Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;

(b) the Policy is no longer legislatively or statutorily compliant; and/or

(c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

(a) comply with the revised Policy; or

(b) are in turn repealed.

### Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

(a) Violent or Threatening Behaviour Policy, effective March 22, 2006;

(b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and

(c) all previous Administration Governing Documents on the subject matter contained herein.

### Part VII: Cross References

6.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

(a) Violent or Threatening Behaviour Procedure;

(b) Sexual Assault Policy;

(c) RWLE and Sexual Assault Procedure;

(d) Vice-President (Administration) Bylaw;

(e) Student Discipline Bylaw;

(f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(g) Use of Computer Facilities Policy and Procedure;

(h) The Workplace Safety and Health Act, C.C.S.M. c. W210; and

(i) The Workplace Safety and Health Regulation, W210 – 217/2006.



# Violent or Threatening Behaviour Procedure

## Part I: Reason for Procedure

1.1 The reason for this Procedure is:

- (a) To establish a protocol for reporting and responding to incidents of Violence that occur with respect to University Matters and to provide a mechanism to support the maintenance of a safe, positive and productive work and learning environment; and
- (b) To comply with The Workplace Safety and Health Regulation, W210 – 217/2006.

1.2 The Policy and this Procedure are not intended to discourage or prevent a complainant from exercising any other rights, actions or remedies that may be available to him or her under any other law.

## Part II: Procedural Content

### Definitions

2.1 The following terms are defined for the purpose of this Procedure:

- (a) "Bylaw" means the Student Discipline Bylaw.
- (b) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Non-Academic Misconduct under the Student Discipline Bylaw, the Student Non-Academic Misconduct and Concerning Behaviour Procedure, and Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct.
- (c) "LASH" means the Local Area Safety and Health committee established by the University of Manitoba in accordance with the provisions of The Workplace Safety and Health Act (Manitoba).
- (d) "OSHA" means the Organizational Safety and Health Advisory committee established by the University that will look at safety and health issues that cross department/faculty lines or affect the University as a whole.
- (e) "Policy" means the Violent or Threatening Behaviour Policy.
- (f) "Procedure" means this Violent or Threatening Behaviour Procedure.
- (g) "STATIS" means the Student/Staff Threat Assessment Triage Intervention Support team comprised of the following representatives:
  - (i) Vice-Provost (Students);
  - (ii) Associate Vice-President (Human Resources);
  - (iii) Director, Security Services;
  - (iv) Executive Director, Student Support;
  - (v) Student Support Case Manager; and
  - (vi) Legal Counsel.
- (h) "UMSS" means the University of Manitoba's Security Services.
- (i) "Unit" means a faculty, school, college, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate

Vice-President or Vice-Provost. An academic department within a faculty or school is not a Unit as the term is used within these Procedures.

- (j) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.
- (k) "University" means The University of Manitoba.
- (l) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.
- (m) "University Matter" has the same meaning as defined in section 2.3 of this Procedure.

(n) "Violence" means:

- (i) The attempted or actual exercise of physical force against a person; or
- (ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

### Scope

2.2 This Procedure applies to members of the University Community in relation to any University Matter.

2.3 "University Matter" means any activity, event, or undertaking in which a member of the University Community participates, which has a substantial connection to the University, such as:

- (a) University-related activities or events, including but not limited to:
  - (i) Any activity or event on property owned or controlled by the University;
  - (ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;
  - (iii) The offering of any service by the University, including educational services;
  - (iv) Student placements, practica, or clinical training;
  - (v) University research activities, whether on or off campus;
  - (vi) Student and/or employee exchanges arranged in connection with the University;
  - (vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;
  - (viii) University field trips, travel-study tours, service-learning activities, and similar activities;
- (b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:

- (i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;
- (ii) Participation on a committee or board as a representative of the University;
- (iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;
- (iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or
- (v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

### Immediate Response Protocol

2.4 In the event of imminent bodily harm, individuals should call 911 and UMSS. When reporting an incident, individuals should attempt to provide the following information:

- (a) A complete description of the incident(s) involving Violence;
- (b) Name(s) of individuals involved in the incident(s);
- (c) Description of individual(s), if name(s) not known;
- (d) Name(s) of witness(es) or description, if name(s) not known; and
- (e) Location of the incident(s).

2.5 Where a report of Violence is received by UMSS, UMSS shall respond as soon as reasonably possible and the Director of UMSS (or designate) shall be notified.

2.6 Without limiting the scope of their jurisdiction and/or mandate, UMSS may take any one or more of the following actions in response to a report of Violence, as reasonably determined by UMSS:

- (a) Restore order in violent situations;
- (b) Arrest individual(s) in accordance with section 494(1) of the Criminal Code;
- (c) Contact Winnipeg Police Service;
- (d) Arrange medical assistance;
- (e) Take statement(s) of witness(es);
- (f) Make appropriate referrals; and
- (g) Take immediate action to facilitate the removal or banning of individuals from University property.

2.7 Any decision under section 2.6(g) above to remove an individual from University property shall be effective immediately, subject to

review by the Vice President (Administration). The Chief Risk Officer, the appropriate Unit Head, and STATIS shall be advised of the action as soon as possible.

2.8 The Director of Security Services shall in all cases file a written report with the Vice-President (Administration) on the next business day describing any action taken under section 2.6(g) above.

2.9 Members of the University Community, including students and employees, who have been harmed as a result of an incident of Violence, are encouraged to consult with a health care provider for treatment or referral for post-incident counselling, if appropriate.

2.10 For students affected by Violence, the University will:

- (a) Provide reasonable academic accommodations (such as extensions on assignments, deferrals of exams, leaves of absences, authorized withdrawals, etc.);
- (b) Create a safety plan in consultation with the University's Student Support Case Manager, UMSS, and other offices as appropriate.

2.11 For employees affected by Violence, the University will:

- (a) Provide reasonable work accommodations, in consultation with Human Resources; and
- (b) Create a safety plan, in consultation with the Unit Head, UMSS and other offices as appropriate.

### Report to STATIS

2.12 Where a report of Violence is received by STATIS under section 2.7 of this Procedure, the role of STATIS will be to:

- (a) Develop an action plan to assist and support the members of the University Community affected by the Violence;
- (b) Ensure that members of the University Community affected by the Violence are consulted where appropriate and kept informed of the developments within the parameters of confidentiality;
- (c) Make recommendations to the appropriate Unit Head and/or Disciplinary Authority; and
- (d) Take all necessary action relative to the above.

2.13 A coordinator for STATIS shall be appointed for each incident as follows:

- (a) If the conduct of a Student is the source of concern, the coordinator will be the Vice-Provost (Students) (or a designate);
- (b) If the conduct of an employee is the source of concern, the coordinator will be the Associate Vice-President (Human Resources) (or a designate); and
- (c) If the conduct of any other member of the University Community is the source of concern, the coordinator will be the Director of Security Services (or a designate).

2.14 The coordinator of STATIS will have the following responsibilities:

- (a) Bring together STATIS and, where necessary, experts and other University personnel;
- (b) Coordinate internal and external communication;

(c) Maintain confidential records and ensure the Vice-President (Administration) is informed of developments as appropriate;

(d) Convene debriefing sessions; and

(e) Prepare a final report and recommendation in relation to any decision taken by UMSS under section 2.6(g) above, to be delivered to the Vice-President (Administration) for final determination, with a copy to the Chief Risk Officer and the Unit Head of any Unit affected by the Violence.

### Investigation

2.15 As soon as reasonably practicable after an incident of Violence, the University shall investigate the incident as follows:

(a) Where the individual is an employee, the Unit Head for the employee's Unit will investigate the allegation in consultation with STATIS and Human Resources, and in accordance with applicable legislation, common law, collective agreements, and University policies, procedures and bylaws;

(b) Where the individual is a student, the Disciplinary Authority under the Bylaw and related procedures will investigate the allegation in consultation with STATIS and in accordance with the Student Non-Academic Misconduct and Concerning Behaviour Procedure; and

(c) Where the individual is neither an employee nor a student, the Director of UMSS will investigate the allegation in accordance with applicable legislation, common law, and University policies, procedures and bylaws.

2.16 The Unit Head of any affected Unit, in consultation with the Office of Risk Management, will implement any control measures that are identified as a result of the investigation that will eliminate or control the risk of Violence to individuals in their Unit.

### Discipline

2.17 Individuals who are found to have engaged in Violence under this Policy will be subject to disciplinary action as follows:

(a) Where the individual is an employee, the discipline will be implemented pursuant to and in accordance with applicable legislation, common law, collective agreements, and University policies, procedures and bylaws.

(b) Where the individual is a student, the discipline will be implemented in accordance with the Student Discipline Bylaw and the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(c) Where the individual is neither an employee nor a student, the Vice-President (Administration) or designate may make any determination regarding the individual's continued access to the University in accordance with the Procedure and the Vice-President (Administration) Bylaw.

2.18 The Office of Risk Management must be advised of any decision taken under section 2.17 above.

2.19 The University may take disciplinary/legal action against any individual who submits a frivolous or vexatious complaint under this Policy, or who interferes with an investigation of a complaint under this Policy.

### Violence Prevention Plan

2.20 Subject to section 2.26 of this Procedure and in consultation with the Office of Risk Management, the Unit Head shall advise all employees for which they are responsible of the risk of Violence in the Unit, including the nature and extent of the risk and the risk of Violence from persons whom the employees are likely to encounter in the course of their work.

2.21 In accordance with The Workplace Safety and Health Regulation, each Unit Head shall, no less than annually:

(a) Consult with the employees in their Unit, the applicable LASH committee, and the Office of Risk Management to review and develop the violence prevention plan that will be implemented by their Unit;

(b) Ensure that all employees in their Unit have received appropriate training in the Policy, this Procedure, and the violence prevention plan for their Unit; and

(c) Review the mechanisms in place to ensure that employees in their Unit comply with the Policy, this Procedure, and the violence prevention plan for their Unit.

2.22 The violence prevention plan referred to in section 2.21 above shall provide information on the following matters:

(a) A description of:

(i) Any particular worksite in their Unit of which the University is aware that an incident of Violence has occurred or may reasonably be expected to occur; and

(ii) Any particular job functions at the workplace where an employee performing their job function has been, or may reasonably be expected to be, exposed to the incident of Violence;

(b) The measures the University will implement to eliminate the risk of Violence in the Unit, or the measures that the University will implement to control that risk if it is not reasonably practicable to eliminate it;

(c) The measures and procedures that the University has in place for summoning immediate assistance when an incident of Violence occurs or is likely to occur in the Unit;

(d) A statement directing the employee to review the Policy and this Procedure, as well as any other documents that will outline the measures and procedures that the University has in place for summoning immediate assistance when an incident of Violence occurs or is likely to occur; and

2.23 The violence prevention plan shall be communicated to all employees in the Unit immediately at the time of hire and shall be posted online or in the Unit for quick reference by employees.

### Annual Report

2.24 Annually, the Office of Risk Management will prepare a report that compiles:

(a) A record of the incidents of Violence in each Unit of the University, if any;

(b) The results of any investigation into an incident of Violence, including a copy of:

(i) Any recommendations for control measures or changes to the violence prevention policy for the affected Unit; and

(ii) Any report prepared under in respect of such an incident;

(c) The control measures, if any, implemented as a result of an investigation into an incident.

2.25 The annual report will be provided to the Vice-President (Administration) and to OSHA.

### Obligations of Confidentiality by the University

2.26 In respect of an incidence of Violence, the University will not disclose the name of the complainant, the name of the respondent, or the circumstances related to the complaint to any person, other than where the disclosure is:

- (a) Necessary in order to investigate the complaint;
- (b) Required in order to take corrective action in response to the complaint; or
- (c) Required by law, including but not limited to the University's legal obligations under the Workplace Safety and Health Regulation (Manitoba).

2.27 Personal information that is disclosed under section 2.26 above in respect of an incidence of Violence must be the minimum amount necessary for the purpose.

### Obligations of Confidentiality by Others

2.28 All persons involved in an investigation of an incident of Violence, whether as a witness or retrieving relevant information or documents, must keep confidential:

- (a) The existence and nature of the investigation; and
- (b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office or from STATIS.

2.29 Notwithstanding section 2.28 above, any person involved in an investigation may:

- (a) Obtain confidential advice (including advice from a student advocate, union representative, lawyer, or support person(s), as may be appropriate);
- (b) Disclose information to others only to the extent reasonably necessary to gather evidence and to make full answer to any allegations; and
- (c) Use information obtained independent of the investigation in any other forum.

### Legislated Review of the Procedure

2.30 In accordance with The Workplace Safety and Health Act (Manitoba), the OSHA shall review these Procedures every three (3) years and make any recommendations it feels are necessary and advisable.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Vice-President (Administration) that a formal review of this Procedure is required.

3.2 The Chief Risk Officer or designate is responsible for the implementation, administration and review of this Procedure.

3.3 Board of Governors members, Senate members, faculty/college/school councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every three (3) year. The next scheduled review date for this Procedure is June 22, 2019.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the Vice-President (Administration) deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) Violent or Threatening Behaviour Procedure, effective March 17, 2009;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Violent or Threatening Behaviour Policy;
- (b) The Workplace Safety and Health Act, C.C.S.M. c. W210;
- (c) The Workplace Safety and Health Regulation W210 – R.M. 217/2006;
- (d) Health and Safety Policy;
- (e) Safety Committees Procedure;
- (f) Respectful Work and Learning Environment Policy;
- (g) Sexual Assault Policy;
- (h) RWLE and Sexual Assault Procedure;
- (i) Student Non-Academic Misconduct and Concerning Behaviour Procedure;
- (j) Student Discipline Bylaw; and

(k) Use of Computer Facilities Policy and Procedure.

## Voluntary Withdrawal Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

### Part I: Reason for Policy

1.1 The University of Manitoba provides Students with sufficient time to plan their schedules through the registration cycle with both academic and personal circumstances in mind. The registration cycle is characterized by the Registration Period, the Registration Revision Period, and the Voluntary Withdrawal Period. The purpose of this Policy is to define and establish the requirements and limitations for Voluntary Withdrawal during the Voluntary Withdrawal Period at the University.

### Part II: Policy Content

#### Definitions

2.1 The following terms have the following defined meanings for the purpose of this Policy.

(a) "Authorized Withdrawal" or "AW" is an approved withdrawal from all courses in a given period for medical or compassionate reasons, granted in accordance with the Authorized Withdrawal Policy and Procedure.

(b) "Calendar" means the University's official academic calendar for the Term and Level in which a course is taught.

(c) "College" means a Professional College as defined under the Definitions of Academic Units Policy.

(d) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(e) "Grade Point" refers to a numerical value assigned to a letter grade received in a course.

(f) "Grade Point Average" or "GPA" refers to the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted.

(g) "Leave of Absence" is a period of leave established, administered, and approved by the Faculty/College/School that enables Students to temporarily withdraw from the University.

(h) "Level" refers to the level of the degree in which the Student is enrolled, such as undergraduate level, graduate level or non-degree level.

(i) "Official Record" is a Student's complete academic history at the University of Manitoba that is maintained by the Registrar's Office. Official Records are available in the form of an Official Transcript or a Student History.

(j) "Official Transcript" is an official document printed on secure paper and signed by the Registrar that reflects a student's permanent record at the University of Manitoba.

(k) "Policy" means this Voluntary Withdrawal Policy.

(l) "Quality Points" is the grade point value of the assigned Letter Grade multiplied by the credit hours of the course.

(m) "Registration Period" is the period prior to the beginning of classes in which new and returning Students may register.

(n) "Registration Revision Period" is the period after the beginning of classes within which students may withdraw from a course or courses without academic or financial penalty.

(o) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(p) "Student" refers to any person enrolled at the University.

(q) "Student History" is the complete record of a Student's activity at the University, including a record of Authorized Withdrawals, produced for internal administrative use.

(r) "Term" is a period of time defined in the Calendar within which a course for credit may be offered, including Fall, Winter and Summer Terms.

(s) "University" means The University of Manitoba.

(t) "Voluntary Withdrawal" or "VW" is a registration option that enables Students to withdraw from a course or courses after the Registration Revision Period without academic penalty.

(u) "Voluntary Withdrawal Period" is the period after the Registration Revision Period in which Students may voluntarily withdraw from a course or courses, as outlined in section 2.6 of this Policy.

#### General

2.2 A Voluntary Withdrawal is to be distinguished from other University withdrawal options, such as Authorized Withdrawal, Leaves of Absence, withdrawal during the Registration Revision Period, or withdrawal pursuant to other University-approved policies or regulations.

2.3 Students at the undergraduate Level are generally permitted to VW from a course or courses without receiving prior approval from their Faculty/College/School.

2.4 In the event that a Student chooses to VW from a course with a co-requisite, the Student must also VW from the co-requisite course. To determine if a course has a co-requisite, Students should consult the Calendar and the course descriptions in the chapter of the Faculty/College/School offering the course.

2.5 Students at the graduate Level are not permitted to VW from a course or courses without receiving the approval of the advisor/advisory committee, the head or graduate chair in the department in which the Student is registered, and the Faculty of Graduate Studies.

2.6 Students may withdraw from a course(s) without academic penalty during the Voluntary Withdrawal Period, which begins at the end of the Registration Revision Period and ends on the VW deadline, as follows:

(a) The 48th teaching day for courses taught over a single Term;

(b) The end of the Registration Revision Period of the second Term for courses taught over two or more Terms;

(c) A date calculated using a pro-rated number of teaching days for Summer Term or other Irregularly Scheduled Courses, as published yearly in the Calendar.

2.7 Ceasing to attend a class or classes will not constitute an official withdrawal from that course. Students who do not VW from a course will remain enrolled in and will receive a final grade for that course.

2.8 Students who have elected to VW from a course cannot subsequently re-enroll in that course, except in accordance with the Repeated Course Policy.

## Scope

2.9 This Policy applies only to Voluntary Withdrawal during the current Term. Students wishing to withdraw for medical or compassionate reasons should consult the Authorized Withdrawal Policy and Procedure, and provisions regarding Leaves of Absence as outlined in the Calendar.

## Responsibilities of the Student

2.10 Students are responsible for considering all implications prior to VW. Withdrawal from a course or courses may affect academic progression, financial aid eligibility, CIS athletic eligibility, entrance into professional and graduate programs, and/or student visa requirements.

## Responsibilities of the Faculties/Colleges/Schools

2.11 Voluntary Withdrawal may be considered, together with course failures or repeats, when the Faculty of Graduate Studies or another Faculty/College/School with limited enrolment is reviewing applications for admission into its programs.

2.12 Faculties/Colleges/Schools may, subject to the approval of Senate, deny access to VW for all Students enrolled in an identified academic program. Faculties/Colleges/Schools are required to notify all applicants to that program of this proscription.

## Official Records

2.13 A Voluntary Withdrawal shall be recorded on the Student History and Official Transcript issued by the University.

2.14 Final grades for courses in which Students ceased attending, without an official VW, will be included on the Student History and Official Transcript issued by the University, and will be factored into the Student's Grade Point Average.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Policy.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Voluntary Withdrawal Policy, effective February 1, 1977, revised May 13, 1993, and December 7, 2005;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Authorized Withdrawal Policy;
- (b) Definitions of Academic Units Policy;
- (c) Grade Point Averages Policy; and
- (d) Repeated Course Policy.

# General Academic Regulations

## Introduction

This chapter contains the regulations and requirements that apply to all students, regardless of faculty or school.

Each faculty and school has its own supplementary regulations and requirements. These are published in the faculty or school chapters of the Academic Calendar. Some faculties and schools also have additional regulations and requirements governing their programs; these are available from the faculty or school.

It is the responsibility of each student to be familiar with the academic regulations and requirements of the University of Manitoba in general and of the specific academic regulations and requirements of their faculty or school of registration. Accordingly, students are asked to seek the advice of advisors in faculty and school general offices whenever there is any question concerning how specific regulations apply to their situations.

## Residence and Written English and Mathematics Requirements

### Residence Requirements For Graduation

Each faculty and school recommends to the Senate the number of credit hours each student must complete in order to graduate from its programs. Senate also requires each student to complete a minimum number of credit hours at the University of Manitoba – this is called the “residence requirement.”

Unless otherwise stated in faculty and school chapters, the minimum residence requirement of the University of Manitoba is the work normally associated with one year in the case of programs of three years’ duration, and two years for programs of four years’ duration. Some faculties and schools may have additional residence requirements specified in their program regulations. However, in all cases, the residence requirement is assessed following an appraisal of the educational record of the student applying to transfer credits from another institution or applying to earn credits elsewhere on a letter of permission. The residence requirement is not reduced for students whose “challenge for credit” results in a passing grade.

### University English and Mathematics Requirements for Undergraduate Students

All students are required to complete, within the first 60 credit hours of their programs, a minimum of one three credit hour course with significant content in written English, and a minimum of one three credit hour course with significant content in mathematics.

Some degree programs have designated specific written English and mathematics courses to fulfil this requirement.

Price Faculty of Engineering have their own written English requirements (p. 461).

Some degree programs require that the written English and/or mathematics requirements be completed prior to admission.

See the program descriptions in the faculty and school chapters of the Academic Calendar for details.

### Exemptions to the Written English and Mathematics Requirement

- All students with completed baccalaureate degrees and who transfer into any program to which these requirements apply.
- Registered Nurses entering the Bachelor of Nursing Program for Registered Nurses.
- Students admitted before the 1997-98 Regular Session.
- Written English exemption only: Students transferring from Université de Saint-Boniface who have completed a written French requirement (at the university) before transferring to the University of Manitoba will be deemed to have met the written English requirement.

### Approved English and Mathematics Courses

A complete list of all courses which satisfy the university written English and mathematics requirement is provided below. (When searching for courses in Aurora, students may search Course Attributes for courses that satisfy the written English and Mathematics requirements).

**Note that some programs may restrict the choice of English or Mathematics courses. See the program descriptions in the faculty and school chapters of the Academic Calendar for details.**

### Written English Courses

Course	Title	Hours
AGRI 2030	Technical Communications	3
ANTH 1520	Critical Cultural Anthropology	3
ANTH 2020	Relatedness in a Globalizing World	3
ANTH 2230	Anthropology of Travel and Tourism	3
ANTH 3330	Sex and Sexualities	3
ARTS 1110	Introduction to University	3
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
CATH 1190	Introduction to Catholic Studies	3
CATH 2010	Literature and Catholic Culture 1	3
CATH 2020	Literature and Catholic Culture 2	3
CLAS 2612	Greek Literature in Translation	3
CLAS 2622	Latin Literature in Translation	3
ENGL 0930	English Composition	3
ENGL 0940	Writing About Literature	3
ENGL 1XXX	All English courses at the 1000 level	
ENGL 2XXX	All English courses at the 2000 level	
ENGL 3XXX	All English courses at the 3000 level	
ENGL 4XXX	All English courses at the 4000 level	
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
FAAH 2930	Writing about Art	3
FILM 2280	Film and Literature	6
FORS 2000	Introductory Forensic Science	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
GEOL 3130	Communication Methods in the Geological Sciences	3
GMGT 1010	Business and Society	3
GMGT 2010	Business Communications	3
GPE 2700	Perspectives on Global Political Economy	3

GRMN 1300	Masterpieces of German Literature in English Translation (C)	3	PSYC 4520	Honours Research Seminar	6
GRMN 1310	Love in German Culture in English Translation (C)	3	RLGN 1322	Introduction to Eastern Religions	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3	RLGN 1324	Introduction to Western Religions	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3	RLGN 1420	Ethics in World Religions	3
GRMN 2500	Special Topics in German in English Translation (C)	3	RLGN 1424	Religion and Sexuality	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3	RLGN 1440	Evil in World Religions	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3	RLGN 2032	Introduction to the Study of Religion	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3	RLGN 2036	Introduction to Christianity	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3	RLGN 2052	Conservative Christianity in the United States	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3	RLGN 2112	Medicine, Magic, and Miracle in the Ancient World	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3	RLGN 2116	Cognitive Science and Religion	3
GRMN 3390	German Representations of War (C)	3	RLGN 2140	Introduction to Judaism	3
GRMN 3510	Special Topics in German in English Translation (C)	3	RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3	RLGN 2162	Great Jewish Books	3
HIST 1XXX	All History courses at 1000 level		RLGN 2170	Introduction to the New Testament	3
HIST 2XXX	All History courses at 2000 level		RLGN 2222	The Supernatural in Popular Culture	3
HNSC 2000	Research Methods and Presentation	3	RLGN 2590	Religion and Social Issues	3
HYGN 1340	Communications	2	RLGN 3102	Myth and Mythmaking: Narrative, Ideology, Scholarship	3
INDG 2020	The Métis in Canada	3	RLGN 3280	Hasidism	3
INDG 2110	Introduction to Indigenous Community Development	3	RUSN 1400	Masterpieces of Russian Literature in Translation	3
INDG 2530	Introduction to Indigenous Theory	3	RUSN 1410	Love in Russian Culture in English Translation	3
KPER 2120	Academic Skills in Kinesiology and Recreation Management	3	RUSN 2280	Russian Culture until 1900	3
LABR 1260	Working for a Living	3	RUSN 2290	Russian Culture from 1900 to the Present	3
LABR 1290	Introduction to the Canadian Labour Movement	3	RUSN 2310	Exploring Russia through Film	3
LABR 2200	Labour History: Canada and Beyond (C)	3	RUSN 2410	Russian Literature after Stalin	3
LABR 2300	Workers, Employers and the State	3	RUSN 2600	Special Topics in Russian Culture in English Translation	3
LABR 4510	Labour Studies Field Placement Seminar	3	RUSN 2740	Literature and Revolution	3
LAW 1540	Legal Methods	5	SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
LAW 2650	Introduction to Advocacy	3	SOC 3100	Practicum in Criminological/Sociological Research	6
LING 2740	Interpretation Theory	3	SOC 3350	Feminism and Sociological Theory	3
PHIL 2612	A Philosophical History of Science	3	UKRN 2200	Ukrainian Myth, Rites and Rituals	3
PHIL 2614	Philosophy of Science	3	UKRN 2410	Ukrainian Canadian Cultural Experience	3
PHIL 2790	Moral Philosophy	6	UKRN 2590	Ukrainian Literature and Film	3
PHIL 3220	Feminist Philosophy	3	UKRN 2600	Special Topics in Ukrainian Studies	3
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3	UKRN 2770	Ukrainian Culture until 1900	3
POL 2600	Polish Culture until 1918	3	UKRN 2780	Ukrainian Culture from 1900 to the Present	3
POL 2610	Polish Culture 1918 to the Present	3	UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
POL 2660	Special Topics in Polish Literature and Culture	3	UKRN 3970	Women and Ukrainian Literature	3
POLS 1502	Introduction to Political Studies	3	WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3
PSYC 2500	Elements of Ethology	3	WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
PSYC 3200	Thinking Critically About Psychological Research	3	WOMN 2560	Women, Science and Technology	3
PSYC 3380	Nature, Nurture and Behaviour	3	WOMN 3520	Transnational Feminisms	3
			<b>Mathematics Courses</b>		
			<b>Course</b>	<b>Title</b>	<b>Hours</b>
			AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
			ECON 2040	Quantitative Methods in Economics	3



FA 1020	Mathematics in Art	3
GEOG 3810	Quantitative Research Methods in Geography (TS)	3
MATH 1XXX	All Mathematics courses at 1000 level	
MATH 2XXX	All Mathematics at 2000 level	
MATH 3XXX	All Mathematics at 3000 level	
MATH 4XXX	All Mathematics at 4000 level	
MUSC 3230	Acoustics of Music	3
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PSYC 2260	Introduction to Research Methods in Psychology	3
SOC 2294	Understanding Social Statistics	3
STAT 1XXX	All Statistics courses at 1000 level	
STAT 2XXX	All Statistics courses at 2000 level	
STAT 3XXX	All Statistics courses at 3000 level	
STAT 4XXX	All Statistics courses at 4000 level	

## Course Identification

### Credit Hours (Cr.Hrs.)

Each faculty and school develops courses for its degree credit programs, subject to Senate approval, and assigns a credit hour value to each course.

The credit hours for a course are expressed as a number associated with the course which indicates its relative weight. There is a correlation between class hours and credit hours (i.e. 6 credit hours = 3 hours a week, two terms; and 3 credit hours = 3 hours a week, one term).

For the purposes of registration, courses taught over both the Fall and Winter Terms have been divided into two parts. The credit hour value of the course are divided equally and applied to each part of the course. For example: for a six credit hour spanned course each of the Fall and Winter Term parts of the course will be assigned the value of three credit hours. Students registering for term spanning courses will receive one grade for the course and only when the second part is completed. The course grade will be applied to both the Fall and Winter parts of the course.

### Prerequisite and Co-requisite Courses

**Prerequisite:** If a course is prerequisite for a second course, the prerequisite must be met in order to begin the second course. To determine whether or not a course has a prerequisite, see the course descriptions in the chapter of the faculty or school offering the course. Normally, a minimum grade of "C" is required in all courses listed as prerequisites, except as otherwise noted in the course descriptions.

For some courses, the prerequisite may be completed before registering for the second course or may be taken concurrently with the second course. To determine if a course may be taken concurrently, see the course descriptions in the chapter of the faculty or school offering the course.

**Co-requisite:** If a first course is a co-requisite for a second course, the first course **must** be completed in the same term as the second course. To determine if a course has a co-requisite, see the course descriptions in the chapter of the faculty or school offering the course.

## Course Numbers

### First Two to Four Characters

The two, three or four characters in every course number are a shortened version of the subject of the course.

### Last Four Digits

At the University of Manitoba the last four digits of the course number reflect the level of contact with the subject.

#### For example:

ECON 1210

ECON is the code for Economics.

1210 indicates that it is an introductory or entry level course.

If the course requires a laboratory, this will be shown following the credit hours immediately following the title.

#### For example:

BIOL 3242 (lab required)

The 2000, 3000, 4000 course numbers indicate the second, third, and fourth levels of university contact with a subject.

Numbers in the 5000 range are normally associated with pre-Master's work or courses in the Post Baccalaureate Diploma and the Post-Graduate Medical Education programs.

Courses numbered 6000-8000 are graduate courses of the Faculty of Graduate Studies.

Course numbers in the 9000 series are used to identify courses taken at the University of Winnipeg by students in the University of Manitoba/University of Winnipeg Joint Master's Programs. The 9000 numbers do not indicate the level of the course taken (see *Graduate Calendar* or *University of Winnipeg Calendar*).

In most cases, some correlation exists between the course number and a student's year of study; that is, students in the third year of a program will generally carry course loads comprised primarily of 3000-level courses.

### Other course numbering information

Courses with numbers that end in 0 or an even number are taught in English, most of which are offered on the Fort Garry or Bannatyne campuses or through Distance and Online Education.

Courses with numbers that end in odd numbers are taught in French at Université de Saint-Boniface. (<http://www.cusb.ca/>)

## Grades and Grade Point Average Calculation

### Introduction

Final grades in most courses are expressed as letters, ranging from F, to A+ the highest. A grade of D is the lowest passing grade, however the minimum grade required to use a course as credit toward a degree or diploma program may be set higher by a faculty or school. Refer to faculty and school regulations. Each letter grade has an assigned numerical value which is used to calculate grade point averages. Grading scales used to determine the final letter grade may vary between courses and programs.

Some courses are graded on a pass/fail basis and because no numerical value is assigned to these courses, they do not affect grade point

averages. Courses graded in this way are clearly identified in course descriptions and program outlines.

## The Letter Grade System

Letter Grade	Grade Point Value	Description
A+	4.5	Exceptional
A	4.0	Excellent
B+	3.5	Very Good
B	3.0	Good
C+	2.5	Satisfactory
C	2.0	Adequate
D	1.0	Marginal
F	0	Failure
P		Pass
S		Standing

The grade of “D” is regarded as marginal in most courses by all faculties and schools. It contributes to decreasing a term, degree or cumulative Grade Point Average to less than 2.0. Courses graded “D” may be repeated for the purpose of improving a GPA. Note that some faculties and schools consider a grade of “D” as unacceptable and will not apply the course toward the program as credit. In most cases the course will need to be repeated to attain the acceptable grade. Refer to faculty and school regulations.

## Calculation of Grade Point Average

The University of Manitoba will report cumulative and term grade point averages for all students through Aurora Student.

Please also refer to the Grade Point Averages Policy (p. 53) found in the University Policies and Procedures..

### Quality Points

The quality points for a course are the product of the credit hours for the course and the grade point obtained by the student; e.g., 3 credit hours with a grade of “B” (3.0 points) = 3 credit hours x 3.0 = 9.0 quality points.

### Quality Point Total

The quality point total is the sum of quality points accumulated as students proceed through their program of studies.

### Grade Point Average (GPA)

The grade point average (GPA) is the quality point total divided by the total number of credit hours.

Example:

Course	Credit Hours	Grade	Grade Points	Quality Points
Course 1	3	B	3	9
Course 2	3	B+	3.5	10.5
Course 3	3	C+	2.5	7.5
Course 4	3	B	3	9
Course 5	3	A	4	12
Totals	15			48

Grade point average: 240 Quality Points / 15 Credit Hours = 3.20

## Poor Grades and Program Progression

A course in which a “D” standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of “C” is required in a prerequisite subject or to meet degree requirements.

Students in doubt as to the status of their record should consult an advisor in their faculty or school.

For minimum grade levels, especially as they affect progression requirements, see the faculty or school regulations in the *Academic Calendar* or consult an advisor.

## Academic Honours

Students qualify for the Honour List (Dean’s, Director’s, University 1) when they achieve qualifying grade point averages, as specified by the faculty/school or program regulations.

In addition, outstanding academic achievement will qualify students for other honours and awards. These include:

- the University Gold Medal, which is awarded at graduation in each faculty or school to the student with the most outstanding academic record;
- program medals, which are awarded by faculties and schools to the best student graduating from a specific program;
- graduation “with distinction”, which is recorded on the transcripts of all students who attain a qualifying grade point average;
- and other medals and prizes that are specific to programs or disciplines.

## Academic Evaluation

### Methods of Evaluation

Students shall be informed of the method of evaluation to be used in each course, as specified in the *Responsibilities of Academic Staff with Regard to Students Policy* (p. 75), found in the University Policies and Procedures.

In departments where a course is offered in more than one section, the department offering the course endeavours to provide instruction so that all sections cover similar topics and that all students achieve a similar level of competency in the topic. However, there will be differences in evaluation as well as in teaching style, readings and assignments from one section to another. Students may contact the department for additional information before registration.

### Credit for Term Work

In subjects involving written examinations, laboratories, and term assignments, a student may be required to pass each component separately. If no final examination is scheduled in a course, the student’s final grade will be determined on the basis of the method of evaluation as announced in the first week of lectures.

If credit is not given for term work, the student’s final grade will be determined entirely by the results of the final written examination. Where the final grade is determined from the results of both term work and final examinations, the method of computing the final grade will be as announced within the first week of classes. Should a student write a deferred examination, term grades earned will normally be taken into account as set out in the immediately preceding paragraph.

### Repeating a Course

A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Elective courses graded "F" may either be repeated or another elective substituted. All electives in a program must be approved by the faculty or school.

### Probation and Academic Suspension

Failure to meet minimum levels of performance as specified in the regulations of the faculty or school will result in a student being placed either on probation or academic suspension in accordance with the faculty or school regulations.

A student's status is determined, following final examinations, at the end of each term (Fall, Winter or Summer terms) or at the end of an academic session as specified in faculty regulations. A student placed on probation is advised to discuss his/her program prior to the next registration with a representative of the dean or director to determine which courses, if any, should be repeated.

A student placed on academic suspension will normally be permitted to apply for re-entry to the faculty or school after one year has elapsed, but reinstatement is not automatic and individual faculty or school regulations must always be consulted.

While on suspension, students are not normally admissible to another faculty or school.

## Other Forms of Earning Degree Credit

### Letter of Permission for Transfer of Credit

Students in degree programs at this university may take courses at other recognized colleges or universities for transfer of credit provided such courses are approved at least one month prior to the commencement of classes at the other institution by the faculty or school in which they are currently registered. The approval is subject to individual faculty/school regulations and is granted in the form of a Letter of Permission. The student must obtain a Letter of Permission whether or not the course/s being taken are for transfer of credit to the University of Manitoba. Failure to obtain a Letter of Permission may have serious academic implications.

To obtain a Letter of Permission (<https://umanitoba.ca/registrar/letter-permission/>), application must be made to the Registrar's Office as early as possible and at least one month prior to when required at the other institution.

Each application must be accompanied by the appropriate fee. The fees are for each application and a separate application is required for each session and institution regardless of the number of courses being considered. Students planning to seek permission to take courses elsewhere for transfer of credit to the University of Manitoba are cautioned to check the current Academic Calendar for the residence and degree requirements of the degree programs in which they are enrolled.

Transferred courses will be given assigned credit hour values and grades. The transferred grade will be included in the student's degree and cumulative GPA.

### Challenge for Credit

The purpose of Challenge for Credit is to provide students of the university with some means of obtaining academic credit in University of Manitoba courses (not otherwise obtainable as a transfer of credit from other institutions) for practical training and experience, or reading and

study previously completed. Students who have registered to challenge would normally not attend classes or laboratories. Courses which have previously been taken at the University of Manitoba may not be challenged for credit.

To be eligible to challenge for credit a student must first be admitted to a faculty or school of the University of Manitoba. Eligible students will be required to demonstrate their competence in the courses which they are challenging for credit. Where formal, written examinations are required, these will be generally scheduled during the regular examination sessions in April/May, June, August, or December.

For information regarding requirements, procedures, applications and fees a student should contact the office of the faculty or school in which the student is enrolled, or in the case of new students, the faculty or school to which the new student has been admitted.

### Application of Course Credit when transferring between Programs within the University of Manitoba

When students transfer into program from another faculty or school within the University of Manitoba, some course credits previously earned may be applied to the new program. The credit hour value assigned by the faculty or school that offers the course is used. That is, there can only be one credit weight designated for a course with a particular course number.

## Academic Appeals

With the exception of decisions on admissions or disciplinary matters, all academic appeals from decisions of faculty or school appeals committees at the University of Manitoba or by the Comité d'appels at Université de Saint-Boniface shall be heard by the Senate Appeals Committee regardless of the institute of registration of the student concerned.

The complete terms of reference for the Senate Committee on Appeals as well as an Appeal Form may be obtained from the Office of the University Secretary, 312 Administration Building or Student Advocacy/Student Resource Services, 519 University Centre.

## Academic Integrity

The University of Manitoba takes academic integrity seriously. As a member of the International Centre for Academic Integrity, the University defines academic integrity as a commitment to six fundamental values: honesty, trust, fairness, respect, responsibility and courage. (International Centre for Academic Integrity, 2014)

To help students understand the expectations of the University of Manitoba, definitions for the types of prohibited behaviours are in the Student Academic Misconduct Procedure (p. 84) and provided below.

"Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the academic integrity of the University, including but not limited to:

- (a) Plagiarism – the presentation or use of information, ideas, images, sentences, findings, etc. as one's own without appropriate attribution in a written assignment, test or final examination.
- (b) Cheating on Quizzes, Tests, or Final Examinations – the circumventing of fair testing procedures or contravention of exam regulations. Such acts may be premeditated/planned or may be unintentional or opportunistic.

(c) Inappropriate Collaboration – when a student and any other person work together on assignments, projects, tests, labs or other work unless authorized by the course instructor.

(d) Duplicate Submission – cheating where a student submits a paper/ assignment/test in full or in part, for more than one course without the permission of the course instructor.

(e) Personation – writing an assignment, lab, test, or examination for another student, or the unauthorized use of another person’s signature or identification in order to impersonate someone else. Personation includes both the personator and the person initiating the personation.

(f) Academic Fraud – falsification of data or official documents as well as the falsification of medical or compassionate circumstances/ documentation to gain accommodations to complete assignments, tests or examinations.

Note that the above applies to written, visual, and spatial assignments as well as oral presentations.

Over the course of your university studies, you may find yourself in situations that can make the application of these definitions unclear. The University of Manitoba wants to help you be successful, and this includes providing you with the knowledge and tools to support your decisions to act with integrity. There are a number of people and places on campus that will help you understand the rules and how they apply to your academic work. If you have questions or are uncertain about what is expected of you in your courses, you have several options:

- Ask your professor, instructor, or teaching assistant for assistance or clarification.
- Get support from the Academic Learning Centre (p. 1769) or Libraries (p. 1772):
- Visit the Academic Integrity site (p. 1769) for information and tools to help you understand academic integrity.
- Make an appointment with the Student Advocacy (p. 1773) office. This office assists students to understand their rights and responsibilities and provides support to students who have received an allegation of academic misconduct.

## Appeals of Grades

### Appeal of Term Work

Students may formally appeal a grade received for term work provided that the matter has been discussed with the instructor in the first instance in an attempt to resolve the issue without the need of formal appeal. Term work grades normally may be appealed up to ten (10) working days after the grades for the term work have been made available to the student.

The fee which is charged for each appealed term work grade will be refunded for any grade which is changed as a result of the appeal.

### Appeal of Final Grades

Final grades are not released to students who are on “Hold Status”; the deadline for appeal of assigned grades will not be extended for students who were unable to access their final grades due to a hold.

*These regulations expand on the Final Grades Procedures (p. 48) found in the University Policies and Procedures.*

## Attendance and Withdrawal

### Attendance at Class and Debarment

Regular attendance is expected of all students in all courses.

An instructor may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by the faculty or school regulations.

A student may be debarred from class, laboratories, and examinations by action of the dean/director for persistent non-attendance, failure to produce assignments to the satisfaction of the instructor, and/or unsafe clinical practice or practicum. Students so debarred will have failed that course.

### Withdrawal from Courses and Programs

#### Voluntary Withdrawal

The registration revision period extends two weeks from the first day of classes in both Fall and Winter terms. Courses dropped during this period shall not be regarded as withdrawals and shall not be recorded on official transcripts or student histories. The revision period is prorated for Summer terms and for parts of term.

After the registration revision period ends, voluntary withdrawals (VWs) will be recorded on official transcripts and student histories.

The following dates are deadlines for voluntary withdrawals:

- The Voluntary Withdrawal deadline shall be the 48th teaching day in both Fall and Winter term for those half-courses taught over the whole of each term;
- The Voluntary Withdrawal deadline for full-courses taught over both Fall and Winter term shall be the 48th teaching day of the Winter term; and
- The Voluntary Withdrawal deadline for full-and-half courses taught during Summer terms or during some other special schedule shall be calculated in a similar manner using a pro-rated number of teaching days.

The exact Voluntary Withdrawal dates that apply to courses offered in the current academic session are published in the Academic Schedule (p. 28).

#### Authorized Withdrawal

Subject to the provision of satisfactory documentation to the faculty of registration, Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds.

#### Required Withdrawal from Professional Programs

Senate, at the request of some faculties and schools, has approved bylaws granting them the authority to require a student to withdraw on the basis of unsuitability for the practice of the profession to which the program of study leads.

This right may be exercised at any time throughout the academic year or following the results of examinations at the end of every year.

This right to require a student to withdraw prevails notwithstanding any other provisions in the academic regulations of the particular faculty or school regarding eligibility to proceed or repeat.

Where Senate has approved such a bylaw, that fact is indicated in the *Academic Calendar* chapter for that faculty or school. A copy of the

professional unsuitability bylaw may be obtained from the general office of the faculty or school.

## Deferred and Supplemental Examinations

*These regulations expand on the Deferred and Supplemental Examinations Procedures ([https://umanitoba.ca/admin/governance/governing\\_documents/academic/1299.html](https://umanitoba.ca/admin/governance/governing_documents/academic/1299.html)) found in the University Policies and Procedures.*

### Accepting Standing in Course without Examination

In the event that a student is unable to write a deferred examination as it has been scheduled, a grade may be assigned without examination (please refer to the Deferred and Supplemental Examinations Procedures) (p. 48). A student who accepts standing in a course without examination may not, at a later date, request permission to write a deferred examination in the course.

### Supplemental Examinations

Supplemental Examinations are offered by some faculties to students who have not achieved the minimum result in required courses.

Students who are granted supplemental privileges are normally required to sit the examination within thirty (30) working days from the end of the examination series in which the supplemental grade was received, unless the progression rules of a faculty or school require the successful completion of an entire academic year before a student is eligible to proceed into the next. In this case, students are obliged to sit the examination at the next ensuing examination period.

## Final Examinations

*These regulations expand on the Final Examinations and Final Grades Policy and Procedures found in the University Policies and Procedures.*

### General Examination Regulations

Students (with the exception of students auditing courses) are required to write all final examinations. Those who absent themselves without an acceptable reason will receive a grade classification of "NP" (No Paper) accompanied by a letter grade based on term work completed, using a zero value for incomplete term work and for the final examination. If no credit for term work is involved, a grade of "F" will be assigned. Under certain conditions a student may apply for a deferred examination; see Deferred and Supplemental Examinations.

### Examination Schedules

For most faculties, schools and colleges, final examinations are normally conducted in December for Fall Term courses; in April/May for Winter Term and Fall/Winter Term spanned courses; and in August for Distance and Online Education Summer Term courses. Exact dates for the exam period can be found in the Academic Schedule (p. 28).

The Schedule of Final Exams for Fall and Winter is made available by the Registrar's Office approximately one month after the beginning of the term. This schedule is made available on the Registrar's Office Website (<https://umanitoba.ca/registrar/final-exams/>) and includes finalized dates and times for each exam. Exam locations are added to the schedule at a later date. Summer Term courses, final exam details will be made available at the time of registration.

**Students must remain available until all examination and test obligations have been fulfilled. Travel plans are not an acceptable reason for missing an exam.**

### Examination Personations

A student who arranges for another individual to undertake or write any nature of examination for and on his/her behalf, as well as the individual who undertakes or writes the examination, will be subject to discipline under the university's Student Discipline Bylaw, which could lead to suspension or expulsion from the university. In addition, the Canadian Criminal Code treats the personation of a candidate at a competitive or qualifying examination held at a university as an offence punishable by summary conviction.

## Hold Status

*More details about being on Hold can be found online on the Registrar's Office website (<https://umanitoba.ca/registrar/hold-status/>).*

Students will be placed on "Hold Status" if they incur any type of outstanding obligation (either financial or otherwise) to the university or its associated faculties, schools, colleges or administrative units.

Some typical reasons for holds are:

- Program/course selection must be approved
- U1 student must transit into the Faculty of Arts or Science
- Required Major, Minor and/or Concentration declaration
- Transcripts or documents required from other institutions
- Unpaid tuition and/or other university fees
- Outstanding library books and/or fines
- Parking fines
- Pending disciplinary action

Depending on the reason for the hold, limited or no administrative or academic services will be provided to students on Hold Status until the specific obligations have been met.

Students must clear their holds prior to registration by contacting the appropriate office. Students with outstanding financial obligations to the university will not be permitted to register again until the hold has been cleared or permission to register has been obtained from the Office of the Vice-President (Administration).

### Advisor and Program Holds

Students enrolled in some programs are required to discuss their course selections and program status with an advisor prior to registration. Advisor and Program Holds normally only restrict registration activity; other administrative services remain available.

Students can verify whether their program requires consultation with an advisor by checking their faculty/school section of the Academic Calendar, or by viewing their Registration Time and Status in Aurora.

## Graduation and Convocation

### Graduation

Students may graduate from the University of Manitoba in May/June, October, and February of each year. (Convocation ceremonies are held in May/June and October only).

Students are eligible to graduate when they have completed all of the requirements for their degree program in accordance with the regulations

described in the chapter General Academic Regulations (p. 118) and the regulations available from the general offices of their faculties and schools.

It is the responsibility of each student to be familiar with the graduation requirements of the program in which they are enrolled. Consultation with academic advisors is advised to ensure that graduation requirements are met.

Please refer to the Registrar's Office website (<https://umanitoba.ca/registrar/graduation-convocation/FAQ/>) for Frequently asked Questions about Graduation and Convocation.

## Application for Graduation

Every candidate for a degree, diploma or certificate must make formal application at the beginning of the session in which he/she expects to complete graduation requirements.

Application is to be made through Aurora Student. (Log into Aurora Student; click Enrolment and Academic Records, then Declarations, then Declare Graduation Date.)

## Changing a Graduation Date

If you need to change your graduation date after you have made your declaration, you must contact the general office of your faculty, college, or school as soon as possible.

## Receipt of Information about Graduation

After you have declared your graduation, you will be sent a series of e-mails to your University e-mail account, requesting you to verify your full legal name, asking you about your attendance at convocation, providing convocation information, and so on. **It is imperative that you activate your University of Manitoba email account and check it regularly.**

## Convocation

Convocation ceremonies are held in May/June and October of each year.

February graduates are invited to attend the May/June ceremonies.

Graduating students are encouraged to attend with their families and friends because it is the one ceremonial occasion that marks the successful conclusion of their program of studies.

Graduates who wish to attend Convocation, verify their attendance at the Convocation ceremony by reserving their academic attire through the University approved supplier.

Students who, for any reason, do not attend Convocation will receive their degrees in absentia.

The Registrar's Office will hold unclaimed parchments for a maximum of twelve months after graduation when any unclaimed parchments will be destroyed. These will include those not given at Convocation, those that were to be picked up in person but not claimed, those that were mailed but returned to the Registrar's Office by the postal outlet or courier depot, those that were not issued due to a financial hold on a student's records, and those that were reprinted immediately after convocation due to corrections.

It is critical that you update your address, phone number and email through Aurora whenever changes occur. Note that any changes made with the Alumni Association are not reflected in your University of Manitoba student records.

If you do not receive your parchment, it is your responsibility to follow up with the Registrar's Office within a twelve-month period. Any requests for parchments after this time will be processed as replacements; there is a fee charged for replacement parchments.

## Academic Dress

Students are responsible for making arrangements to reserve their academic attire through the University approved supplier. Rental fees apply. Details will be provided via e-mail once Convocation planning begins.

## Convocation Information

Information on Convocation may be found on the Graduation/Convocation website (<http://umanitoba.ca/convocation/>).

## Personal Information

### Mailing Address

In order to receive University mail, it is essential that you to provide the Registrar's Office with your current address. All mail will be directed to the address you provide. You may change your mailing address and phone number by accessing Aurora Student and then selecting Personal Information.

### Change of Name

If you have changed your name since you were first admitted or if the name on your record is incomplete or inaccurate, official evidence of the name change or correction must be submitted to the Registrar's Office along with a completed Request for Change of Name form (<https://umanitoba.ca/registrar/change-your-personal-information/>). The University of Manitoba uses your **full legal name** on its records, transcripts, and graduation documents (a full legal name, for example, includes all names on your birth certificate - first, middle, and last - or on your study permit). Abbreviated names, Anglicized names, or initials should not be used unless they have been proven with appropriate documentation.

## Areas of Study

Each Faculty/School chapter includes a list (where applicable) of Majors, Minors, Concentrations and Focuses which may be included in their degree programs.

### Alphabetical Listing of Subjects

Subject	Code	Faculty/School
Accounting	ACC	Management
Actuarial Studies Warren Centre	ACT	Management
Agribusiness and Ageconomics	ABIZ	Agricultural and Food Sciences
Agroecology	AGEC	Agricultural and Food Sciences
Agriculture, General	AGRI	Agricultural and Food Sciences
Agriculture Diploma	DAGR	Agricultural and Food Sciences
American Sign Language	ASLL	Arts
Anatomy	ANAT	Medicine
Anesthesia	ANES	Medicine
Animal Science	ANSC	Agricultural and Food Sciences
Anthropology	ANTH	Arts
Applied Mathematics	AMAT	Science
Arabic	ARA	Arts
Architecture	ARCG	Architecture
Architecture Interdisciplinary	ARCH	Architecture
Arts Interdisciplinary	ARTS	Arts
Asian Studies	ASIA	Arts
Astronomy	ASTR	Science
Biochemistry and Medical Genetics	BGEN	Medicine
Biological Sciences	BIOL	Science
Biosystems Engineering	BIOE	Agricultural and Food Sciences
Biotechnology	BTEC	Science
Canadian Studies	CDN	Arts
Catholic Studies	CATH	Arts
Chemistry	CHEM	Science
City Planning	CITY	Architecture
Civil Engineering	CIVL	Engineering
Classical Studies	CLAS	Arts
Community Health Sciences	CHSC	Medicine
Computer Science	COMP	Science
Data Science	DATA	Science
Dental Diagnostic and Surgical	DDSS	Dentistry
Dental Hygiene	HYGN	Dental Hygiene
Dentistry	DENT	Dentistry

Diagnostic Cytology	CYTO	Medical Rehabilitation
Diploma in Agriculture	AGRI	Agricultural and Food Sciences
Disability Studies	DS	Disability Studies
Economics	ECON	Arts
Education Ph.D.	EDUC	Education
Educational Administration, Foundations and Psychology	EDUA	Education
Education: Curriculum, Teaching and Learning	EDUB	Education
Electrical Engineering	ECE	Engineering
Engineering - Preliminary Year	ENG	Engineering
English	ENGL	Arts
Entomology	ENTM	Agricultural and Food Sciences
Entrepreneurship/Small Business	ENTR	Management
Environment	ENVR	Environment, Earth, and Resources
Environment, Earth, and Resources	EER	Environment, Earth, and Resources
Environmental Architecture	EVAR	Architecture
Environmental Design	EVDS	Architecture
Environmental Interior Environment	EVIE	Architecture
Environmental Landscape and Urbanism	EVLU	Architecture
Family Social Sciences	FMLY	Medicine
Film Studies	FILM	Arts
Finance	FIN	Management
Fine Art General Courses	FA	Art
Fine Art Diploma	FNDP	Art
Fine Art: Art History	FAAH	Art
Fine Art Studio Courses	STDO	Art
Food Science	FOOD	Agricultural and Food Sciences
Forensic Sciences	FORS	Science
French	FREN	Arts
General Agriculture	AGRI	Agricultural and Food Sciences
General Human Ecology	HMEC	Human Ecology
General Management	GMGT	Management
Geography	GEOG	Environment, Earth, and Resources
Geological Sciences	GEOL	Environment, Earth, and Resources
German	GRMN	Arts

Global Political Economy	GPE	Arts	Oral Biology	ORLB	Dentistry
Graduate Studies	GRAD	Graduate Studies	Pathology	PATH	Medicine
Greek	GRK	Arts	Peace Studies	PEAC	Graduate Studies
Health Studies	HEAL	Health Sciences	Pharmacology	PHAC	Medicine
Hebrew	HEB	Arts	Pharmacy (Doctor of)	PHMD	Pharmacy
History	HIST	Arts	Pharmacy	PHRM	Pharmacy
Human Nutritional Sciences	HNSC	Agricultural and Food Sciences	Philosophy	PHIL	Arts
Human Resources Management/Industrial Relations	HRIR	Management	Physical Education	PHED	Kinesiology and Recreation Management
Hungarian	HUNG	Arts	Physical Education and Recreation Studies General	PERS	Kinesiology and Recreation Management
Icelandic	ICEL	Arts	Physical Therapy	PT	Medical Rehabilitation
Immunology	IMMU	Medicine	Physics	PHYS	Science
Indigenous Studies	INDG	Arts	Physiology	PHGY	Medicine
Interdisciplinary Management	IDM	Management	Plant Science	PLNT	Agricultural and Food Sciences
Interdisciplinary Medicine	IMED	Medicine	Polish	POL	Arts
Interior Design	IDES	Architecture	Political Studies	POLS	Arts
International Business	INTB	Management	Portuguese	PORT	Arts
Italian	ITLN	Arts	Post Graduate Medical Education	PGME	Medicine
Judaic Civilization	JUD	Arts	Preventive Dental Science	PDS	Dentistry
Kinesiology	KIN	Kinesiology and Recreation Management	Psychiatry	PCTY	Medicine
Kinesiology, Phys.Ed and Recreation	KPER	Kinesiology, Phys.Ed and Recreation	Psychology	PSYC	Arts
Labour Studies	LABR	Arts	Recreation	REC	Kinesiology and Recreation Management
Landscape Architecture	LARC	Architecture	Religion	RLGN	Arts
Latin	LATN	Arts	Resource Management	NRI	Environment, Earth, and Resources
Law	LAW	Law	Respiratory Therapy	RESP	Medical Rehabilitation
Linguistics	LING	Arts	Restorative Dentistry	RSTD	Dentistry
Management Information Systems	MIS	Management	Russian	RUSN	Arts
Management Science	MSCI	Management	Science, Interdisciplinary	SCI	Science
Marketing	MKT	Management	Slavic Studies	SLAV	Arts
Mathematics	MATH	Science	Social Work	SWRK	Social Work
Mechanical Engineering Graduate	MECG	Engineering	Sociology	SOC	Arts
Mechanical Engineering Undergraduate	MECH	Engineering	Soil Science	SOIL	Agricultural and Food Sciences
Medical Microbiology and Infectious Diseases	MMIC	Medicine	Spanish	SPAN	Arts
Medical Rehabilitation Medicine	REHB MED	Medical Rehabilitation Medicine	Statistics	STAT	Science
Microbiology	MBIO	Science	Supply Chain Management	SCM	Management
Midwifery	MDFY	Nursing	Surgery	SURG	Medicine
Music	MUSC	Music	Theatre	THTR	Arts
Nursing	NURS	Nursing	Ukrainian	UKRN	Arts
Occupational Therapy	OT	Medical Rehabilitation	Ukrainian Canadian Heritage Studies	UCHS	Arts
Operations Management	OPM	Management	Undergraduate Medical Education	UGME	Medicine



Women's and Gender Studies	WOMN	Arts
Yiddish	YDSH	Arts

# Admissions

## Welcome

You are joining a vibrant community of over 29,000 students and 8,000 academic and support staff members that emphasizes excellence in teaching, learning, and research.

The University of Manitoba is a community of people who study, teach, conduct research, and create music and art, and whose ideas and accomplishments have an impact on our society and culture both here in Manitoba and in the wider world.

The University of Manitoba is the province's largest university and the first to be established in western Canada.

The majority of new University of Manitoba students will enter University 1, an innovative program that was specially designed to provide choice and flexibility. University 1 gives you the opportunity to begin your university studies with a year of personal and academic exploration. Advisors are available to provide academic advice and assistance. During the campus wide orientation that begins your first academic year, you will be introduced to the wide range of campus support services that can help you with all aspects of student life.

If you are joining the University of Manitoba after completing some college or university courses at another institution, you are equally welcome as you continue your studies.

This document, the *Undergraduate Calendar*, provides the basic information on admission requirements. More specific information on admission requirements and the application process can be found in the applications themselves and their accompanying guides and/or bulletins which can be downloaded from the Admissions website (<https://umanitoba.ca/admissions/>). In addition, there are advisors in the general offices of all academic units who are ready to answer your questions and to help you understand policies and regulations that affect you.

Again, welcome to the University of Manitoba. You are joining a large community of students and scholars, and when you graduate you will be joining an even larger community of graduates.

**The University of Manitoba is honored to provide you with your education.**

## An Overview of Undergraduate Admission

The twenty-two faculties and schools of the University of Manitoba offer over 60 different undergraduate programs. Some of these programs are open to high school graduates, or to mature status applicants, while others require a year or more of university-level studies as preparation for admission.

There are several programs that offer direct entry options for qualified high school graduates, see Direct Entry Options (p. 129) for the list of these programs. The majority of high school students applying to the University of Manitoba choose University 1, a first year program designed to provide a foundation for studies in Arts, Science, and the professional disciplines.

Many programs offer only an 'advanced entry' option and accept applications from students who have completed a year or more in university-level studies, either in University 1 (or another program at the

University of Manitoba) or at another recognized university or college. These programs are listed in Advanced Entry Options (p. 133).

The programs offering the 'direct entry' option also offer an 'advanced entry' option for students who wish to start in University 1 and then select their degree program in second year.

In addition, students can also apply as Auditing, Visiting, or Special Students (see Other Admission Categories (p. 134)). Usually students in these applicant categories will apply to General Studies (Extended Education) where they can take degree credit courses in a variety of disciplines to meet entrance requirements for a future degree application or to meet career development and personal goals.

The main criterion for admission for direct and advanced entry programs is the scholastic achievement of the student. In instances such as the Marcel A. Desautels Faculty of Music and the School of Art, additional criteria designed to assess the student's suitability for education are applied.

Most faculties and schools in the University of Manitoba have enrolment limitations, and a process of selection is applied by the university. In some programs the number of students applying for admission greatly exceeds the number which the university is able to admit. Selection, therefore, is based upon scholastic achievement and suitability for the discipline. In some faculties and schools first consideration is given to residents of Manitoba who are Canadian Citizens or Permanent Residents. A limited number of places may be assigned to Canadian Citizens or Permanent Residents who are resident outside Manitoba or to those who are not Canadian Citizens/Permanent Residents. Booth University College (<http://www.boothuc.ca>) (approved teaching centre) and Université de Saint-Boniface (<https://ustboniface.ca/>) (an affiliated college) are not limited in their enrolment, and interested students are directed to those institutions for information.

Many of the first-year level courses in mathematics and the sciences at the University of Manitoba will have high school subject prerequisites. These prerequisites are listed in the course descriptions sections of this calendar.

All applicants whose primary language is not English must fulfil the English language proficiency requirements described in English Language Proficiency (p. 136).

## Direct Entry Options

Comprehensive information on the entrance requirements, application process, and deadlines for each of these programs can be found on the Admissions website (<https://umanitoba.ca/admissions/>).

The following faculties and schools offer direct entry programs which accept students graduating from Manitoba high schools (or the equivalent in other provinces/countries):

- University 1
- Faculty of Agricultural & Food Sciences (degree programs)
- Faculty of Agricultural & Food Sciences (diploma program)
- Faculty of Arts
- School of Art (Fine Arts studio degree programs)
- School of Art (Fine Arts diploma program)
- Asper School of Business
- School of Dental Hygiene
- Price Faculty of Engineering

- Clayton H. Riddell Faculty of Environment, Earth, & Resources
- Faculty of Kinesiology & Recreation Management (except Athletic Therapy)
- Rady Faculty of Health Sciences (Interdisciplinary Health)
- Marcel A. Desautels Faculty of Music
- Faculty of Science

Students applying from high school to a direct entry program must meet two levels of requirements:

- The general entrance requirements
- The specific subject and performance requirements of the program for which admission is sought.

Some University of Manitoba undergraduate courses, particularly mathematics and science courses, will have specific high school courses as prerequisites to register in these courses. These prerequisites may not be required for admission to the direct entry program, but are required for course registration. If students have not completed the necessary high school courses, they can complete a UM preparatory upgrading course. See our website for listings of these high school prerequisites.

Students who have completed 24 credit hours or more of post-secondary courses are not eligible to apply for admission to the direct entry programs (see Advanced Entry Options (p. 133))

## General Entrance Requirements

### Manitoba High School Students - General Entrance Requirements

Applicants must present Manitoba high school graduation, with successful completion of five full credits at the Grade 12 level, in courses designated S (Specialized), G (General), or U (Dual Credit – University).

For program specific subject requirements see Specific Subject Requirements (p. 131)

### Other Canadian High School Students - General Entrance Requirements

The following certificates are usually accepted as equivalent to Manitoba high school standing and will, therefore, meet the university's general entrance requirements for students from that region.

- *Alberta*: High school graduation with five acceptable Grade 12 credits.
- *British Columbia*: High school graduation with four acceptable Grade 12 credits.
- *New Brunswick*: High school graduation with six acceptable Grade 12 credits.
- *Newfoundland*: High school graduation with ten acceptable Grade 12 credits.
- *Northwest Territories*: High school graduation with five acceptable Grade 12 credits.
- *Nova Scotia*: High school graduation with five acceptable Grade 12 credits.
- *Nunavut*: High school graduation with five acceptable Grade 12 credits.
- *Ontario*: High school graduation with six Grade 12 U or M courses.
- *Prince Edward Island*: High school graduation with five acceptable Grade 12 credits
- *Quebec*: First-year CEGEP with satisfactory standing (normally a GPA of 2.0 or better or 65 percent or better).
- *Saskatchewan*: High school graduation with five acceptable Grade 12 credits.

- *Yukon Territory*: High school graduation with four acceptable Grade 12 credits.

## Countries and Regions outside Canada - General Entrance Requirements

The following certificates are usually accepted as equivalent to Manitoba high school standing and will, therefore, meet the university's general entrance requirements for students from that region. Additional listings can be found on the Admissions website (<https://umanitoba.ca/admissions/undergraduate/requirements/international/>).

- *British-patterned education*: (United Kingdom and most Commonwealth countries except as noted separately below) General Certificate of Education, with two subjects at Advanced Level and three at Ordinary Level, or three subjects at Advanced Level and one at the Ordinary Level, with a C overall average; no subject accepted below a D grade. Acceptable alternative: U.K. Higher National Diploma or Certificate.
- *French-patterned education*: (Algeria, Cote d'Ivoire, Cambodia, France, French Guinea, Haiti, Laos, Morocco) Diplôme de Bachelier de l'Enseignement du Second Degré (Baccalaureate Parts I and II)
- *Latin America*: (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Venezuela: all others see individual listings below): Bachillerato
- *Middle East*: (Bahrain, Iran, Iraq, Jordan, Kuwait, Libya, Oman, Qatar, Saudi Arabia, Syria, Sudan, United Arab Emirates, Yemen): all others see individual listing below: national secondary school certificate
- *Russian-patterned education*: (Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan, Uzbekistan) Attestate o Srednem (Polnom) Certificate and complete General Secondary Education
- *Yugoslavian-patterned education*: (Bosnia-Herzegovina, Croatia, Macedonia, Serbia, Slovenia, Yugoslavia) Matura/Secondary School Leaving Diploma
- *Argentina*: Bachillerato
- *Australia*: matriculation as defined by the home state university
- *Bangladesh*: Higher Secondary Certificate (HSC)
- *Brazil*: Certificado de Ensino Medio (Certificate of Secondary Education)
- *China*: Upper Middle School Graduation Certificate
- *Czech Republic*: Maturitni Zkouška (Maturita)
- *Ethiopia*: Higher Education Entrance Qualification
- *Germany*: Reifezeugnis
- *Greece*: Apolytirion
- *Hong Kong*: HKDSE/HKCEE Diploma, with at least two HKALE level subjects and three HKCEE level subjects with a minimum overall average of a 'C' and no grade below a 'D'. Two HKASLE level subjects will be held equivalent to one HKALE level subject.
- *India*: All-Indian Senior School Certificate, Higher Secondary Certificate (Pre-Degree, Pre-Professional or Pre-University), Intermediate Certificate, Higher Secondary Certificate Part 2
- *Indonesia*: Ijazah Sekolah Menengah Atas (Ijazah SMA) and the Surat Keterangan Hasil Ujian Nasional (SKHUN)
- *Ireland, Republic of*: Leaving Certificate
- *Israel*: Bagrut Certificate
- *Italy*: Maturita Classica Diploma or Maturita Scientifica Diploma
- *Japan*: Upper Secondary School Diploma
- *Kenya*: Kenya Certificate of Secondary Education (KCSE)

- *Malaysia*: Sijil Tinggi Persekolahan Malaysia (STPM) or The Unified Examination Certificate for Independent Chinese Schools (UEC)
- *Mexico*: Bachillerato
- *Nigeria*: Senior School Certificate with WAEC results
- *Pakistan*: Higher Secondary School Certificate (HSC) / Intermediate Certificate
- *Philippines*: Senior High School (Academic Track K-12 system) Diploma; before 2017-2018: One year of study from a recognized institution of higher learning
- *Poland*: Maturity/Swiadectwo Dojrzalosci Certificate
- *Portugal*: Diploma de Ensino Secundario
- *Singapore*: Singapore-Cambridge General Certificate of Education (Advanced Level) with at least two H2 level courses and three O level courses.
- *Slovak Republic*: Maturity Certificate (Maturitnej Skuske)
- *South Korea*: Academic Upper Secondary School Certificate (Immungye Kodung Hakkyo Choeupchang)
- *Spain*: Titulo de Bachillerato or University Orientation Year
- *Taiwan*: Senior High School Leaving Certificate
- *Thailand*: Mathayom /Maw 6
- *Ukraine*: Atestat pro Povnu Zagalnu Sersdniu Osvitu (Grade 12)
- *United States of America (and Puerto Rico)*: complete Grade 12 with a minimum of five academic Grade 12 subjects

**Not Acceptable:** The following qualifications by themselves are not acceptable as a basis of admission: IGCSE/GCSE/GCE (O) levels only; Business and Technology Education Council (BTEC) Certificate; West African School Certificate; Senior School Certificate with National Examinations Council (NECO) Results; Hong Kong Certificate of Education; Ordinary Diploma and Technician Diploma; Malaysian Technical Diploma; U.K. City and Guilds Certificate; U.K. College of Preceptors Licentiate; U.K. Ordinary National Certificate or Diploma; Caribbean Secondary Education Certificate (CSEC)/CXC Examinations only

Graduates from international schools overseas will be considered for admission only if they are eligible for admission to a major university of their country of citizenship; or they have successfully completed an internationally examined curriculum such as the GCE or IB diploma, or they have successfully completed the formal graduation requirements of a Canadian provincial ministry of education in an approved institution.

### International Baccalaureate Students - General Entrance Requirements

To meet the General Requirements, an I.B. student must present three courses at the Higher Level and three courses at the Standard Level, with a minimum score in each subject of three and an overall minimum score of 24. Credit may be granted for selected Higher and/or Standard Level courses with minimum scores of four in specific subject areas; see Advanced Standing for High School Students (p. 135).

### Home Schooled Applicants

Home schooled applicants will be considered for admission for University 1 on an individual basis. Contact the Admissions Office for additional information.

### Mature Student Status

Mature student status is granted to one who:

- Does not meet the normal entrance requirements;
- Is at least 21 years of age (before May 1 for admission to classes beginning in May; before July 1 for classes beginning in July; before September 30 for the Fall term; and before January 31 for the Winter term, and,
- Is either a Canadian citizen, or a Permanent Resident of Canada.

Mature status students may apply to any of the following direct entry programs: University 1, Engineering, Fine Arts (diploma program), and Music. Members of the Canadian Military are also eligible to apply to General Studies (Extended Education), the Clayton H. Riddell Faculty of Environment, Earth, & Resources, and the Faculties of Arts and Science as mature students. Applicants to Engineering are required to meet the specific high subject requirements of that Faculty, i.e. a minimum of 70% in each of English 40S, Chemistry 40S, Pre-Calculus Math 40S, and Physics 40S (or the equivalent) plus a minimum 80% average over these subjects.

Applicants who have completed 24 credit hours or more of course work at another post-secondary institution are not normally eligible for mature student status admission. These applicants should apply to one of the 'advanced entry' programs.

Applicants who do not qualify for consideration for admission under the mature status requirements must meet the regular high school entrance requirements applicable to their chosen faculty or school.

Applicants seeking admission under mature student status are encouraged to seek further information from the Admissions Office.

## Specific Subject Requirements and Performance Levels for Admission to Direct Entry Options

In addition to the General Entrance Requirements listed above by Geographic region, applicants must meet the Specific Subject Requirements for their selected program. The requirements are listed for Manitoba high school students, the equivalent from other provinces and countries are acceptable. A list of approved academic courses can be found in the Direct Entry Applicant Information Bulletin ([https://umanitoba.ca/explore/sites/explore/files/2020-11/direct\\_entry\\_bulletin.pdf](https://umanitoba.ca/explore/sites/explore/files/2020-11/direct_entry_bulletin.pdf)).

Should the number of qualified applicants exceed the number of available positions, the strongest candidates will be selected.

### University 1

General Entrance Requirements as listed above, plus a minimum 70% average over the following, with no less than 60% in each course:

- English 40S
- Mathematics 40S
- Two academic 40S courses

Should the above requirements not be met, applicants are considered for Limited Admission. Limited Admission is open to Canadian citizens and permanent residents only. Some registration restrictions and performance standards apply, and additional academic supports and services are provided (see University 1 (p. 138)). Limited Admission to University 1 requires General Entrance Requirements as listed above, plus a minimum 65% average over the following, with no less than 55% in each course:

- English 40S
- Mathematics 40S
- Two academic 40S courses

### School of Agriculture - Diploma program

General Entrance Requirements as listed above, plus, a minimum average of 60% over the following three courses:

- English 40S
- Mathematics (40S or 45S)
- One of: Biology, Chemistry, Physics, or Computer Science 40S

Students without a suitable high school standing may apply under the Special Consideration Category (see the Agriculture Diploma Bulletin (<https://umanitoba.ca/explore/sites/explore/files/2021-03/agriculture-diploma-bulletin.pdf>) for more detailed information).

### Faculty of Agricultural & Food Sciences

#### Agriculture, Agroecology, Agribusiness, Human Nutritional Sciences and Food Sciences degree programs

General Entrance Requirements as listed above, plus a minimum 70% average over the following courses, with no less than 60% in each course:

- English 40S
- Mathematics 40S
- Two academic 40S courses

### Faculty of Arts

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- Mathematics 40S
- Two academic 40S courses

### School of Art (Fine Arts studio degree programs)

General Entrance Requirements as listed above, plus one English 40S credit with a minimum grade of 60% and a minimum 70% average over three 40S credits. Portfolios (<https://umanitoba.ca/explore/programs-of-study/fine-arts-studio-program-bfa-diploma/>) are required from all applicants. Grade 12 Art is recommended.

### School of Art (Fine Arts diploma program)

Candidates should meet the General Entrance Requirements as listed above, plus the same specific subject requirements and performance levels as the School of Art studio degree above, but applications for the diploma program will be accepted from students who have not graduated from high school or who do not meet the studio degree requirements. Portfolios (<https://umanitoba.ca/explore/programs-of-study/fine-arts-studio-program-bfa-diploma/>) are required from all applicants. Grade 12 Art is recommended.

### Asper School of Business

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 70% in each course:

- English 40S
- Pre-Calculus Mathematics 40S
- Two academic 40S courses

### School of Dental Hygiene

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- One of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- Chemistry 40S
- An academic 40S course

### Price Faculty of Engineering

General Entrance Requirements as listed above, plus a minimum 80% average over the following courses, with no less than 70% in each course:

- English 40S
- Pre-Calculus Mathematics 40S
- Chemistry 40S
- Physics 40S

### Clayton H. Riddell Faculty of Environment, Earth, and Resources Environmental Science and Physical Geography Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- Pre-Calculus Mathematics 40S
- Physics 40S
- One of: Biology 40S, Chemistry 40S, or Computer Science 40S

### Earth Science Degree Programs

General Entrance Requirements as listed above, plus a minimum 70% average over the following courses, with no less than 60% in each course:

- English 40S
- Pre-Calculus Mathematics 40S
- Chemistry 40S
- Physics 40S

### Environmental Studies and Geography Degree Programs

General Entrance Requirements as listed above, plus a minimum 70% average over the following courses, with no less than 60% in each course:

- English 40S
- Mathematics 40S
- Two academic 40S courses

### Rady Faculty of Health Sciences Health Sciences Degree Program

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- One of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- Biology 40S
- Chemistry 40S

### Health Studies Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- One of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- Biology or Chemistry 40S
- An academic 40S course

### College of Medicine (Family Social Sciences)

Admission to the Family Social Sciences program is currently suspended.

### Faculty of Kinesiology & Recreation Management Kinesiology and Physical Education Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- One of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- One of: Biology, Chemistry, or Physics 40S
- An academic 40S course

### Recreation Management and Community Development Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- One of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- Two academic 40S courses

Please note that candidates interested in Athletic Therapy must apply as Advanced Entry applicants (see Advanced Entry Options (p. 133)).

### Marcel A. Desautels Faculty of Music

General Entrance Requirements as listed above, plus a minimum 70% average over the following courses, with no less than 60% in each course:

- English 40S
- Mathematics 40S
- Two academic 40S courses

An audition and theory assessment (<https://umanitoba.ca/music/>) are required. Grade 12 Music and a second language at the Grade 12 level are recommended.

### Faculty of Science

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- One of: Pre-Calculus Mathematics 40S (recommended) or Applied Mathematics 40S
- One of: Biology 40S, Chemistry 40S, Computer Science 40S, or Physics 40S
- An academic 40S course

## Advanced Entry Options

Comprehensive information on the entrance requirements, application process, and deadlines for each of these options can be found on the Admissions website (<https://umanitoba.ca/admissions/>).

The following faculties and schools offer advanced entry options for applicants with one year (24 credit hours) or more of university-level studies, either in University 1 (or another program) at the University of Manitoba, or at another recognized post-secondary institution.

- Agricultural & Food Sciences (degree programs) (p. 148)
- Agricultural & Food Science (diploma program) (p. 148)
- Architecture (Environmental Design) (<https://catalog.umanitoba.ca/undergraduate-studies/architecture/environmental-design-bachelor/>)
- Arts (p. 205)

- Asper School of Business (p. 692)
- Clayton H. Riddell Faculty of Environment, Earth, & Resources (p. 491)
- Dental Hygiene (p. 637)
- Dentistry (p. 629)
- Education (p. 447)
- Engineering (p. 460)
- Fine Arts (Art History) (p. 198)
- Fine Arts (Studio program) (p. 198)
- General Studies (Extended Education) (p. 572)
- Health Studies and Health Sciences (<https://catalog.umanitoba.ca/undergraduate-studies/health-sciences/health-studies-bhsc/>)
- Kinesiology & Recreation Management (p. 677)
- Law (p. 687)
- Medicine (p. 592)
- Rehabilitation Sciences (Respiratory Therapy) (p. 674)
- Marcel A. Desautels Faculty of Music (p. 782)
- Nursing (p. 646)
- Pharmacy (p. 665)
- Science (p. 799)
- Social Work (p. 945)

Students who have attended university or college, but who have completed less than 24 credit hours of course work at another institution, should apply for admission to a direct entry program (see Direct Entry Options (p. 129)).

Students applying to an advanced entry option must meet two levels of requirements:

- The minimum performance standard of the University
- The minimum performance standards and specific requirements of the Faculty or School in which admission is sought.

### Minimum Performance Standard of the University

The minimum performance requirement for entry to a post-University 1 level program at any faculty or school at the University of Manitoba is a cumulative grade point average (CGPA) of 2.0 (C). Students who do not meet this requirement may be considered for admission if they have achieved a minimum grade point average (GPA) of 2.0 (C) on all courses acceptable for credit in the faculty or school to which application is made. In this case, students must have at least 24 credit hours acceptable for credit. In addition to this university minimum performance requirement, students must meet any additional entrance requirements, performance levels, and selection criteria stipulated for the faculty or school of application.

Students who are currently on suspension at another post-secondary institution will not normally be considered for admission to the University of Manitoba.

*Students are advised that selection processes are competitive and in many cases applicants must present adjusted grade point averages greater than the minimum level stated.*

### Minimum Performance Standards and Specific Requirements of the Faculty or School

Each faculty and school has its own admission requirements and processes, including minimum performance standards and specific

entrance requirements and restrictions, and this information is provided in the Applicant Information Bulletin posted on the University website (<https://umanitoba.ca/admissions/>). The introductory section of each faculty or school chapter provides a general overview of the admissions requirements, but for specific, comprehensive information on the entrance requirements and selection processes, students must review the Faculty's Applicant Information Bulletin posted on the website.

## Other Admission Categories

### Readmission, Continuing and Returning Students

All students who were admitted and who did not follow through with registration must apply (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) for re-admission.

Students who voluntarily withdraw from their first-year of studies must reapply for admission. The only exceptions are students in Agricultural and Food Science, Arts, Clayton H. Riddell Faculty of Environment, Earth, and Resources, General Studies, Science, Social Work, and University 1 who are permitted to reregister without re-applying for admission.

Former students who have attended other institutions since their last registration at the University of Manitoba must apply for re-admission, unless the other institution was attended on a letter of permission.

Current students are not permitted to concurrently study at other recognized colleges or universities unless they have obtained a Letter of Permission. Students must obtain a Letter of Permission whether or not the course(s) being taken are for transfer of credit to the University of Manitoba. Failure to obtain a Letter of Permission may have serious academic implications and require the student to reapply for admission.

Students whose past registration was in the following faculties, but who have not been in attendance for one or more years, should seek formal permission to re-register from the office of the dean or director of the faculty or school concerned, to ensure that work previously completed complies with current program requirements: Agricultural and Food Sciences; Arts; General Studies (Extended Education); Engineering; Clayton H. Riddell Faculty of Environment, Earth, and Resources; Science; Social Work; or University 1. Former students of the Faculty of Arts are required to re-apply for admission if they have been away from their studies for ten or more years.

All students who were admitted to the Asper School of Business, Dental Hygiene, Education, Environmental Design, School of Art, Nursing, Music, or Kinesiology & Recreation Management, where there is limited enrolment, and who have not been in attendance for one year or more, must make formal application to re-register to the office of the dean or director before June 1. Their acceptance back into the program will be subject to quota restrictions and compliance with existing program requirements.

Students who wish to change to a different faculty or school, or who are no longer eligible to continue in one program of studies at the University of Manitoba, may apply for admission to another faculty or school by the application deadline date and must meet the entrance requirements of the faculty of choice.

Students wishing to return to their program of studies after serving a period of academic or disciplinary suspension must make a formal request for re-registration to the Dean's or Director's office of their faculty or school. Students currently on suspension from a faculty or school at

the University of Manitoba will not normally be eligible for consideration for admission to another faculty or school.

Students who attend another post-secondary institution or another faculty or school at the University after being placed on suspension must submit an application through the Admissions Office to be considered for readmission to the faculty or school of suspension.

Graduates who wish to take further courses in their own faculty, but not towards a degree, must apply for readmission as a "special student."

### Special Students

Special students are those who wish to enrol in a degree credit course for professional or personal interest and who are not seeking to complete a degree. These students apply to General Studies (Extended Education) or to the faculty or school offering the course.

### Visiting Students

Visiting students are students who are registered at another institution who are taking one or more courses at the University of Manitoba on a Letter of Permission from their home university. These students generally apply for admission to General Studies (Extended Education).

**Students are not permitted to concurrently register in degree programs at two institutions without a Letter of Permission.**

### Auditing Students

Auditing students are those who wish to be admitted for the purpose of auditing a course(s) only (not for academic credit). No documentation other than the information requested on the application form is required for admission purposes. Auditing students are not entitled to examination or other evaluation privileges, and in no instance may credit standing be obtained for a course which has been audited. Once admitted, the written consent of the instructor of the course(s) which the student wishes to audit must be presented at the time of registration for approval by the faculty or school. (Students admitted in a category other than auditor may audit courses with the approval of the dean or director, provided written permission of the instructor is presented at registration)

### Students Transiting to Arts or Science from University 1

University 1 students who have completed a minimum of 24 credit hours may enter the Faculty of Arts and Faculty of Science by a 'transit' process available through the Aurora Student Registration system. There is no application fee or additional required documentation to transit to Arts or Science.

To be eligible to transit, a student must have achieved a minimum cumulative grade point average (CGPA) of 2.00 on 24 credit hours of university level courses. Students who have completed more than 24 credit hours at the point of transit assessment must have achieved a minimum adjusted grade point average (AGPA) of 2.00. The AGPA calculation will be based on the best graded 24 credit hours of completed coursework at the point of transit.

All students who have completed 30 credit hours or more will be assessed for eligibility to transit upon completion of Winter term. If eligible, the student must transit prior to Fall term registration. If ineligible, defined as a student who does not meet the minimum 2.00 AGPA requirement, the student will be suspended from University 1 for 12 months.

Details on how to complete the transit process can be found in the University 1 section of the Undergraduate Academic Calendar. Students

can also contact the Faculty of Arts, Faculty of Science or the University 1 First Year Centre offices for information.

## Admission with Advanced Standing

Students who have previously attended a recognized post-secondary institution, including universities, colleges, community and/or technical colleges, and Bible Colleges, who are selected for admission to either a direct entry or an advanced entry program option may qualify for advanced standing. Advanced standing will be granted in compliance with the residence requirements, provided the work completed is part of the requirements of the degree program in which the student wishes to enrol. Some faculties and schools may consider only courses completed within ten (or fewer) years. Credit will be granted only for courses taken at a recognized institution. Standing cannot be determined until official transcripts and complete course descriptions have been received. Since it takes considerable time to have courses evaluated for transfer credit, students are urged to submit their results and course descriptions as early as possible in order that the evaluation process can be completed in time for registration. Students who do not have evaluations completed prior to registration should consult their faculty or school for guidance in selecting courses.

Transfer credit for each individual course will be evaluated by the appropriate University of Manitoba department and transfer credit will be granted subject to program applicability.

Further information on transfer of credit and residence requirement is found in the chapter, General Academic Regulations and Requirements.

Some faculties and schools may have limitations on possible credit taken beyond a specified period; this information is described in their chapters or in the Applicant Information Bulletin (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>).

## Advanced Standing for High School Students

Students who have completed courses in the *Advanced Placement* program (selected Advanced Placement College Board examinations with a minimum score of four in specific areas) or the *International Baccalaureate* program (selected Higher and Standard Level courses with minimum scores of 4 in specific subject areas), may apply for transfer of credit (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/#advanced-placement-and-international-baccalaureate-students>) to the program they are entering. Students who have completed university level courses while in high school (including Challenge for Credit) will be required to submit an official transcript from the institution for which credit was granted and will be assessed for advanced standing. Students should consult the Admissions Office for information.

Students admitted on the basis of high school graduation may be denied transfer of credit for any university studies completed between the filing of the application and subsequent registration at the University of Manitoba.

## Students Applying from Bible Colleges

Students who have attended a Bible college will be considered for admission/transfer credit, providing that:

- The Canadian Bible college is a member institution of the Association of Universities and Colleges of Canada (AUCC) or is affiliated with an AUCC member institution (other than as an approved teaching

centre), or is accredited by the Association for Biblical Higher Education (ABHE).

- The U.S. Bible college holds regional accreditation in the U.S., or is accredited by ABHE.

Degrees from Bible Colleges will not qualify applicants for admission to second degree or after degree programs, with the exception of holders of approved degrees from Booth College and Providence College who are applying for admission to the After Degree Bachelor of Education program. These degrees may suffice for admission to the After Degree program; contact the Faculty for specific information.

## Graduates of Diploma Schools of Nursing (R.N.)

Graduates of diploma schools of nursing may be considered admissible as regular students to the University of Manitoba. Admission to specific faculties and schools will be with the consent of the dean or director and will be conditional upon the presence of specific subject fields within the program completed. Applicants in this category may be granted advance standing not exceeding the residency policy of the faculty concerned (grades of "C+" or equivalent in individual courses have the potential for credit in a degree program).

## Graduates of Diploma Schools of Psychiatric Nursing (R.P.N.)

Diploma programs in Manitoba may receive credit transfer for professional work completed.

## Canadian Coast Guard College

Graduates of the Canadian Coast Guard College diploma programs with a minimum 2.5 ("C+") average will be considered for admission as regular students to the University of Manitoba, and may be granted up to one year of advance standing, as appropriate to faculties and schools.

## Graduates of Extended Education Certificate Programs

Graduates of certificate programs offered under the auspices of the Extended Education Division of the University of Manitoba which require a minimum of 180 contact hours, may be eligible to receive credit towards an undergraduate degree providing they have been admitted to a faculty or school in which transfer of credit is appropriate. A minimum overall average of 2.5 or better must have been achieved to qualify for consideration. The maximum amount of credit which may be transferred will be determined by Extended Education in consultation with the relevant faculty or school.

## Universal Policies

For purposes of undergraduate admission to the University of Manitoba, a Manitoba Resident shall be defined as a Canadian Citizen or Permanent Resident of Canada who, at the application deadline, meets any one of the following four descriptions:

1. Has graduated from a Manitoba high school
2. Has a recognized degree from a university in Manitoba
3. Has completed either one year or two consecutive years of full-time academic studies in a recognized program at a university in Manitoba, while physically residing in Manitoba. The duration shall be determined by the program of study and identified in the respective Applicant Information Bulletin (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) or Supplemental Regulations.
4. Has resided continuously in Manitoba for any two year period following high school graduation. The two year residence period shall



not be considered broken where the program's admission committee is satisfied that the applicant was temporarily out of the province on vacation, in short-term volunteer work or employment, or as a full-time student.

In the event of a tie, the following procedure will be used:

1. Increase the number of significant figures used in the calculation.
2. Where a tie still exists, the application that was received first will be used to break the tie. All completed applications are time stamped upon submission; in the case of a paper application, these applications will be time stamped after they have been entered into the system by a University of Manitoba Admissions Office staff member.

## English Language Proficiency

### English Language Proficiency Requirement

English is the language of instruction and communication at the University of Manitoba. Accordingly, an applicant whose primary language is not English, or whose previous education was in another language, must demonstrate a command of English sufficient to meet the demands of classroom instruction, written assignments, and participation in tutorials and discussions.

*Canadian Citizens, Permanent Residents and others whose primary language is English* are deemed to be proficient in English by virtue of having lived and been educated in a country where English is the primary language (country as determined by the Admissions Office).

*Canadian Citizens and Permanent Residents and International (study permit) applicants whose primary language is not English* must provide evidence of proficiency in English by meeting the University of Manitoba standards as outlined in the following section.

### English Language Proficiency Options

Any applicant who is asked to demonstrate proficiency in the English language may do so by meeting any one of the following options:<sup>1</sup>

- Achieve a minimum total score of 86 with a minimum of 20 in each component score on the internet-based Test of English as a Foreign Language (TOEFL iBT or TOEFL iBT Home Edition or TOEFL iBT Paper Edition).
- Achieve minimum scores of 4.5 in Reading, 4.5 in Listening and 4.0 in Writing on the Canadian Test of English for Scholars and Trainees (CanTEST).
- Achieve a minimum overall score of 6.5 and a minimum score of 6.0 in each of the four modules (listening, reading, speaking, writing) on the International English Language Testing System (IELTS) Academic or IELTS Indicator.
- Achieve a grade of 180 or higher on the Cambridge Assessment English: C1 Advanced or C2 Proficiency.
- Achieve a score of 60 or more in the Canadian Academic English Language Assessment (CAEL).
- Achieve a minimum score of 58 in the Pearson Test of English (Academic).
- Achieve a pass in the direct-entry English program, also known as the Academic English Program for University and College Entrance (AEPUCE), as taught by the English Language Centre at the University of Manitoba (or equivalent program at the University of Winnipeg or Red River College).

- Successful completion of 30 unique (not repeated), passed (D or higher) credit hours within the International College of Manitoba with a minimum 2.0 adjusted grade point average.

<sup>1</sup> Some Faculties may require a specific test or test scores higher than those indicated above.

### English Language Proficiency Waiver

An English language proficiency waiver may be granted to anyone who is a Permanent Resident, Naturalized Canadian, or who is in Canada on a study permit.

Students seeking this exemption must provide supporting documentation and have the information assessed as satisfactorily meeting one of the following:

1. Ten consecutive years of residency in Canada that may include years of study in Canada. The period of residency will be the time lapsed between the "Landed On" date on the "Record of Landing" document and the start of the program.
2. Successful completion of a three year secondary school program in Canada, or three years of post-secondary education in Canada, or any combination of three successful calendar years of secondary and post-secondary education in Canada.
  - Successful completion of secondary studies equates to meeting the entrance requirements of the University of Manitoba. Secondary education must include Grade 12 where appropriate and completion of five course credits per year. The three years of secondary study must be completed immediately prior to attending the University of Manitoba.
  - Successful completion of post-secondary education equates to a minimum completion of 72 credit hours or equivalent. The three years of post-secondary study must be completed within two years of attending the University of Manitoba.
3. Graduation from a Manitoba high school, with five credits at the Grade 12 level, which include two credits of English at the 40S level with an average grade of 75%.
4. Graduation from a Canadian Curriculum secondary school (other than Manitoba curriculum) with a year 12 English Literature grade of 75% or higher.
5. Achieved a grade of four or greater on the International Baccalaureate Higher Level English course, or a grade of four or greater on the Advanced Placement English examination (Language Composition; Literature and Composition).
6. Successful completion of thirty (30) credit hours of university level coursework and six credit hours of transferrable English courses at the 1000 level or higher with a minimum grade of B at a recognized university where English is the primary language of instruction, in a country where English is the primary language (see approved country exemption list (<https://umanitoba.ca/admissions/undergraduate/requirements/english-language-proficiency/#countries-exempt-from-english-language-requirements>)). University level study must be completed immediately prior to attending the University of Manitoba.
7. Graduation from a degree program at a recognized university where English is the primary language of instruction, in a country where English is the primary language (see approved country exemption list (<https://umanitoba.ca/admissions/undergraduate/requirements/english-language-proficiency/#countries-exempt-from-english-language-requirements>)). Graduation from the qualifying institution must be within two years of attending the University of Manitoba.

8. Successful completion of the General Certificate of Education Advanced Level (GCE A-Level) with a minimum grade of B in English (non-ESL) at the GCSE/IGCSE O Level, AS Level, or A-Level.
9. Completion of the Indian Senior School Certificate (ISSC) or the Indian School Certificate (ISC) awarded by the Central Board of Secondary Education (CBSE) or the Council for the Indian School Certificate (CISC) with a minimum grade of 75% in the senior English subject.

Additionally, applicants will receive the waiver if they verify conditions equivalent to 1, 2, or 3 listed above in a country where English is the primary language.

## Application Procedure

### Applications, Deadlines and Documents

On-line applications and downloadable application material is provided on the university website (<https://umanitoba.ca/admissions/>) and at the Admissions Office, 424 University Centre; telephone (204) 474-8808. All applicants are advised to download the Applicant Information Bulletin (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) for their chosen faculty/school for a careful review of the entrance requirements and selection process and then to apply online (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) for admission.

Students are encouraged to submit their applications as early as possible to provide enough time for documentation submission and application processing. Students cannot register until a favourable admission decision has been made. Generally faculties and schools do not consider nor issue acceptances to students awaiting supplemental or summer session results. In those faculties and schools which do, applications must be filed in time to meet the deadline date. An admission decision will only be made upon receipt of final examination results.

Application to live in a campus residence (<http://umanitoba.ca/housing/>) is made separately (see Student Residences (p. 1773)).

Students who have attended a university other than the University of Manitoba will be required to submit official transcripts of all previous work completed. Transcripts should be submitted at the time of application, or as soon as final results are available, but no later than the deadline date for submission of documents. University of Manitoba transcripts are not required of applicants.

Transfer student applicants who register for further university/college courses subsequent to their application to the University of Manitoba (unless on a Letter of Permission from the University of Manitoba) must submit an official transcript of final grades. Admission status will be reassessed, and unless prior permission has been obtained from the Admissions Office, transfer of credit may be denied.

### Appeals of Admission Decisions

Individuals who wish to have their applications reconsidered should submit their request to the Chair of the Selection Committee. Past experience has shown that most inquiries can be satisfied at this level without further reference. Persons wishing reconsideration of the decision of the Selection Committee shall direct their request to the Chair within ten (10) days of the mailing of the Committee decision.

Should the student wish to pursue the reconsideration decision of the Selection Committee further, such an appeal will be made in accordance with the Senate committee on Admission Appeals.

Procedures: [http://www.umanitoba.ca/admin/governance/governing\\_documents/students/admission\\_appeals.html](http://www.umanitoba.ca/admin/governance/governing_documents/students/admission_appeals.html)

### Application Fraud or Misconduct

Application fraud or misconduct includes:

- Failure to declare attendance at another post-secondary institution;
- Presenting falsified academic documentation or causing or encouraging another person to falsify records through translation or data changes;
- Presenting falsified personal documentation, e.g. using a false name, date of birth, country of origin, etc.;
- Presenting falsified or fictitious reference documentation;
- Cheating on, or having another person write, a standardized entry exam such as, TOEFL, MCAT, LSAT, DAT or GMAT;
- Presenting another person's standardized test score as one's own to falsify a test result; and
- Failure to report suspensions from another post-secondary institution.

The commission of applicant fraud or misconduct may result in acceptance and registration being withdrawn and the applicant disqualified from consideration, not only in the year of application, but in subsequent sessions. If discovered in a subsequent session it may result in dismissal from the university.

### Declaration

All persons seeking admission to the University of Manitoba must sign (or accept) the following declaration on the application for admission form: "I hereby certify that I have read and understood the instructions and information sheet accompanying any part of this application form and that all statements made in connection with this application are true and complete."

# University 1

## University 1 First Year Centre

**Program Director:** Brandy Usick

**Campus Address/General Office:** 205 Tier Building

**Telephone:** (204) 474 6209

**Fax:** (204) 474 7659

**Email Address:** [university\\_1@umanitoba.ca](mailto:university_1@umanitoba.ca)

**Website:** [umanitoba.ca/U1](http://umanitoba.ca/U1) (<http://umanitoba.ca/U1/>)

### First Year of Studies in University 1

University 1 is the administrative home for most beginning undergraduate students, through the first 30 credit hours of courses, in most University of Manitoba degree programs. University 1 students have the opportunity to design an individualized first year in order to meet the admission requirements of one or more target degree programs.

High school graduates, mature students, and transfer students with less than 24 credit hours of post-secondary education, are generally admitted to University 1. Other direct entry options also exist for several faculties, schools and colleges. Please refer to the Admissions Chapter of this calendar for details.

Students who have completed 24-30 credit hours while in University 1 will either transit to the Faculty of Arts or the Faculty of Science, or apply to one of the other faculties, schools or colleges at the University of Manitoba, where they will complete the requirements of the degree program of their choice in order to graduate.

### The University 1 First Year Centre

The University 1 First Year Centre is the only office on campus dedicated to supporting all first year students. It is home to Registration Advisors and Academic Advisors. If you have questions about courses and programs, or challenges arise affecting your academic success, the staff members of the University 1 First Year Centre are available to assist you.

Registration Advisors serve as a welcoming presence in the First Year Centre and are available to assist students with basic advising needs, registration assistance, as well as provide general information about the university, its policies and procedures, and by making on-campus referrals as needed.

Academic Advisors typically assist students with degree program planning, course selection, registration issues, academic expectations and skills, personal issues or concerns, and in connecting with other campus resources.

The First Year Planning Guide (<http://umanitoba.ca/firstyear/>) on the University 1 website offers detailed guidance on first year course selection, program planning, and registration.

Newly-admitted students are strongly encouraged to review the First Year Planning Guide before consulting an Academic Advisor in the University 1 First Year Centre.

### Advising Programming

Making the transition to university from high school, from another post-secondary institution, or from the workplace, can seem overwhelming. Online resources, along with individual and group advising services, provide students with the tools and information needed to start their first year off strong and find success as a University of Manitoba student.

Advising opportunities are strategically planned to provide students with useful information when they need it most. Throughout the year, students are provided with a variety of opportunities to strengthen their connection with first year advising services, as well as with the larger campus community. Students are encouraged to seek out information and advice at regular intervals.

All new students are strongly encouraged to visit the First Year Centre to familiarize themselves with available supports and resources at the beginning of their first term at university.

### ARTS 1110

ARTS 1110, is a three-credit hour course, designed to help students with the transition from high school, college, or the workplace, to university studies. ARTS 1110 offers a unique combination of educational principles, practical skills, regular feedback on assignments, and the support of experienced instructors and teaching assistants. Features of ARTS 1110 include strategies for academic success, introduction to libraries and research methods, exercises in critical thinking, and instruction and extensive practice in effective writing.

ARTS 1110 is available to students who have completed fewer than 60 credit hours of university-level courses. Successful completion of ARTS 1110 fulfils the university's Written English (W) requirement.

## Admission Requirements

The Admissions chapter of this publication contains general University of Manitoba admission information, rules and regulations.

For current University 1 admission requirements, refer to our Applicant Information Bulletin (<http://www.umanitoba.ca/student/admissions/application/programs/university-one-application.html>) on the Admissions website.

Historical admission requirements can be found in the PDF versions of the Undergraduate Academic Calendar (<https://umanitoba.ca/registrar/academic-calendar/past-academic-calendars/>).

### Limited Admission

High school graduates who fall below the minimum admission requirements to University 1, and who are Canadian Citizens or Permanent Residents, may qualify for admission under the Limited Admission category. Please see the University 1 Applicant Information Bulletin (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) for more information.

The U1 First Year Centre has designed the Limited Admission program to support students' transition to successful university studies.

Limited Admission students are required to:

- Meet in person with their dedicated academic advisor prior to initial registration
- Obtain approval from an academic advisor for their course selection and registration
- Meet in person with their dedicated academic advisor once during each term while they are enrolled in University 1
- Successfully complete and achieve a D or better in the course ARTS 1110 in their first term of registration
- Register in a minimum of 9 credit hours and a maximum of 12 credit hours in each of Fall and Winter term

- Participate in a minimum of one-skill building workshop, as recommended by their academic advisor.

Failure to fulfill these requirements will result in the removal of registration privileges in University 1.

## Transfer of Credit

Students who have completed International Baccalaureate (IB) or Advanced Placement (AP) courses in high school may choose to transfer in these courses for university-level credit. Students who would like transfer credit for IB or AP courses should contact the Admissions (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>) office.

Students who have completed courses at another post-secondary institution prior to admission to University 1 may receive transfer credit for these courses, as outlined in the Transfer Credit section of the Admissions website. Courses completed at another institution 10 years or more before registration in University 1 are not considered for transfer credit.

## Returning to University 1 After an Extended Leave

U1 students who have been away from the University of Manitoba for more than a year will find that their student status is inactive and they are unable to register for courses.

If a returning student has not attended another accredited post-secondary institution since leaving the University of Manitoba, and they have 27 credit hours or less, they are eligible to return to University 1. The student should consult with a Registration Advisor at the University 1 First Centre to be reinstated as a student.

Returning U1 students are encouraged to meet with an Academic Advisor in the U1 First Year Centre to discuss their return to studies, registration date and time, and academic goals, well in advance of the start of registration.

Students who have attended another accredited post-secondary institution since they were in University 1 must typically re-apply for admission. Students can contact Admissions (<http://umanitoba.ca/student/admissions/>) for more details.

If a student has completed more than 27 credit hours, between courses taken at the University of Manitoba and those taken at another institution, the student will not be eligible to return to University 1 and will be required to apply to a degree program.

Students should consult with an Academic Advisor in their target faculty, school or college for information and advice well in advance of the application deadline, which will vary by faculty, and can be obtained from the Admissions office.

## University 1 Academic Regulations

Academic regulations which apply to all students are described in the chapters of the Calendar titled General Academic Regulations (p. 118), and University Policies and Procedures (p. 37). In addition, faculties, schools and colleges have regulations and requirements that apply specifically to their students.

Please see the specific faculty, school or college chapter(s) in the Calendar for the academic regulations that may apply to courses in which

you are registered. University 1 Academic Regulations are described below.

## Maximum Course Load

University 1 students are restricted to a maximum of 30 credit hours during the Fall/Winter terms, with a maximum of five courses in each term.

## Voluntary Withdrawals

Students are permitted to withdraw from courses within the deadlines listed for each term in the Academic Schedule. The responsibility for initiating withdrawals rests solely with the student. Voluntary Withdrawals (p. 116) (VWs) must be done by the student using Aurora; non-attendance in courses does not constitute a withdrawal.

VWs will not be permitted after the deadlines posted in the Academic Schedule. Students are strongly encouraged to discuss their plans with an academic advisor before withdrawing from courses.

In exceptional circumstances, Authorized Withdrawals may be permitted on presentation of appropriate documentation. Consult an Academic Advisor in the University 1 First Year Centre for information.

## Repeating Courses

University 1 students may repeat a course they have previously taken, but they are not required to do so because of a low grade or a Voluntary Withdrawal (VW), unless it is a course required for admission or required once in their target degree program. University 1 students who wish to repeat a course in which they have a final grade must consult with a University 1 academic advisor prior to registration. Students may be eligible for a laboratory exemption in classes they are repeating which include a laboratory component.

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

As per the University of Manitoba Repeated Course Policy (p. 55) as found in the University Policies and Procedure section of the Undergraduate Calendar, when a student wishes to repeat a course (or to register for an equivalent course) which the student has previously VW'd or received a grade in, the student will be subject to Limited Access (p. 55).

**Limited Access does not prevent students from repeating a course or registering for an equivalent course that they have previously VW'd or received a grade in.** Rather, for three consecutive terms following the Term in which the student VW'd or received a grade in the course, students will be unable to register for the repeated course during the Initial Registration Period. Their registration for the repeated course will be delayed until the Limited Access Term Expiry Date, after Initial Registration has ended. A specific Limited Access Term Expiry Date will be established for each term of registration.

Grades from all completed courses will be used in the calculation of the Cumulative Grade Point Average, subject to the Grade Point Averages Policy as found in the University Policies and Procedure section of the Undergraduate Calendar. The grades for all courses attempted will be included on the official transcript.

Students must refer to their target faculty, school or college's Applicant Information Bulletin, found on the Admissions (<http://umanitoba.ca/>)

student/admissions/) office website, to determine how repeating a course may affect admission eligibility.

## Deferred Examinations

If a student has missed one or more final exams due to unexpected medical or compassionate circumstances, they may be permitted an opportunity to write their exam/s at a later date. To make this arrangement, University 1 students must contact the First Year Centre within 48 hours of the date of the missed examination. A medical certificate, or otherwise appropriate documentation, may be required.

If the request for a deferred examination is approved, the student will, in most cases, be offered the opportunity to write another examination within 30 working days.

Students with known exam conflicts due to religious observance (interfaith calendar (<http://www.interfaith-calendar.org/>)), participation in specific scholastic and athletic events, or a medical condition may request a deferred examination. Applications for a deferred examination due to a known conflict, as indicated here, must be filed 20 working days prior to the date of the scheduled exam. Travel plans are not an acceptable reason for missing an exam.

The University 1 First Year Centre is the only place that can arrange a deferred examination for University 1 students who miss an exam scheduled by the Registrar's Office. U1 cannot grant deferrals for mid-terms or final exams scheduled in class time. Please see your instructor for options related to missed in-class tests or to request extensions to submit term work.

Please see the Registrar's Office website (<http://umanitoba.ca/student/records/finals/682.html>) for more information about deferred final exams.

## Authorized Withdrawals

Students who are unable to fulfill their academic responsibilities due to extenuating circumstances and who have valid and documented reasons for withdrawal from courses, such as medical illness or compassionate circumstances may apply to University 1 for Authorized Withdrawal. If granted, Authorized Withdrawal will result in the student being withdrawn from a course without academic penalty. Authorized Withdrawals will not appear on a student's official university transcript. Please see the University of Manitoba Authorized Withdrawal Policy (p. 44) for more information.

## Academic Performance

### For Students Admitted Prior to Fall 2021:

Grades obtained in University 1 become a part of the student's permanent record and will appear on the student's official transcript. Grades earned while in University 1 will determine admission to most faculties, schools and colleges, and may also qualify a student for the University 1 Honour List. See the General Academic Regulations (p. 118) for a description of how Grade Point Averages (GPAs) are calculated.

### Maximum Number of 'F' Grades

All students in University 1 must meet minimum academic performance requirements and will be placed on academic suspension for one year if they have accumulated more than 36 credit hours of 'F' grades, regardless of the origin of the grade (i.e. courses transferred from other programs or institutions will be included) or whether the course has been repeated.

Students who are performing marginally or are at risk of exceeding the 'F' limit will be identified and will be provided with academic advising, strategic referrals, and support services as necessary.

Students placed on academic suspension are not normally permitted to register in any other faculty, school or college at the University of Manitoba or to attend any other post-secondary institution for a period of one calendar year.

Following one year of suspension, the student may re-apply to the Faculty of Arts (p. 205) or the Faculty of Science (p. 799) and return to the University of Manitoba. Please see the Faculty of Arts or Faculty of Science chapters of the Calendar for a complete description of the options available following academic suspension.

Although an academic assessment is not appealable, University 1 students are encouraged to meet with an Academic Advisor in the First Year Centre to discuss options and potential remedies for poor academic performance.

### For Students Admitted in Fall 2021 and Thereafter:

Grades obtained in University 1 become a part of the student's academic record and will appear on the student's official transcript. At the end of each academic term (Fall, Winter, and Summer), students will be assessed based on the number of credit hours completed and the GPA earned. See the General Academic Regulations (p. 118) chapter of this *Calendar* for a description of how Grade Point Averages (GPAs) are calculated.

### Unofficial Assessment

All University 1 students who have completed 3 to 12 credit hours will have their academic performance assessed informally. Students in this credit hour range, with a cumulative GPA of less than 1.75 will be identified as part of the *Early Warning Program*, which is designed to assist students at the earliest sign of academic difficulty. Interventions include, but are not limited to: academic advising, support services, and strategic referrals with the goal of returning the student to good standing.

### Official Assessment

University 1 students who have completed 15 credit hours or more will be officially assessed based on their academic performance. Students will fall into one of four categories: Minimum Met, Academic Warning, Probation, and Academic Suspension.

### Minimum Met

University 1 students who have completed 15-27 credit hours and achieve a cumulative GPA of 2.0 or greater, at each point of assessment, will have met the minimum academic standard in University 1.

### Academic Warning

University 1 students who have completed 15-27 credit hours and whose cumulative GPA is between 1.75 and 1.99 will have an assessment of Academic Warning. Students in this category will be encouraged to discuss their academic plans and strategies with an academic advisor in the First Year Centre. The student and academic advisor will work together to assess challenges and identify appropriate resources and/or supports to aid the student in reaching minimum academic standards.

### Probation

Students who do not achieve a cumulative GPA of 1.75 after completing between 15 and 27 credit hours will be placed on probation. The notation "On Probation" will be recorded on the student's transcript.

While on probation, students will be encouraged to meet with an academic advisor who will make recommendations for participation in

interventions developed for at-risk students. These may include, but are not limited to: follow-up meeting/s with an academic advisor in the First Year Centre; participation in skill building workshop/s as determined by the academic advisor such as: study skills/time management, academic writing, test/exam preparation, career development and planning, and/or referrals to student support resource units.

Students who are registered in spanned courses will still be assessed at the end of each term in which they are registered. It is possible for a student to be placed on probation prior to completing a spanned course; however, an assessment of academic suspension will not occur while a student is registered in a spanned course. Students on probation who are registered in spanned courses will continue on probation until the spanned course is complete, at which time, official assessment will take place, based on the number of credit hours completed and GPA.

### Academic Suspension

A student will be placed on academic suspension for one calendar year (3 consecutive academic terms) if after completion of 30 or more credit hours, s/he fails to obtain a minimum 2.0 GPA calculated on the best 24 hours of completed coursework.

A student placed on academic suspension in University 1 is not normally permitted to register in any other faculty or school at the University of Manitoba or to attend any other post-secondary institution for a period of one calendar year. Following the 12-month suspension, the student may request reinstatement and upon return, will be eligible to register in University 1 for a maximum of 24 additional credit hours.

When returning from suspension, students will be assessed as being on probation until such time as they are admitted to another University of Manitoba Faculty or School, or they are able to meet the eligibility criteria for transit (See Section 4.3). They will have a hold placed on their Aurora student account, and will be required to meet with an academic advisor in the First Year Centre prior to subsequent registration. Students returning from suspension may be required to participate in interventions developed for at-risk students. These may include, but are not limited to: required follow-up meeting/s with an academic advisor in the First Year Centre; referrals to student support resource units; participation in skill building workshop/s as determined by the academic advisor such as: study skills/time management, academic writing, test/exam preparation, career development and planning. Failure to do so may result in removal of registration privileges in University 1.

If a student returning from suspension has completed the allowable additional 24 credit hours and fails to meet the 2.00 AGPA standard they would be ineligible to proceed in University 1.

Although an academic assessment is not appealable, University 1 students are encouraged to meet with an academic advisor in the First Year Centre to discuss options and potential remedies for poor academic performance.

### University 1 Honour List

Students who achieve a term GPA of 3.75 or higher on a minimum of 12 credit hours offered by the University of Manitoba will be placed on the University 1 Honour List. The University 1 Honour List will be calculated after each term (Fall, Winter, and Summer); the notation "University 1 Honour List" will be recorded on the student's transcript specific to that term.

## Appeals of Decisions

Students in University 1 have the right to appeal any decisions made from the University of Manitoba policies, or from University 1 policies. Appeals from University 1 students should first be directed to the First Year Centre Coordinator within 10 working days from the date of the decision. Decisions of the First Year Centre Coordinator are appealable to the Executive Director Student Engagement and Success. Decisions of the Executive Director may be appealed on procedural grounds to the University 1 Appeals Committee. See <http://umanitoba.ca/u1/about/index.html> (<http://umanitoba.ca/u1/about/>) for detailed policy and procedure information.

Student Advocacy and Case Management has Student Advocates who are available to assist students in preparing all appeals and requests for special consideration. Students can contact their office at 520 University Centre, Ph: 204 474-7423.

## University 1 Program Requirements

### Course Selection and Registration

Detailed information regarding first year courses and registration can be found in the First Year Planning Guide (<http://umanitoba.ca/u1/>) on the University 1 website. Instructional videos are also available within the Guide to assist students through the registration process.

Students will be directed to resources, including the First Year Planning Guide, upon acceptance of their offer of admission to the University of Manitoba.

### University 1 Curriculum

University 1 is normally the first 24-30 credit hours of a student's degree program. The University 1 curriculum includes a breadth requirement to ensure that students are exposed to a representative sample of courses. To that end, University 1 students are required to take 6 credit hours of courses from the Faculty of Arts, 6 credit hours of courses from the Faculty of Science, and 6 credit hours of courses from the Faculty of Arts or the Faculty of Science or the Clayton H. Riddell Faculty of Environment, Earth, and Resources. The remaining 12 credit hours of courses are to be chosen from the Recommended Introductory Courses list, found within the First Year Planning Guide ([http://umanitoba.ca/u1/first\\_year/](http://umanitoba.ca/u1/first_year/)).

The University 1 curriculum will normally be fulfilled through the completion of the admission requirements to faculties, schools and colleges, as outlined in this Calendar and in the First Year Planning Guide ([http://umanitoba.ca/u1/first\\_year/](http://umanitoba.ca/u1/first_year/)).

Students may be eligible to enter a faculty, school or college program once they have completed a minimum of 24 credit hours. Students who have not completed the University 1 curriculum and who are admitted to faculties, schools and colleges after University 1, will complete any outstanding requirements as part of their degree program.

### Admission to Faculties, Schools and Colleges Following University 1

For target faculties, schools, and colleges that admit students directly from U1, either 24 or 30 credit hours are required to fulfil admission requirements to degree programs. See the specific admission requirements for each target faculty, school, and college in the Calendar.

### Applying to Faculties, Schools and Colleges

University 1 students who have met the minimum admission requirements for their target degree program can apply to an Advanced

Entry (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) program for which they have met the first year requirements. Detailed admission information for advanced entry degree programs can be found in each program's Applicant Information Bulletin, available on the Admissions website.

Applications to degree programs in faculties, schools or colleges other than Arts or Science, must be made through the Admissions website (<http://umanitoba.ca/student/admissions/application/>).

### Transiting to the Faculty of Arts or the Faculty of Science For Students Admitted Prior to Fall 2021:

University 1 students who have completed between 24 and 30 credit hours do not have to apply for admission if they are targeting degree programs in either the Faculty of Arts or the Faculty of Science. Instead, these students are able to transit to the Faculty of Arts or the Faculty of Science. University 1 students are assessed once per year for their eligibility to transit. Students can transit on Aurora once a year in mid-June. Visit the U1 website for more specific instructions on how to transit (<https://umanitoba.ca/university-1/#leaving-university-1>). Students should transit before registering for courses. There is no fee to transit.

Alternatively, students who have completed between 24 and 27 credit hours may elect to remain in University 1 and register for a full course load in the following regular academic year, depending on the requirements of their target degree program.

Students who have completed 30 credit hours are not eligible to remain in University 1 for the following year. They are required to either transit to the Faculty of Arts or the Faculty of Science, or to apply to an advanced entry program for which they have met the admission requirements.

### For Students Admitted in Fall 2021 and Thereafter:

Transit (<https://umanitoba.ca/university-1/#leaving-university-1>) is an admissions process for University 1 students who seek entry to the Faculty of Arts or the Faculty of Science.

Transit is permitted prior to Fall term registration only; students will be assessed for transit eligibility at the completion of Winter term. Students who have completed a minimum of 24 credit hours prior to Fall Term registration *may* transit if eligible. Pass/Fail courses are not included in assessment for transit eligibility.

To be eligible to transit, a student must have achieved a minimum cumulative grade point average (CGPA) of 2.00 on 24 credit hours of university level courses. Students who have completed more than 24 credit hours at the point of transit assessment must have achieved a minimum adjusted grade point average (AGPA) of 2.00. The AGPA calculation will be based on the best graded 24 credit hours of completed coursework at the point of transit.

All students who have completed 30 credit hours or more will be assessed for eligibility to transit upon completion of Winter term. If eligible, the student *must* transit prior to Fall term registration. If ineligible, defined as a student who does not meet the minimum 2.00 AGPA requirement, the student will be suspended from University 1 for 12 months.

Following the 12-month suspension, the student may request reinstatement and upon return, will be eligible to register in University 1 for a maximum of 24 additional credit hours.

When returning from suspension, students will be assessed as being on probation until such time as they are able to meet the eligibility criteria

for transit. They will have a hold placed on their student account, and will be required to participate in interventions developed for at-risk students. These may include, but are not limited to: required meeting/s with an academic advisor in the First Year Centre; participation in skill building workshop/s as determined by the academic advisor such as: study skills/ time management, academic writing, test/exam preparation, career development and planning, and/or referrals to student support resource units. Failure to do so may result in removal of registration privileges in University 1.

At the next point of transit assessment, students who meet the AGPA criteria will be *required* to transit. Those who fail to do so will be permitted to continue in University 1 while attempting to meet the AGPA requirement. If a student returning from suspension has completed the allowable additional 24 credit hours and fails to meet the 2.00 AGPA standard they would be ineligible to proceed in University 1.

## Recommended Introductory Courses

Refer to Faculty Regulations (p. 138) for information about choosing courses in University 1. To find a description of the courses on this list, go to the chapter in this Calendar for the Faculty, School, or College that is offering the course. Departments are listed alphabetically within each Faculty, School, or College chapter. Course descriptions are located in the department sections and sorted in numerical order. Note that not all courses listed in this section are offered every year. To determine which courses are offered in the current academic year, refer to the Aurora Class Schedule. Students may be permitted to take courses not on this list with permission of the teaching Faculty, School, or College and University 1. For a list of courses available at Université de Saint-Boniface see a University 1 Academic Advisor or refer to the Aurora Class Schedule ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).

## Faculty of Agricultural and Food Sciences

In addition to the courses listed below, students who are registering in University 1 for a second year to complete courses required for entry to Agricultural and Food Sciences may request permission to register in any advanced level Agricultural and Food Sciences courses for which they have the prerequisites, subject to space limitations. Students must first consult a University 1 Academic Advisor.

Course	Title	Hours
<b>Agribusiness</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 1010	Economics of World Food Issues and Policies	3
<b>Entomology</b>		
ENTM 1000	World of Bugs	3
<b>Food Science</b>		
FOOD 1000	Food Safety Today and Tomorrow	3
<b>General Faculty</b>		
AGRI 1600	Introduction to Agrifood Systems	3
<b>Human Nutritional Sciences</b>		
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
<b>Plant Science</b>		
PLNT 1000	Urban Agriculture	3

## Faculty of Architecture

Course	Title	Hours
EVDS 1600	Introduction to Environmental Design	3
EVDS 1602	Visual Literacy	3
EVDS 1660	History of Culture, Ideas and Environment 1	3
EVDS 1670	History of Culture, Ideas and Environment 2	3

## School of Art

Course	Title	Hours
FA 1020	Mathematics in Art	3
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3
STDO 1210	Drawing: Studio 1	3
STDO 1240	Figure Study 1	3
STDO 1250	Drawing: Studio 2	3
STDO 1410	Visual Language	3
STDO 1450	Open Studio 1	3
STDO 1470	Materials Studio	3
STDO 1510	Art Now	3

## Faculty of Arts

In addition to the courses listed below, University 1 students may take any 2000, 3000 and 4000 level Arts courses for which they have the prerequisite, subject to space limitations.

Course	Title	Hours
<b>Anthropology</b>		
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220	Cultural Anthropology	3
ANTH 1520	Critical Cultural Anthropology	3
<b>Asian Studies</b>		
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
ASIA 1750	Introduction to Korean	6
ASIA 1760	Introduction to Chinese (Mandarin)	6
ASIA 1770	Introduction to Japanese	6
ASIA 1780	Basic Sanskrit	6
ASIA 1790	Basic Hindi-Urdu	6
ASIA 2750	Intermediate Korean	6
ASIA 2760	Intermediate Chinese (Mandarin)	6
ASIA 2770	Intermediate Japanese	6
<b>Canadian Studies</b>		
CDN 1000	Introduction to Canada	3
<b>Catholic Studies</b>		
CATH 1190	Introduction to Catholic Studies	3
<b>Classics</b>		
Classical Studies:		
CLAS 1270	Introduction to Ancient Greek Culture	3
CLAS 1280	Introduction to Ancient Roman Culture	3
CLAS 1520	Greek and Roman Mythology	3
Greek:		
GRK 1010	Introduction to the Reading of Ancient Greek 1	3
GRK 1020	Introduction to the Reading of Ancient Greek 2	3

GRK 1030	New Testament Greek	6
GRK 1060	Introductory Modern Greek 1	3
GRK 1070	Introductory Modern Greek 2	3

Latin:

LATN 1080	Introduction to the Reading of Latin 1	3
LATN 1090	Introduction to the Reading of Latin 2	3

**Economics**

ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies	3

**English, Theatre, Film, and Media**

English:

ENGL 0930	English Composition <sup>1</sup>	3
ENGL 0940	Writing About Literature <sup>2</sup>	3
ENGL 1200	Representative Literary Works	6
ENGL 1300	Literature since 1900	6
ENGL 1340	Introduction to Literary Analysis	3
ENGL 1400	Thematic Approaches to the Study of Literature	3

Film:

FILM 1290	The Art of the Film 1	3
FILM 1310	Film History	3

Theatre:

THTR 1220	Introduction to Theatre	6
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<sup>1</sup> This course is not acceptable for credit in the Faculties of Engineering, Nursing and Pharmacy, towards the teachable major/minor in Education, nor can it be used to meet the Humanities requirement.

<sup>2</sup> This course is not acceptable for credit in the Faculties of Engineering, Nursing and Pharmacy, nor can it be used to meet the Humanities requirement.

Course	Title	Hours
<b>French, Spanish and Italian</b>		
French:		
FREN 1152	Introductory French 1	3
FREN 1154	Introductory French 2	3
FREN 1190	Français	6
FREN 1200	French 1	6
FREN 1252	Français oral 1	3
Spanish:		
SPAN 1180	Introductory Spanish	6
SPAN 1190	Introductory Spanish 2	3
SPAN 1262	Intermediate Spanish Grammar and Conversation 1	3
SPAN 1272	Intermediate Spanish Grammar and Conversation 2	3
SPAN 1280	Spanish for Native Speakers	3
SPAN 1290	Accelerated Intermediate Spanish	6
Italian:		
ITLN 1080	Introductory Italian	6



Portuguese:			HIST 1270	New Directions in History: Inquiries into the Power Relations of the Modern World (G)	3
PORT 1170	Introductory Portuguese	6	HIST 1350	An Introduction to the History of Western Civilization to 1500 (G)	3
PORT 1282	Intermediate Portuguese Grammar and Conversation 1	3	HIST 1360	An Introduction to the History of Western Civilization from 1500 (G)	3
<b>German and Slavic Studies</b>			HIST 1370	Modern World History: 1500-1800 (M)	3
German:			HIST 1380	Modern World History: 1800-Present (M)	3
GRMN 1120	Beginning German (A)	6	HIST 1390	History of Colonial Canada: 1500-1885 (C)	3
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3	HIST 1400	History of the Canadian Nation since 1867 (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3	HIST 1420	Asian Civilizations to 1500 (B)	3
GRMN 2100	Intermediate German (A)	6	HIST 1430	Asian Civilizations from 1500 (B)	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3	HIST 1440	History of Canada (C)	6
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3	HIST 2010	Indigenous History in Canada (C)	6
GRMN 2140	Exploring German Literature (B)	3	HIST 2020	The Métis in Canada (C)	3
Hungarian:			HIST 2140	Colonial Latin America (A)	3
HUNG 1000	Introduction to Hungarian 1	3	HIST 2150	Independent Latin America (A)	3
HUNG 1002	Introduction to Hungarian 2	3	HIST 2180	The History of Catholicism to 1540 (G)	3
Polish:			HIST 2200	Labour History: Canada and Beyond (C)	3
POL 1890	Introductory Polish	6	HIST 2210	History of Britain, 1485 to the Present (E)	6
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3	HIST 2220	The Shaping of Modern Ireland, 1500-Present (E)	6
POL 2600	Polish Culture until 1918	3	HIST 2230	History of the United States from 1607 (A)	6
POL 2610	Polish Culture 1918 to the Present	3	HIST 2240	History of Antisemitism and the Holocaust (E)	6
POL 2890	Intermediate Polish	6	HIST 2250	Social History of the Jews: Antiquity to Present (G)	6
Russian:			HIST 2282	Inventing Canada (C)	3
RUSN 1300	Introductory Russian	6	HIST 2286	Modern Canada (C)	3
RUSN 1330	Introductory Russian 2	3	HIST 2288	History of Social Movements in Canada (C)	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3	HIST 2350	Europe 1789-1870 (E)	3
RUSN 1410	Love in Russian Culture in English Translation	3	HIST 2360	Europe 1870 to the Present (E)	3
RUSN 2280	Russian Culture until 1900	3	HIST 2390	Early Modern Europe, 1450-1789 (E)	6
RUSN 2290	Russian Culture from 1900 to the Present	3	HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
RUSN 2810	Intermediate Russian	6	HIST 2420	The Medieval World (D)	6
RUSN 2820	Intermediate Russian 2	3	HIST 2500	History of Africa (R)	6
Ukrainian:			HIST 2502	The Modern Middle East: A Critical Survey (R)	6
UKRN 1230	Language Seminar in Ukraine 1	3	HIST 2600	Introduction to Ukraine (E)	3
UKRN 1310	Introductory Ukrainian	6	HIST 2610	Making of Modern Ukraine (E)	3
UKRN 1320	Introductory Ukrainian 2	3	HIST 2654	History of the People's Republic of China, 1949-Present (B)	3
UKRN 2720	Intermediate Ukrainian	6	HIST 2660	History of the Soviet Union (E)	3
UKRN 2730	Intermediate Ukrainian 2	3	HIST 2670	History of Capitalism (M)	3
UKRN 2770	Ukrainian Culture until 1900	3	HIST 2680	A History of Socialism from the French Revolution to the Present (M)	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3	HIST 2730	Modern World History, 1914-1945: The 30 Years' Crisis (M)	3
<b>Global Political Economy</b>			HIST 2732	Modern World History, 1945-1992: The Age of Three Worlds (M)	3
GPE 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3	HIST 2734	Modern World History, 1980-Present: New World Order? (M)	3
<b>Course History</b>			HIST 2750	History of the United States from 1607 to 1877 (A)	3
HIST 1200	An Introduction to the History of Western Civilization (G)	6	HIST 2760	History of the United States from 1877 (A)	3
HIST 1260	New Directions in History: Inquiries into the Cultural Basis of the Modern World (G)	3	HIST 2840	A History of Russia to 1917 (E)	3
			HIST 2900	Topics in Social History (G)	6
			HIST 2990	The History of Catholicism since 1540 (G)	3

**Icelandic**

ICEL 1200	Introduction to Icelandic	6
ICEL 1210	Conversational Icelandic	3
ICEL 1300	Introduction to Swedish	3
ICEL 1400	Introduction to Contemporary Culture in Iceland	3
ICEL 1410	Introduction to Culture in Medieval Iceland	3

**Interdisciplinary**

ARTS 1110	Introduction to University <sup>1</sup>	3
ARTS 1160	Leadership: An Interdisciplinary Approach <sup>2</sup>	3

**Indigenous Studies**

INDG 1000	Orientation Course: The Colonizers and the Colonized	3
INDG 1200	Indigenous Peoples in Canada	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
INDG 2012	Indigenous History in Canada	6
INDG 2020	The Métis in Canada	3

## Indigenous Languages:

INDG 1250	Introductory Cree 1	3
INDG 1260	Introductory Cree 2	3
INDG 1270	Introductory Anishinaabemowin (Ojibwe) 1	3
INDG 1280	Introductory Anishinaabemowin (Ojibwe) 2	3
INDG 1300	Selected Topics in Introductory Indigenous Language	3
INDG 1310	Introductory Anishinaabemowin (Ojibwe) Immersion	3
INDG 1320	Anishinaabemowin (Ojibwe) Literacy for Fluent Speakers	3

**Judaic Studies**

## Arabic:

ARA 1000	Elementary Arabic	6
ARA 2000	Intermediate Arabic	6

## Hebrew:

HEB 1120	Biblical Hebrew (A)	6
HEB 1250	Hebrew 1	6
HEB 1260	Hebrew 2	6

## Yiddish:

YDSH 1220	Yiddish	6
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## Labour Studies:

LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3
LABR 2200	Labour History: Canada and Beyond (C)	3

## Linguistics:

ASLL 1000	American Sign Language 1	3
LING 1000	Introduction to Linguistics	3
LING 1010	Introduction to Linguistics 2: Language in Context	3
LING 1310	Indigenous Languages of Manitoba	3
LING 1360	Languages of Canada	3
LING 1440	Descriptive Grammar of Modern English	3
LING 1460	Words	3
LING 1620	Language and the Media	3

**Philosophy**

PHIL 1200	Introduction to Philosophy	6
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PHIL 1290	Critical Thinking	3
PHIL 1300	Introduction to Logic	3
PHIL 1420	Philosophy as a Way of Life	3

**Political Studies**

POLS 1502	Introduction to Political Studies	3
POLS 1506	Survey of Political Studies	3

**Psychology**

PSYC 1200	Introduction to Psychology	6
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**Religion**

RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RLGN 1350	The History of Eastern Christianity	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 1410	Death and Concepts of the Future	3
RLGN 1420	Ethics in World Religions	3
RLGN 1424	Religion and Sexuality	3
RLGN 1430	Food: Religious Concepts and Practices	3
RLGN 1440	Evil in World Religions	3
RLGN 1450	Religion and the Media	3

**Sociology**

SOC 1000	Introduction to Sociology	3
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**Women's and Gender Studies**

WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3
WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
WOMN 2560	Women, Science and Technology	3
WOMN 2600	Sex, Gender, Space and Place	3

Course	Title	Hours
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**Philosophy**

PHIL 1200	Introduction to Philosophy	6
PHIL 1290	Critical Thinking	3
PHIL 1300	Introduction to Logic	3
PHIL 1420	Philosophy as a Way of Life	3

**Political Studies**

POLS 1502	Introduction to Political Studies	3
POLS 1506	Survey of Political Studies	3

**Psychology**

PSYC 1200	Introduction to Psychology	6
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**Religion**

RLGN 1120	Biblical Hebrew	6
RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RLGN 1350	The History of Eastern Christianity	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 1410	Death and Concepts of the Future	3
RLGN 1420	Ethics in World Religions	3
RLGN 1424	Religion and Sexuality	3
RLGN 1430	Food: Religious Concepts and Practices	3
RLGN 1440	Evil in World Religions	3

RLGN 1450	Religion and the Media	3
<b>Sociology</b>		
SOC 1000	Introduction to Sociology	3
<b>Women's and Gender Studies Program</b>		
WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3
WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
WOMN 2560	Women, Science and Technology	3
WOMN 2600	Sex, Gender, Space and Place	3

<sup>1</sup> This course is not acceptable for credit in the Price Faculty of Engineering, nor does it satisfy a Humanities or Social Sciences requirement.

<sup>2</sup> This course will satisfy the Faculty of Arts' Social Sciences requirement.

## Price Faculty of Engineering

In addition to the courses listed below, students who are registering in University 1 for a second year to complete courses required for entry to Engineering may request permission to register in any advanced level Engineering courses for which they have the prerequisites, subject to space limitations. Students must first consult the Price Faculty of Engineering and a University 1 Academic Advisor.

Course	Title	Hours
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3

## Clayton H. Riddell Faculty of Environment, Earth, and Resources

In addition to the courses listed below, University 1 students may take any 2000, 3000 and 4000 level Clayton H. Riddell Faculty of Environment, Earth, and Resources courses for which they have the prerequisite, subject to space limitations.

Course	Title	Hours
<b>Environmental Science</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
<b>General Faculty</b>		
EER 1000	Earth: A User's Guide	3
<b>Geography</b>		
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3
<b>Earth Sciences</b>		
GEOL 1340	The Dynamic Earth	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
GEOL 1410	Natural Disasters and Global Change	3
GEOL 1420	Exploring the Planets	3

## Rady Faculty of Health Sciences

### Max Rady College of Medicine - Community Health Sciences

Course	Title	Hours
<b>Health Sciences, Health Studies, and Human Ecology</b>		
HEAL 1600	Health and Health Professions	3
<b>Family Social Sciences</b>		
FMLY 1000	Families in Contemporary Canadian Society	3
FMLY 1010	Human Development in the Family	3
FMLY 1012	Introduction to Social Development	3
FMLY 1420	Family Management Principles	3

## Faculty of Kinesiology and Recreation Management

Course	Title	Hours
KPER 1200	Physical Activity, Health and Wellness	3
KPER 1400	Concepts of Recreation and Leisure	3
KPER 1500	Foundations of Physical Education and Kinesiology	3
REC 2100	Introduction to Leisure Travel	3

## Faculty of Management/I. H. Asper School of Business

In addition to the courses listed below, students may register in any advanced level Business course for which they have the prerequisites, subject to space limitations.

Course	Title	Hours
<b>Business Administration</b>		
GMGT 1010	Business and Society	3
GMGT 2060	Management and Organizational Theory	3
GMGT 2070	Introduction to Organizational Behaviour	3
<b>Entrepreneurship</b>		
ENTR 2010	Managing the Smaller Business	3
ENTR 2020	Starting a New Business	3
<b>Marketing</b>		
MKT 2210	Fundamentals of Marketing	3

## Marcel A. Desautels Faculty of Music

Course	Title	Hours
MUSC 1010	Music Matters: Excursions in Western Musical Culture	3
MUSC 1020	Introduction to Popular Music	3
MUSC 1030	History of Musical Theatre	3
MUSC 1110	Music Theory 1 <sup>1</sup>	3
MUSC 1120	Music Theory 2 <sup>1</sup>	3
MUSC 1280	Musical Style and Structure 1 <sup>1</sup>	3
MUSC 1290	Musical Style and Structure 2 <sup>1</sup>	3
MUSC 1930	Rudiments of Music	3

<sup>1</sup> Contact the Marcel A. Desautels Faculty of Music for permission to register.

## Faculty of Science

In addition to the courses listed below, University 1 students may take any 2000, 3000 and 4000 level Science courses for which they have the prerequisite, subject to space limitations.

Course	Title	Hours	Course	Title	Hours
<b>Biological Sciences</b>			MBIO 1410	Introduction of Molecular Biology	3
BIOL 1000	Biology: Foundations of Life	3	<b>Physics and Astronomy</b>		
BIOL 1010	Biology: Biological Diversity and Interaction	3	Astronomy:		
BIOL 1020	Biology 1: Principles and Themes	3	ASTR 1810	Introduction to Astronomy: The Magnificent Universe	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3	ASTR 1830	Life in the Universe	3
BIOL 1300	Economic Plants	3	Physics:		
BIOL 1340	The State of the Earth's Environment: Contemporary Issues	3	PHYS 0900	Preparing for University Physics	0
BIOL 1410	Anatomy of the Human Body	3	PHYS 1018	The Mechanics of Nature	3
BIOL 1412	Physiology of the Human Body	3	PHYS 1020	General Physics 1	3
<b>Chemistry</b>			PHYS 1030	General Physics 2	3
CHEM 0900	Preparatory Chemistry	0	PHYS 1050	Physics 1: Mechanics	3
CHEM 1018	Chemistry - The Central Science	3	PHYS 1070	Physics 2: Waves and Modern Physics	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3	<b>Statistics</b>		
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3	STAT 1000	Basic Statistical Analysis 1	3
CHEM 1120	Introduction to Chemistry Techniques	3	STAT 1150	Introduction to Statistics and Computing	3
CHEM 1130	Introduction to Organic Chemistry	3	STAT 2000	Basic Statistical Analysis 2	3
<b>Computer Science</b>			STAT 2150	Statistics and Computing	3
COMP 1010	Introductory Computer Science 1	3	<b>Faculty of Social Work</b>		
COMP 1012	Computer Programming for Scientists and Engineers	3	<b>Course</b>	<b>Title</b>	<b>Hours</b>
COMP 1020	Introductory Computer Science 2	3	SWRK 1310	Introduction to Social Welfare Policy Analysis	3
COMP 1500	Computing: Ideas and Innovation	3	SWRK 2080	Interpersonal Communication Skills	3
COMP 1600	Navigating Your Digital World	3			
<b>Mathematical Sciences</b>					
MATH 0500	Preparing for University Mathematics	0			
MATH 1010	Applied Finite Mathematics	3			
MATH 1018	Pre-Calculus in Practice	3			
MATH 1020	Mathematics in Art	3			
MATH 1080	Fundamentals of Mathematical Reasoning	3			
MATH 1090	Mathematical Reasoning in Euclidean Geometry	3			
MATH 1200	Elements of Discrete Mathematics	3			
MATH 1210	Techniques of Classical and Linear Algebra	3			
MATH 1220	Linear Algebra 1	3			
MATH 1230	Differential Calculus	3			
MATH 1232	Integral Calculus	3			
MATH 1240	Elementary Discrete Mathematics	3			
MATH 1300	Vector Geometry and Linear Algebra	3			
MATH 1310	Matrices for Management and Social Sciences	3			
MATH 1500	Introduction to Calculus	3			
MATH 1510	Applied Calculus 1	3			
MATH 1520	Introductory Calculus for Management and Social Sciences	3			
MATH 1690	Calculus	6			
MATH 1700	Calculus 2	3			
MATH 1710	Applied Calculus 2	3			
<b>Microbiology</b>					
MBIO 1010	Microbiology I	3			
MBIO 1220	Essentials of Microbiology	3			

# Faculty of Agricultural and Food Sciences/School of Agriculture

## General Office

**Dean:** Martin Scanlon

**Associate Dean(s):** Jitendra Paliwal (Graduate Programs and Academic), Nazim Cicek (Research);

**Program Director:** School of Agriculture: Sue Clayton

**Campus Address/General Office:** 256 Agriculture Building

**Telephone:** (204) 474-6026

**Email Address:**

General: agfoodsci@umanitoba.ca

Undergraduate Program Inquiries: aginfo@umanitoba.ca

**Website:** [umanitoba.ca/afs/](https://umanitoba.ca/afs/) (<https://umanitoba.ca/afs/>)

**Academic Staff:** Please refer to the Faculty of Agricultural and Food Sciences website at [umanitoba.ca/afs](https://umanitoba.ca/afs/) (<https://umanitoba.ca/afs/>)

**Student Services Office:** 160 Agriculture Building

**Telephone:** 204 474 9295

## Faculty Overview

The Faculty of Agricultural and Food Sciences has earned a reputation for its high-calibre teaching programs and its friendly, helpful staff. Students benefit not only from the expertise of staff in the Faculty, but also from the close proximity of other faculties on campus, federal research facilities, and a vibrant Winnipeg-based agricultural community.

Information on the Faculty's History, Vision and Mission Statements, Research, Programs, Centres, and Departments can be found on our website at: [umanitoba.ca/afs](https://umanitoba.ca/afs/) (<https://umanitoba.ca/afs/>).

## Degree Programs

The B.Sc. degree programs in Agricultural and Food Sciences provide an applied science background for graduates to enter a range of professions. Students can choose degree specializations in Agribusiness, Agriculture (Agronomy, Animal Systems or Plant Biotechnology), Agroecology, Food Science or Human Nutritional Sciences. The faculty also offers a two-year pre-veterinary program for students who plan to pursue a Doctor of Veterinary Medicine degree. One of the focuses of the Faculty is upon the agricultural industry with professions dedicated to the production, processing and marketing of food and bioresources. Additionally, the agriculture based B.Sc. degree prepares students to tackle a range of career opportunities that extend into other sectors of the economy. Professional agriculturists hold positions in extension, resource management and conservation, teaching, research and business; professional food science graduates find employment in similar positions related to food manufacturing and processing; and professional human nutritional sciences graduates enjoy exciting careers in dietetics, institutional administration, government and community programs, the non-profit sector, the food industry, education, and research. Graduates from the Faculty make important contributions to the economy and health of Manitoba, Canada, and the world.

## Diploma in Agriculture Program

The two-year Agriculture Diploma program offers a practical education for students interested in operating a farm or working in the agrifood industry. Although many diploma graduates return to family farms after graduating, an increasing number can be found working for farm supply companies, feed companies, financial institutions and grain handling

companies, as well as doing technical work for various government agencies.

The Agriculture Diploma program covers a wide range of agricultural subjects, from production through to marketing and business management. Communication and leadership skills also receive considerable emphasis. The program includes a number of engaging assignments as well as a major project that relates directly to the student's individual farm or business interests.

Classes begin in mid September and exams end in early April to accommodate students with obligations to plant and harvest crops. The program is also designed for those who plan to transfer credits earned from the Agriculture Diploma program to some of the Faculty of Agricultural and Food Sciences' degree programs.

## Professional Designations

### Agrologists Manitoba (Manitoba Institute of Agrologists)

Graduates of the B.Sc. (Agriculture), B.Sc. (Agribusiness), B.Sc. (Agroecology) and B.Sc. (Food Science) degrees meet the entry to practice education requirement and are eligible to become Professional Agrologists (P.Ag.). Graduates of the Agriculture Diploma program meet education eligibility requirements to become Technical Agrologists (Tech.Ag.). Agrologists are regulated professionals who have highly specialized knowledge about agriculture and food production and natural resource management. They provide decision makers with advice to help feed the world, boost the economy, and protect the environment. Graduates from the Faculty's professional programs who are working and practicing agrology in Manitoba require registration with and a licence from Agrologists Manitoba. Students/prospective students should contact Agrologists Manitoba (<https://agrologistsmanitoba.ca/>) directly for more information on the practice of agrology in Manitoba.

### Canadian Institute of Food Science and Technology (CIFST)

B.Sc. (Food Science) graduates are eligible to become members of CIFST, a professional society associated with the manufacturing, processing and packaging of food.

### Registered Dietitian (RD)

If eligible, students from the B.Sc. (Human Nutritional Sciences) in the Partnership for Dietetic Education and Practice (PDEP) accredited undergraduate degree with dietetics courses as stipulated, may apply for PDEP accredited post-degree Practicum Programs and/or Masters Practicum Programs to become a Registered Dietitian. Upon completion of an accredited undergraduate degree and practicum program, graduates may apply to write the Canadian Dietetic Registration Exam (CDRE) and register with a provincial regulating body such as the College of Dietitians of Manitoba (CDM).

## Minors offered by the Faculty of Agricultural and Food Sciences

As part of the electives portion of their programs, students may declare and complete a Minor from departments or interdisciplinary programs in which a Minor is offered. Completion of a Minor is optional. Information about Minors in faculties other than Agricultural and Food Sciences is found in the appropriate departmental/school/faculty program offerings in the Undergraduate Calendar.

Students may not declare both their Major and Minor from the same department/interdisciplinary program. It should be noted that planning for completion of a Minor should be done early in the program, ideally before 60 credit hours. Completion of a Minor may require that a student take more than the minimum number of credit hours for graduation.

A Management Minor is offered by the Asper School of Business (p. 693); Agriculture, Agroecology, Food Science and Human Nutritional Sciences students may complete this minor (not available to Agribusiness students). The Minor consists of 18 credit hours of courses offered by the Asper School of Business (Faculty of Management).

Agronomy (p. 186)

Animal Systems (p. 187)

Crop Protection (p. 187)

Entomology (p. 187)

Food Science (p. 187)

Plant Biotechnology (p. 187)

Soil Science (p. 188)

Human Nutrition and Metabolism (p. 187)

## Programs

Minors (optional or required) are part of degree programs - for program length, refer to the Years to Completion.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Agribusiness, B.Sc. (p. 157)	4	120	Yes
Agroecology, B.Sc. (p. 159)	4	120	Yes
Agronomy, B.Sc. - Agriculture (p. 161)	4	120	Yes
Agronomy Minor (p. 186)		18	
Animal Systems, B.Sc. - Agriculture (p. 163)	4	120	Yes
Animal Systems Minor (p. 187)		18	
Business Management, Agriculture Diploma (p. 182)	2	93	Yes
Crop Management, Agriculture Diploma (p. 184)	2	93	Yes
Crop Protection Minor (p. 187)		18	
Entomology Minor (p. 187)		18	
Food Industry Option, B.Sc. - Human Nutritional Sciences (p. 170)	4	120	Yes
Food Science, B.Sc. (p. 166)	4	120	Yes
Food Science Minor (p. 187)		18	
Foods Option, B.Sc. - Human Nutritional Sciences (p. 172)	4	120	Yes
General Agriculture, Agriculture Diploma (p. 180)	2	93	Yes
Human Nutrition and Metabolism Minor (p. 187)		18	
Human Nutritional Sciences, B.Sc. - Agreement with Red River College Culinary Arts (p. 179)	2-3	60	
Human Nutritional Sciences, B.Sc. - Second Degree Program (p. 177)	2-3	60	Yes
Internationally Educated Agrologists Post-Baccalaureate Diploma (p. 188)			
Livestock, Agriculture Diploma (p. 185)	2	93	Yes
Nutrition Option, B.Sc. - Human Nutritional Sciences (p. 174)	4	120	Yes
Plant Biotechnology, B.Sc. - Agriculture (p. 165)	4	120	Yes

Plant Biotechnology Minor (p. 187)

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Soil Science Minor (p. 188)

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Pre-veterinary Program (<https://catalog.umanitoba.ca/undergraduate-studies/agricultural-food-sciences-agriculture/pre-veterinary-program/>):

Two full years of university training are required for admission to the Western College of Veterinary Medicine (Saskatoon) comprised of a minimum 60 Credit Hours.

## Faculty Academic Regulations

### Admission Requirements

The following is a summary of the admission requirements for the Faculty of Agricultural and Food Sciences Degree and Diploma Programs.

Equivalent academic courses completed at recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin (<http://umanitoba.ca/admissions/>).

### Admission Requirements for Degree Programs

Students can enter the four-year degree programs in the Faculty of Agricultural and Food Sciences in two ways:

1. Direct Entry from high school
2. Advanced Entry - A minimum 24 credit hours of university-level coursework with a minimum adjusted GPA of 2.0.

Each entry path has specific course and credit requirements that you must meet to be considered for admission.

Review the details outlined here to ensure your high school courses and credit hours match the requirements for the entry path and the program you're interested in pursuing.

### Direct Entry (All Degree Programs)

General Admission Requirements	Category Requirements
MB High School Graduation	A minimum 70% average over the following, with no less than 60% in each course:
(5 full credits at the Grade 12 level in courses designated S, G, or U)	<ol style="list-style-type: none"> <li>1. An English 40S course</li> <li>2. Applied or Pre-Calculus Math 40S</li> <li>3. Academic 40S</li> <li>4. Academic 40S</li> </ol>

### Advanced Entry

B.Sc. in Agribusiness, Agriculture, Agroecology, Food Science and Human Nutritional Sciences - A minimum of 24 credit hours of University-level coursework with a minimum adjusted grade point average of 2.0.

Please note: If the number of eligible candidates exceeds the available spaces, an adjusted grade point average higher than the minimum may be required.

For full details regarding admissions requirements, application deadlines and to apply, please consult the University of Manitoba Admissions (<https://umanitoba.ca/admissions/>) page.

High School Requirements for prerequisites in required degree courses:

Program	English 40S	Math 40S - Pre-Calculus	Math 40S - Applied	Biology 40S	Chemistry 40S	Physics 40S
B.Sc. Agribusiness	60%	60%		recommended but not required		
B.Sc. Agriculture (Agronomy), Animal Systems, Plant Biotechnology	60%	60% or	70%	50%	50%	
B.Sc. Agroecology	60%	50% or	50%	50%	50%	
B.Sc. Food Science	60%	60%		50%	50%	
B.Sc. Human Nutritional Sciences	60%	50% or	50%	Required for students taking BIOL 1020	50%	
Pre-Veterinary Studies	60%	60% or	70%	50%	50%	50%

### Transfers of Credit

Students may be able to use transfer credits towards their individual degree programs and should consult Student Services to determine applicable courses. More information about transferring credits can be found on the Transfer Credit (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>) webpage.

### Admission Requirements for the Diploma Program

#### Direct Entry

The Direct Entry option is for students who have graduated from high school and have not attended any post-secondary institutions, or have completed fewer than 24 credit hours at a recognized university or college. Applicants must meet the admission requirements as listed in the Direct Entry Application Information Bulletin. (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) Applicants who would otherwise fall under the Direct or Advanced Entry Category but who do not meet the academic requirements may apply under the Special Consideration Category.

Direct Entry requires a minimum 60% average over the following:

1. English 40S
2. Mathematics 40S or 45S
3. One of Biology, Chemistry, Physics, or Computer Science 40S

If the number of eligible candidates exceeds the available spaces, an academic average higher than the minimum may be required for admission. The equivalent level of studies from other Canadian provinces or other countries will be accepted.

### Advanced Entry

The Advanced Entry option (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) is for applications who have completed one year or more of studies in another faculty at the University of Manitoba or another recognized post-secondary institution. Applicants in this category must have fulfilled all eligibility requirements as described below.

Applicants must:

1. Complete a minimum of 24 credit hours from a recognized university or college.
2. Achieve a Cumulative Grade Point Average (CGPA) of 2.0 or higher (see Calculation of the Cumulative Grade Point Average (p. 121) (CGPA)).

If the number of eligible candidates exceeds the available spaces, a CGPA higher than the minimum may be required for admission.

### Special Consideration Category – Agriculture Diploma

This category is for students whose academic records may not be competitive in the selection process. Such students may apply for Special Consideration only if they meet the criteria for Special Consideration as described below. Only a limited number of applicants may be admitted under the Special Consideration Category. Meeting the eligibility requirements of this category is not a guarantee of admission.

Applicants would be eligible for Special Consideration if they are considered by the Diploma Selection Committee because they either:

- have academic records that are not a true reflection of their academic and intellectual merit because of their exceptional life circumstances (exceptional circumstances include physical, societal, educational, economic, medical, geographical and other obstacles encountered by the applicant),

or

- display skills and attributes in any or all personal, work, or community activities which indicate that they can make a significant contribution to the Agriculture Diploma Program or can make a significant contribution to Manitoba's agri-food industry and/or rural and northern Indigenous communities.

Students who apply for Special Consideration must submit the following documents:

1. **a typed personal statement** not to exceed 800 words which includes the specific reasons why their application merits consideration within the Special Consideration Category.
2. **a typed personal resume.**
3. **three Letters of Recommendation.**

Those candidates who are applying on the basis of *exceptional* circumstances must submit **supporting documentation** to verify their exceptional circumstances (for example, if a student is applying on the basis of exceptional medical circumstances, the student must submit official supporting documentation from a qualified medical professional.)

The Diploma Selection Committee composed of the Director, an Academic Advisor and one Instructor, will review the application and supporting documentation. All candidates will be interviewed by the Selection Committee and may be administered an academic skills test. Criteria used when evaluating Special Consideration applicants

include the applicant's maturity, scholastic ability, agricultural experience, motivation, leadership, and/or demonstrated initiative relevant to an agricultural career. Up to 10% of admission spaces are available to Special Consideration Candidates recommended by the Diploma Selection Committee.

### Transfer of Credit

Courses taken within the degree program in the Faculty of Agricultural and Food Sciences as well as outside the Faculty of Agricultural and Food Sciences or outside of the University of Manitoba may also qualify for credit towards the diploma if the course content and the student's performance are deemed appropriate by the department concerned.

### Admission Requirements for the Internationally Educated Agrologists Post-Baccalaureate Diploma Program (IEAP)

\*Admission suspended\*

Individuals interested in the Internationally Educated Agrologists Post-Baccalaureate Diploma Program must meet the following Admission requirements:

1. Have a degree in agriculture from another country
2. Be a permanent resident or Canadian Citizen
3. Have met the English Language Proficiency Requirements
4. Have a valid driver's license
5. Have a letter from the Manitoba Institute of Agrologist (MIA) indicating their application for registration has been accepted.

### Academic Regulations for all Degree Programs

The provisions of the, General Academic Regulations (p. 118), and the, University Policies and Procedures (p. 37), apply to all students. In addition, the Faculty of Agriculture and Food Sciences has regulations and requirements, published below, that apply specifically to specific degree programs.

### Degree GPA (DGPA)

A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses completed at each point of assessment. The effective courses consist of all courses applicable to the degree program, including repeated, extra and failed course attempts.

### Scholastic Requirements

A minimum passing grade of "D" in prescribed courses is required of all students in the faculty. A higher grade may be required for prerequisite purposes.

Elective courses in which passing grades were not obtained need not be repeated however if taken after admitted to the degree program will count towards the DGPA.

In order to graduate, students must obtain a minimum DGPA of 2.0 calculated over a minimum of 120 credit hours before graduation.

### Course Load Limits

A normal "course load" is 30 credit hours during the regular session, with 15 credit hours normally taken in each academic term. A student may attempt a maximum of 39 credit hours during the regular session, with no more than 21 credit hours in an academic term, provided the student is in a good academic standing and has completed at least 24 credit hours in the previous regular session.



### Course Availability

All courses listed in this *Calendar* are not offered every year. The course(s) offered for the current academic terms are published in the *Aurora Class Schedule*.

### Prerequisite and Corequisite Definitions

The Registrar's Office (<http://umanitoba.ca/student/records/registration/access/640.html>) defines prerequisite and corequisite courses.

### Dean's Honour Roll

Students who have completed a minimum of 12 credit hours of study in either the Fall or Winter terms and who achieved a Term GPA of 3.50 or higher will be placed on the Dean's Honour Roll. Graduating students who achieved Dean's Honour Roll status in the previous term but complete less than 12 credit hours in their final term with a Term GPA of 3.5 or greater, will be eligible to remain on the Dean's Honour Roll.

### Graduation With Distinction

Degrees with distinction will be awarded to students who have achieved a minimum DGPA of 3.75 upon graduation.

### Repeating Courses

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>) will not affect registration for the 2022-2023 (including Summer Term 2023).**

Please refer to the University of Manitoba's Repeated Course Policy (p. 55) in the University Policies and Procedures.

### Academic Assessment Standards

All Agricultural and Food Sciences' students admitted Fall 2019 and onwards are assessed using the following regulations. Students admitted prior to Fall 2019 will be assessed using the old model (each year in May).

#### Academic Assessment Standards – effective Fall 2019

Formal academic assessments are performed following each term of registration for all Faculty of Agricultural and Food Sciences students who have completed 3 or more credit hours.

#### Minimum Met

Students must achieve a DGPA of 2.0 at each point of assessment in order to fulfil the minimum requirements from the Faculty.

Students who do not have a minimum DGPA of 2.0 will be placed on Academic Warning or Probation or Suspension based on the following conditions:

#### Academic Warning

When a student's DGPA drops below a 2.0 for the first time they will be placed on Academic Warning. Once placed on Academic Warning, the student will be placed on hold and must meet with an Academic Advisor to get an override to proceed to register for another term. A student can only be placed on Academic Warning once while in the program.

#### Probation

When on Academic Warning, if a student obtains a TGPA below a 2.0 on their next assessment then they are placed on Probation. The student will be placed on hold and must meet with an Academic Advisor to get an override to proceed to register for another term.

If a student has been on Academic Warning or Probation previously, and then achieved a Satisfactory assessment, has DGPA below 2.0 and then obtains a TGPA below 2.0 they are automatically placed on Probation from Satisfactory.

#### Satisfactory

Once on Academic Warning or Probation a student needs to obtain a TGPA of 2.0 or higher for the next assessment to be Satisfactory. Students who are assessed as Satisfactory are able to register without restrictions.

#### Suspension

If on Probation, a student has a TGPA below 2.0 on their next assessment, they are placed on Suspension. The notation "Academic Suspension for 1 Year" will be recorded on the student's transcript. After remaining out of the Faculty for one calendar year, the student may attempt reinstatement.

#### Maximum Attempts

A maximum of 150 credits hours may be attempted to obtain the 120 credit hours required to graduate. This means that a student cannot accumulate extra courses, repeats (e.g. retake a course to obtain a higher grade) and/or fails which result in more than 30 credit hours over the duration of their program.

#### Suspension (All Attempts Used)

Where it is mathematically impossible for a student to complete the degree within the maximum 150 credit hours (i.e. has exceeded 30 credit hours of attempts, as described above), the student is suspended and after remaining out of the Faculty for one calendar year, may attempt reinstatement.

#### Appeals

Appeals of academic assessments must be submitted to the Dean's Office of the Faculty of Agricultural and Food Sciences within 10 working days of the date of notification of action sent to the student.

#### Reinstatement Policy

After remaining out of the Faculty for one academic year on suspension, a student can attempt reinstatement by completing a minimum of 9 credit hours in one term with no grade less than D and a term grade point average of at least 2.0. Upon success, the student will start their program afresh, with previous grades of 'C' or better applicable to the program, as well as the courses attempted for reinstatement. Terminal courses with passing grades of D may continue to be used towards the degree, upon request to the Associate Dean (Academic) and only under the condition the DGPA remains above a 2.0. A student who does not meet the requirements as listed above will be required to withdraw from the Faculty.

A student who has been reinstated once will not be permitted to attempt reinstatement again; the student will be required to withdraw from the program.

#### Time Limits and Lapse of Credit

The normal maximum time allowed for the completion of the Agriculture degree programs is ten years from the date of first registration. A candidate for a degree will not normally be permitted to count toward that degree any courses taken more than ten year prior to the date of awarding the degree.

Students registered in the HNS Second Degree program will be exempted from the ten-year time limit only for science-based courses (subject areas of CHEM, BIOL and STAT) taken at the U of M or if they have previously been granted equivalences by the University of Manitoba transfer credit process. They will be permitted to use the science courses they already have credit for towards their program.

#### Re-registration of Returning Degree Students

All degree students who were previously admitted to the Faculty of Agricultural and Food Sciences who have not been in attendance for

one or more years must re-register through the Dean's Office. Students returning to the faculty will be subject to compliance with the current program requirements.

### Residence Requirements for Degree Programs

The residence requirements for the degrees offered by the Faculty of Agricultural and Food Sciences, can be found in, General Academic Regulations (p. 118).

### Supplemental Exams

A student registered in an undergraduate degree program in the Faculty of Agricultural and Food Sciences may apply to write a supplemental exam for a Faculty of Agricultural and Food Science course under the following conditions:

1. Student must be within 3 terms (summer, fall, winter/ fall, winter, summer / winter, summer, fall) of their anticipated graduation date.
2. Student must have written the final exam and obtained a final grade of F in the course (incomplete grades are not accepted).
3. It must be mathematically possible to obtain the passing grade required for the course and graduation.
4. It must be mathematically possible for a student writing a supplemental exam to end the term assessed in good standing or eligible to graduate (i.e. have a DGPA above 2.0 or is possible to achieve a TGPA above 2.0 to be considered satisfactory, if previously assessed on probation or academic warning).
5. It must be clearly demonstrated that failing the course will impact the student's ability to graduate.
6. No prior supplemental exams have been written while registered in a degree program in Faculty of Agricultural and Food Sciences.

A student is only permitted one supplemental exam (if conditions are met) during their degree program in the Faculty. Students may be approved a supplemental exam for a course offered through another Faculty, if that Faculty offers supplemental exam privileges. A student would be required to meet the regulations of both Faculty's to write a supplemental exam.

Note: Supplemental Exams in Faculty of Agricultural and Food Sciences courses that are cross-listed with other Faculties courses will only be permitted under conditions that both Faculties allow supplemental exam privileges.

Students must contact the FAFS Student Services Office to request an application form within 5 business days after the term's final grade deadline (or within 2 business days if grades are posted after the final grade deadline).

Students approved must pay the associated fee to the Registrar's Office before they may write a supplemental exam. When supplemental exams are written, the new exam grade will replace the original final exam grade and will be used to re-calculate the final grade in the course.

The supplemental exam shall be considered as a replacement for the final exam only, not for term work.

A comment on the transcript will appear indicating that a student wrote a supplemental exam.

### University Written English and Mathematics Requirements

All students are required to complete a university Written English and Mathematics requirement within the first 60 credit hours of their program. This requirement is described in, General Academic Regulations (p. 118).

The Human Nutritional Sciences written (W) and mathematics (M) requirements are satisfied by required courses HNSC 2000 and AGRI 2400 or STAT 2000. HNSC 2000 will be available to students upon admission to the Human Nutritional Sciences program.

For the degree programs Agriculture, Agribusiness, Agroecology, and Food Science the written (W) requirement can be met by AGRI 2030, or by ENGL 1200, or ENGL 1300. (**Note:** AGRI 2030, Technical Communications cannot be taken in University 1). The mathematics (M) requirement is satisfied by the required AGRI 2400 or any MATH and STAT courses, as required by the programs.

### Transfer of Credit

See Admissions (p. 129) and General Academic Regulations (p. 118).

## Academic Regulations for Diploma Program

### Requirements for Graduation

To qualify for the Diploma in Agriculture a student must have attained a DGPA of at least 2.0 with a minimum grade of "D" in courses over a minimum of 93 credit hours including all those on the prescribed list to a maximum of 105 credit hours. Elective courses in which failures were obtained may be substituted for and need not be repeated, except to help meet the requirements of the scholastic standards described previously.

### Part-Time vs. Full-Time Status for Students

A student is considered to be equivalent to full-time if at least 60 per cent of the normal full-time course load is attempted in the academic term or session.

### Scholastic Standards

A minimum passing grade of "D" in prescribed courses is required of all students in the Diploma in Agriculture. A higher grade may be required for prerequisite purposes.

### Degree GPA

A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses completed at each point of assessment. The effective courses consist of all courses applicable to their program, including repeated, extra and failed course attempts.

### Repeating Courses

A student may repeat any course for the purpose of attaining a better grade. All attempts will be used in the DGPA calculations.

### Academic Assessment Standards

Formal academic assessments are performed following each term of registration for all Faculty of Agricultural and Food Sciences students who have completed 3 or more credit hours.

### Minimum Met

Students must achieve a DGPA of 2.0 at each point of assessment in order to have fulfilled the minimum requirements from the Faculty.

Students who do not have a minimum DGPA of 2.0 will be placed on Academic Warning or Probation or Suspension based on the following conditions:

### Academic Warning

When a student's DGPA drops below a 2.0 for the first time they will be placed on Academic Warning. Once placed on Academic Warning, the student will be placed on hold and must meet with an Academic Advisor to get an override to proceed to register for another term. A student can only be placed on Academic Warning once while in the program.

### Probation

When on Academic Warning, if a student obtains a TGPA below a 2.0 on their next assessment then they are placed on Probation. The student will be placed on hold and must meet with an Academic Advisor to get an override to proceed to register for another term.

If a student has been on Academic Warning or Probation previously, and then achieved a Satisfactory assessment, has DGPA below 2.0 and then obtains a TGPA below 2.0 they are automatically placed on Probation from Satisfactory.

### Satisfactory

Once on Academic Warning or Probation a student needs to obtain a TGPA of 2.0 or higher for the next assessment to be Satisfactory. Students who are assessed as satisfactory are able to register without restrictions.

### Suspension

If on Probation, a student has a TGPA below a 2.0 on their next assessment then they are placed on Suspension. The notation "Academic Suspension" will be recorded on the student's transcript. After remaining out of the Faculty/School for one academic term, a student may attempt reinstatement.

### Reinstatement Policy

After remaining out of the School of Agriculture for one academic term (excluding summer term) on suspension, a student can attempt reinstatement by completing a minimum of 12 credit hours in one term with no grade less than D and a term grade point average of at least 2.0. Upon success, the student will start their program afresh, with previous grades of 'C' or better applicable to the program, as well as the courses attempted for reinstatement. Terminal courses with passing grades of D may continue to be used towards the diploma, upon request to the Associate Dean (Academic) and only under the condition the DGPA remains above a 2.0. A student who does not meet the requirements as listed above will be required to withdraw from the Diploma in Agriculture Program.

A student who has been reinstated once will not be permitted to attempt reinstatement again; the student will be required to withdraw from the Diploma in Agriculture program.

### Appeals

Appeals of academic assessments must be submitted to the Director of the School of Agriculture within 10 working days of the date of notification of action sent to the student.

### Supplemental Exams

Any student in good academic standing for the current term (i.e., not on probation or suspension or academic warning) is eligible to write a supplemental exam. Only one supplemental exam (in a diploma level course offered by the Faculty of Agricultural and Food Sciences) will be permitted during their program and only in a course in which a "D" or "F" was received. The student must have written the final exam. The supplemental exam shall be considered as a replacement for the final exam only, not for term work. Accordingly, students who are granted incomplete or deferred status may not be eligible. When supplemental exams are written, the mark will replace the final exam grade and will be used to re-calculate the final grade in the course.

### Time Limits and Lapse of Credit

The normal maximum time allowed for the completion of the Agriculture Diploma is five years from the date of first registration. A candidate for a Diploma in Agriculture will not be permitted to count toward that diploma

any courses taken more than five years prior to the date of awarding the diploma.

Students who desire an exemption from this maximum must apply, in writing, to the Director.

### Dean's Honour Roll

Students who have completed a minimum of 18 credit hours of study in either the Fall or Winter term and who have achieved a Term GPA of 3.5 or higher will be placed on the Dean's Honour Roll. Graduating students who achieved Dean's Honour Roll status in their final term with a Term GPA of 3.5 or greater, will be eligible to remain on the Dean's Honour Roll.

### Graduation with Distinction

The Diploma in Agriculture with Distinction will be awarded to Diploma students who obtain a DGPA of 3.75 or better with 75 per cent of the courses taken within the Diploma in Agriculture.

An Interfaculty Option in Aging is offered by the following faculties and colleges: Agricultural and Food Sciences, Arts, Kinesiology and Recreation Management, Medicine, Nursing, and Social Work.

To complete the option, students in the Human Nutritional Sciences Program must complete each of the following requirements:

Course	Title	Hours
FMLY 2650 or REC 2650 or SWRK 2650	The Social Aspects of Aging	3
KIN 2610 or NURS 2610	Health and Physical Aspects of Aging	3
HNSC 4362 or FMLY 4300	Nutrition Option Practicum <sup>1</sup> Field Experience	6
6 credit hours of aging-related courses from participating units of the following: <sup>2</sup>		6
HNSC 2130	Nutrition Through the Life Cycle	
HNSC 4310	Nutrition and the Elderly	
FMLY 3220	Death and the Family	
FMLY 3240	Families in Later Years	
FMLY 4220	Aging and Risk in a Global Context	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> At least six (6) credit hours of discipline-specific (professional) applied work in the student's department of registration. Application is required for all field placement or practicum courses.

<sup>2</sup> Other courses are available from the participating faculties.

Upon completion of these requirements, a concentration will be added to the student's transcript.

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a

group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

## Degree Program

**Admission:** Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

**Employment Term Requirements:** The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

## Diploma Program

**Admission:** To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is defendant upon the student receiving a job placement through the Cooperative Education Office.

**Employment Term Requirements:** The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

## Diploma to Degree Pathway

### A. Students who have completed the University of Manitoba's Diploma in Agriculture

Upon completion of the University of Manitoba's Diploma in Agriculture program, students are eligible to apply for the B.Sc. Agribusiness, B.Sc. Agriculture, or B.Sc. Agroecology degree programs providing they have:

- Graduated from the University of Manitoba's Diploma in Agriculture program (Degree GPA of 2.0)

Students who have successfully completed the University of Manitoba's Diploma in Agriculture program and are admitted to one of the applicable degree programs will have transfer credit/course substitutions based on the following. A minimum grade of 'C' or higher must be obtained to transfer the credit outlined in the charts:

### Course substitution allocations for Diploma to Degree Transfer of Credit

Courses taken by All Diploma Students		
Degree Course	Diploma course substitution from the 2018 UM Diploma in Agriculture program and forward	Diploma course substitution from previous UM Diploma in Agriculture program prior to 2018
ABIZ 1000	DAGR 0990	DAGR 0690
ABIZ 2510	ABIZ 0450	ABIZ 0450
AGRI 1600	PLNT 0410 and SOIL 0420	DAGR 0420
PLNT 2500	PLNT 0760	PLNT 0750 or PLNT 0760 or PLNT 0800 or PLNT 0820
Courses Completed depending on Diploma Option		
Degree Course	Diploma course substitution from the 2018 UM Diploma in Agriculture program and forward	Diploma course substitution from previous UM Diploma in Agriculture program prior to 2018
ABIZ 2620	DAGR 0530	DAGR 0530
BIOE 3100	BIOE 0600 or BIOE 0710 or BIOE 0700	BIOE 0400 or BIOE 0710 or BIOE 0690 or BIOE 0700
ANSC 2500	ANSC 0670 or ANSC 0680 or ANSC 0690 or ANSC 0700	ANSC 0670 or ANSC 0680 or ANSC 0690 or ANSC 0700
SOIL 3600	SOIL 0630	SOIL 0620 and SOIL 0630

It is important to note that transfer credits are based on the overall knowledge a student would have obtained within the Diploma program up to that point of the course being substituted. These course substitutions outlined below do not reflect course to course equivalences. For example, a student must take SOIL 0420 (C) to take SOIL 0620 and then SOIL 0620 (C) is required to take SOIL 0630 and therefore SOIL 0630 will be applied as SOIL 3600. Courses applicable for transfer (credit hours and grades) will be applied upon admission. As per the UM Residency Requirements, students must successfully complete a minimum 60 credit hours of UM courses (i.e. courses not previously applied to a completed Diploma or Degree) towards their program to graduate from the degree.

The approved degree level program electives that may have been taken in the Diploma in Agriculture that are eligible for transfer credit, where applicable, into a degree program may include the following: ABIZ 1000, ABIZ 1010, ABIZ 2610, ABIZ 2620, ABIZ 3530, AGRI 2500, AGRI 2510, AGRI 3030, ENTM 1000, FOOD 1000, HNSC 1200, HNSC 1210, PLNT 1000

All students transferring after successful completion of the UM Diploma in Agriculture Program will be allocated the maximum number credit hours of free elective permitted by their selected program (courses to be applied will be the top grades from diploma or degree level courses, not already being transferred as a required course in a chosen degree program), any degree-equivalent course transfers, plus the following potential program-specific transfers (grades of C or higher required):

#### B.Sc. Agribusiness:

- up to the maximum allowable free electives (30 credit hours)
- ABIZ 1000
- ABIZ 2510
- AGRI 1600
- PLNT 2500
- plus 6 credit hours from the above table if taken as an option for ABIZ 2620 and ANSC 2500
- plus 9 credit hours to satisfy Group 2 Restricted Electives (Agrology) - which will be applied as core Diploma courses: DAGR 0910, DAGR 0920 and DAGR 0980.
- plus any degree equivalent program electives taken as stated above (not including AGRI 2002).

#### B.Sc. Agriculture (Agronomy):

- up to the maximum allowable free electives (30 credit hours)
- ABIZ 1000
- ABIZ 2510
- AGRI 1600
- PLNT 2500
- plus 9 credit hours from the above table if taken as an option for ANSC 2500, BIOE 3100 and SOIL 3600
- plus 3 credit hours for Restricted Elective Group 1 if students took both PLNT 0750 and PLNT 0820 (will be applied as PLNT 0820, 3 credits)
- plus any degree equivalent program electives taken as stated above (not including AGRI 2002)

#### B.Sc. Agriculture (Animal Systems):

- up to the maximum allowable free electives (27 credit hours)
- ABIZ 1000
- ABIZ 2510
- AGRI 1600
- PLNT 2500
- plus 9 credit hours from the above table if taken as an option for ABIZ 2620, ANSC 2500 and SOIL 3600
- plus any degree equivalent program electives taken as stated above (not including AGRI 2002)

#### B.Sc. Agriculture (Plant Biotechnology):

- up to the maximum allowable free electives (21 credit hours)
- ABIZ 1000

- ABIZ 2510
- AGRI 1600
- PLNT 2500
- plus 6 credit hours from the above table if taken as an option for ANSC 2500 and SOIL 3600
- plus any degree equivalent program electives taken as stated above (not including AGRI 2002)

#### B.Sc. Agroecology:

- up to the maximum allowable free electives (30 credit hours)
- ABIZ 1000
- AGRI 1600
- PLNT 2500
- plus 6 credit hours from the above table if taken as an option for ANSC 2500 and SOIL 3600
- plus 9 credit hours to satisfy the Restricted Elective Groups 3 and 4 - which will be applied as core Diploma courses: DAGR 0910, DAGR 0920 and DAGR 0980.
- plus any degree equivalent program electives taken as stated above (not including AGRI 2002)

#### B. Students who have not completed the Diploma in Agriculture

Students who have not completed the Diploma in Agriculture can apply for regular admission (via Advanced or Direct Entry) to the degree programs in the Faculty of Agricultural and Food Sciences. Admitted students who have not graduated from the Diploma in Agriculture may receive credit for the indicated course combinations in the chart below, where a minimum grade of 'C' or higher was obtained. Any additional courses can be used toward free electives or as any approved degree equivalent program electives taken. All applicable credit hours and grades will be applied upon admission.

Degree Course	Diploma course substitution from the 2018 UM Diploma in Agriculture program and forward	Diploma course substitution from previous UM Diploma in Agriculture program prior to 2018
ABIZ 1000	DAGR 0990	DAGR 0690
ABIZ 2510	ABIZ 0450	ABIZ 0450
AGRI 1600	PLNT 0410 and SOIL 0420	DAGR 0420
PLNT 2500	PLNT 0760	PLNT 0750 or PLNT 0760 or PLNT 0800 or PLNT 0820
ABIZ 2620	DAGR 0530	DAGR 0530
BIOE 3100	BIOE 0600 or BIOE 0710 or BIOE 0700	BIOE 0400 or BIOE 0710 or BIOE 0690 or BIOE 0700
ANSC 2500	ANSC 0670 or ANSC 0680 or ANSC 0690 or ANSC 0700	ANSC 0670 or ANSC 0680 or ANSC 0690 or ANSC 0700
SOIL 3600	SOIL 0630	SOIL 0620 and SOIL 0630

The approved degree level program electives that may have been taken in the Diploma in Agriculture that are eligible for transfer credit, where applicable, into a degree program may include the following: ABIZ 1000,

ABIZ 1010, ABIZ 2610, ABIZ 2620, ABIZ 3530, AGRI 2500, AGRI 2510, AGRI 3030, ENTM 1000, FOOD 1000, HNSC 1200, HNSC 1210, PLNT 1000.

## Agribusiness, B.Sc.

### Overview/Entrance Requirements

Agribusiness students specialize in the people component of agriculture. This begins with the consumer, ends with the producer and involves all those along the food chain. Food production and distribution is undertaken in a business environment and agribusiness is the study of decision-making within this setting. Graduates gain insight into the agribusiness environment through mastering concepts in economics, finance, marketing and management.

### Degree Requirements

Course	Title	Hours
<b>B.Sc. Agribusiness Degree Core</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ/ECON 2390	Introduction to Environmental Economics	3
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
ABIZ 2620	Agricultural Human Resource Management	3
or HRIR 2440	Human Resource Management	
ABIZ 2520	Introduction to Management Sciences	3
ABIZ 3080/ ECON 3040	Introduction to Econometrics	3
ABIZ 3510	Economics of Food Policy	3
ABIZ 4500	Agribusiness Strategies Seminar	3
ACC 1100	Introductory Financial Accounting	3
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
AGRI 4100	Current Issues in Agricultural Systems	3
ANSC 2500	Animal Production	3
BIOL 1020	Biology 1: Principles and Themes <sup>1</sup>	3
or BIOL 1000	Biology: Foundations of Life	
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>1</sup>	3
or BIOL 1010	Biology: Biological Diversity and Interaction	
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
ECON 2010	Microeconomic Theory 1	3
HNSC 1200	Food: Facts and Fallacies	3
or HNSC 1210	Nutrition for Health and Changing Lifestyles	
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
or MATH 1300	Vector Geometry and Linear Algebra	
Select one of the following: <sup>3</sup>		3
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
PLNT 2500	Crop Production	3
<b>Restricted Electives</b>		
Select 12 credit hours from Group 1 - Agribusiness		12

Select 9 credit hours from Group 2 - Agrology <sup>4</sup>	9
<b>Free Electives</b>	
Select 30 credit hours <sup>5</sup>	30
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> BIOL 1020 and BIOL 1030 are prerequisites for many Agrology courses.
- <sup>2</sup> Students are recommended to take one of MATH 1210 or MATH 1300 however may also substitute MATH 1220 to meet the requirement.
- <sup>3</sup> Students are recommended to take one of MATH 1500 or MATH 1510 or MATH 1520 however may also substitute MATH 1230 to meet the requirement.
- <sup>4</sup> Or not taken from Group 1 above: i.e. cannot use the same course towards both group 1 and 2 restricted electives.
- <sup>5</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

### Restricted Electives

#### Group 1 - Agribusiness

Course	Title	Hours
ABIZ 3120	Commodity Futures Markets	3
ABIZ 3520	Food Distribution and International Merchandising (3-0-0-0)	3
ABIZ 3530	Farm Management	3
ABIZ 3540	Financial Risk Management	3
ABIZ 3550	Environmental Policy	3
ABIZ 4120	Intermediate Econometrics	3
ABIZ 4260	Price Analysis	3

#### Group 2 – Agrology

Course	Title	Hours
ABIZ XXXX	Any ABIZ course	
AGEC 2370	Principles of Ecology	3
AGRI 2300	Indigenous Issues in Food Systems	3
ANSC XXXX	Any ANSC course	
BIOE 3100	Agricultural Engineering Fundamentals for Agronomists	3
ENTM XXXX	Any ENTM except the following:	
ENTM 3162	Manitoba's Insect Fauna	
ENTM 4280	Aquatic Entomology	
ENTM 4500	Insect Taxonomy and Morphology	
FOOD XXXX	Any FOOD course except the following:	
FOOD 4100	Current Issues in Food and Human Nutrition	
FOOD 4230	Food Research	
PLNT XXXX	Any PLNT course except the following:	
PLNT 3140	Introductory Cytogenetics	
PLNT 4380	Plant Science Thesis	
SOIL XXXX	Any SOIL course	

## Progression Plan

### Suggested Agribusiness Program Progression

Course	Title	Hours
<b>Year 1</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 1600	Introduction to Agrifood Systems	3
BIOL 1020 or BIOL 1000	Biology 1: Principles and Themes or Biology: Foundations of Life	3
BIOL 1030 or BIOL 1010	Biology 2: Biological Diversity, Function and Interactions or Biology: Biological Diversity and Interaction	3
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies or Nutrition for Health and Changing Lifestyles	3
MATH 1210 or MATH 1300	Techniques of Classical and Linear Algebra or Vector Geometry and Linear Algebra	3
Select one of the following:		3
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
Free Elective		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ABIZ/ECON 2390	Introduction to Environmental Economics	3
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
ABIZ 2520	Introduction to Management Sciences	3
ACC 1100	Introductory Financial Accounting	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
ANSC 2500	Animal Production	3
ECON 2010	Microeconomic Theory 1	3
PLNT 2500	Crop Production	3
Restricted/Free Electives/Co-op		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
ABIZ 2620 or HRIR 2440	Agricultural Human Resource Management or Human Resource Management	3
ABIZ 3080/ ECON 3040	Introduction to Econometrics	3
ABIZ 3510	Economics of Food Policy	3
Restricted/Free Electives/Co-op		21
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
ABIZ 4500	Agribusiness Strategies Seminar	3
AGRI 4100	Current Issues in Agricultural Systems	3

Restricted/Free Electives/Co-op	24
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

## Degree Program

Admission: Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

Employment Term Requirements: The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

## Diploma Program

Admission: To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA

of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is defendant upon the student receiving a job placement through the Cooperative Education Office.

Employment Term Requirements: The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

## Agroecology, B.Sc.

### Overview/Entrance Requirements

The Agroecology program provides students with an understanding of the natural processes in the agroecosystem and the impact of agricultural practices on these processes. The program emphasizes three areas: ecological sciences, agricultural production, and the social and economic implications of environmental management. Students will develop an understanding of how to manage natural and agricultural resources in a manner that enhances economic production while maintaining the integrity of natural and agricultural environments. Graduates are prepared for careers at the technical and management levels in government and non-government agencies involved in planning and management of natural and agricultural resources. By appropriate choice of free elective courses, students can prepare for graduate studies.

### Degree Requirements

Course	Title	Hours
<b>B.Sc. Agroecology Degree Core</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ/ECON 2390	Introduction to Environmental Economics	3
AGEC 2370/ BIOL 2300	Principles of Ecology	3
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
AGRI 4100	Current Issues in Agricultural Systems	3
ANSC 2500	Animal Production	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
BIOL 3312	Community Ecology	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130 or CHEM 1110	Introduction to Organic Chemistry <sup>1</sup> Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
ECON 1010	Introduction to Microeconomic Principles	3
ENTM 3170	Crop Protection Entomology	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies Nutrition for Health and Changing Lifestyles	3
PLNT 2500	Crop Production	3
PLNT 2520	Genetics	3

or BIOL 2500	Genetics 1	
PLNT 3540	Weed Science	3
PLNT 4270	Plant Disease Control	3
SOIL 3600	Soils and Landscapes in Our Environment	3
<b>Restricted Electives</b>		
Select four courses from Group 1 - Integrated Systems		12
Select two courses from Group 2 - Land Science		6
Select one course from Group 3 - Policy and Economics		3
Select two courses from Group 4 - Agrology		6
<b>Free Electives</b>		
Select 30 credit hours <sup>2</sup>		30
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).

<sup>2</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

### Restricted Electives

#### Group 1 – Integrated Systems

Course	Title	Hours
AGRI 2300	Indigenous Issues in Food Systems	3
ANSC/PLNT 4410	Grassland Agriculture: Plant, Animal and Environment	3
PLNT 3560	Organic Crop Production on the Prairies	3
PLNT 4510	Advanced Cropping Systems	3
SOIL 4400	SOIL ECOLOGY	3

#### Group 2 – Land Science

Course	Title	Hours
SOIL 3XXX	Any 3000 level SOIL (Soil Science) courses	
SOIL 4XXX	Any 4000 level SOIL (Soil Science) courses	

#### Group 3 – Policy and Economics

Course	Title	Hours
ABIZ 2XXX	Any 2000 level ABIZ (Agribusiness) course	
ABIZ 3XXX	Any 3000 level ABIZ (Agribusiness) course	
ABIZ 4XXX	Any 4000 level ABIZ (Agribusiness) course	

#### Group 4 - Agrology

Course	Title	Hours
ABIZ XXXX	Any ABIZ course	
AGRI 2300	Indigenous Issues in Food Systems	3
ANSC XXXX	Any ANSC course	
BIOE 3100	Agricultural Engineering Fundamentals for Agronomists	3
ENTM XXXX	Any ENTM except the following:	
ENTM 3162	Manitoba's Insect Fauna	
ENTM 4280	Aquatic Entomology	
ENTM 4500	Insect Taxonomy and Morphology	
FOOD XXXX	Any FOOD course except the following:	
FOOD 4100	Current Issues in Food and Human Nutrition	
FOOD 4230	Food Research	



PLNT XXXX	Any PLNT course except the following:
PLNT 3140	Introductory Cytogenetics
PLNT 4380	Plant Science Thesis
SOIL XXXX	Any SOIL course

## Progression Plan

Course	Title	Hours
<b>Year 1</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 1600	Introduction to Agrifood Systems	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
ECON 1010	Introduction to Microeconomic Principles	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies or Nutrition for Health and Changing Lifestyles	3
Free Electives		6
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ABIZ/ECON 2390	Introduction to Environmental Economics	3
AGEC 2370/ BIOL 2300	Principles of Ecology	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
ANSC 2500	Animal Production	3
PLNT 2500	Crop Production	3
PLNT 2520/ BIOL 2500	Genetics	3
SOIL 3600	Soils and Landscapes in Our Environment	3
Restricted/Free Electives/Co-op		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
BIOL 3312	Community Ecology	3
PLNT 4270	Plant Disease Control	3
ENTM 3170	Crop Protection Entomology	3
PLNT 3540	Weed Science	3
Restricted/Free Electives/Co-op		18
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
AGRI 4100	Current Issues in Agricultural Systems	3
Restricted/Free Electives/Co-op		27
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

## Degree Program

Admission: Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

Employment Term Requirements: The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

## Diploma Program

Admission: To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission

into the program is dependent upon the student receiving a job placement through the Cooperative Education Office.

**Employment Term Requirements:** The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

## Agronomy, B.Sc. - Agriculture

### Overview/Entrance Requirements

The B.Sc. (Agriculture) is a professional program which prepares graduates for careers in the public and private sectors related to the production and distribution of agricultural commodities. Graduates are prepared to enter directly into a related graduate studies program.

The Agronomy program will provide an integrated and comprehensive study of the factors and processes associated with the science of crop production and the management and use of land and water resources. The program emphasizes land management and the sustainability of agronomic and horticultural crop systems. All students are required to take the following B.Sc. (Agriculture) degree core requirements and the respective program core courses.

### Degree Requirements

Course	Title	Hours
<b>B.Sc. Agriculture Degree Core</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
AGEC 2370/ BIOL 2300	Principles of Ecology	3
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
AGRI 4100	Current Issues in Agricultural Systems	3
ANSC 2500	Animal Production	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130 or CHEM 1110	Introduction to Organic Chemistry <sup>1</sup> Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
ECON 1010	Introduction to Microeconomic Principles	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies Nutrition for Health and Changing Lifestyles	3
Select one of the following: <sup>2</sup>		3
MATH 1210	Techniques of Classical and Linear Algebra	
MATH 1300	Vector Geometry and Linear Algebra	
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
PLNT 2500	Crop Production	3

PLNT 2520 or BIOL 2500	Genetics Genetics 1	3
SOIL 3600	Soils and Landscapes in Our Environment	3
<b>Agronomy Core</b>		
BIOL 2242	The Flowering Plants	3
BIOE 3100	Agricultural Engineering Fundamentals for Agronomists	3
ENTM 3170	Crop Protection Entomology	3
PLNT 3540	Weed Science	3
PLNT 4270	Plant Disease Control	3
PLNT 4510	Advanced Cropping Systems	3
PLNT 4590	Physiology of Crop Plants	3
SOIL 4510	Soil and Water Management	3
SOIL 4520	Soil Fertility	3
<b>Restricted Electives</b>		
Select 6 credit hours from Group 1 - Agriculture		6
Select 3 credit hours from Group 2 - Soil Science <sup>3</sup>		3
<b>Free Electives</b>		
Select 30 credits hours <sup>4</sup>		30
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).

<sup>2</sup> Students are recommended to take one the MATH courses listed in the program requirements above however may also use either MATH 1220 or MATH 1230 to meet the requirement.

<sup>3</sup> Courses required as part of the Agriculture Degree Core or Agronomy Core cannot be used to meet this requirement.

<sup>4</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

<sup>5</sup> Students considering graduate school in agriculture or a related field in the natural sciences are recommended to take CHEM 1120 (Introduction to Chemical Techniques) and CHEM 2730 (Elements of Biochemistry 1) as free electives.

### Restricted Electives

#### Group 1 - Agriculture

Course	Title	Hours
AGRI 2300	Indigenous Issues in Food Systems	3
PLNT 1000	Urban Agriculture	3
PLNT 2510	Fundamentals of Horticulture	3
PLNT 3520	Principles of Plant Improvement	3
PLNT 3560	Organic Crop Production on the Prairies	3
PLNT 4410	Grassland Agriculture: Plant, Animal and Environment	3

#### Group 2 - Soil Science

Course	Title	Hours
SOIL 3XXX	Any 3000 level SOIL course	3
SOIL 4XXX	Any 4000 level SOIL course	3

## Progression Plan

### Suggested Agronomy Program Progression

Course	Title	Hours
<b>Year 1</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 1600	Introduction to Agrifood Systems	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
ECON 1010	Introduction to Microeconomic Principles	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies or Nutrition for Health and Changing Lifestyles	3
Select one of the following:		3
MATH 1210	Techniques of Classical and Linear Algebra	
MATH 1300	Vector Geometry and Linear Algebra	
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
Free Elective		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
AGEC 2370/ BIOL 2300	Principles of Ecology	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
BIOL 2242	The Flowering Plants	3
PLNT 2500	Crop Production	3
PLNT 2520/ BIOL 2500	Genetics	3
SOIL 3600	Soils and Landscapes in Our Environment	3
Restricted/Free Electives/Co-op		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
ANSC 2500	Animal Production	3
BIOE 3100	Agricultural Engineering Fundamentals for Agronomists	3
ENTM 3170	Crop Protection Entomology	3
PLNT 3540	Weed Science	3
PLNT 4270	Plant Disease Control	3
PLNT 4590	Physiology of Crop Plants	3
Restricted/Free Electives/Co-op		12
<b>Hours</b>		<b>30</b>

#### Year 4

AGRI 4100	Current Issues in Agricultural Systems	3
PLNT 4510	Advanced Cropping Systems	3
SOIL 4510	Soil and Water Management	3
SOIL 4520	Soil Fertility	3
Restricted/Free Electives/Co-op		18
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

### Degree Program

**Admission:** Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

**Employment Term Requirements:** The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

## Diploma Program

Admission: To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is defendant upon the student receiving a job placement through the Cooperative Education Office.

Employment Term Requirements: The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

## Animal Systems, B.Sc. - Agriculture Overview/Entrance Requirements

The B.Sc. (Agriculture) is a professional program which prepares graduates for careers in the public and private sectors related to the production and distribution of agricultural commodities. Graduates are prepared to enter directly into a related graduate studies program.

The Animal Systems program will provide an integrated and comprehensive study of the factors and processes associated with the science of animal production including their interaction with the environment. The program will be based on a strong foundation in the scientific disciplines underlying nutrition, growth, reproduction and welfare in animals. All students are required to take the following B.Sc. (Agriculture) degree core requirements and the respective program core courses.

## Degree Requirements

Course	Title	Hours
<b>B.Sc. Agriculture Degree Core</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
AGEC 2370/ BIOL 2300	Principles of Ecology	3
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
AGRI 4100	Current Issues in Agricultural Systems	3
ANSC 2500	Animal Production	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130 or CHEM 1110	Introduction to Organic Chemistry <sup>1</sup> Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
ECON 1010	Introduction to Microeconomic Principles	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies Nutrition for Health and Changing Lifestyles	3
Select one of the following: <sup>2</sup>		3

MATH 1210	Techniques of Classical and Linear Algebra	
MATH 1300	Vector Geometry and Linear Algebra	
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
PLNT 2500	Crop Production	3
PLNT 2520 or BIOL 2500	Genetics Genetics 1	3
SOIL 3600	Soils and Landscapes in Our Environment	3
<b>Animal Systems Core</b>		
ANSC 2510	Anatomy and Physiology 1: Control Systems	3
ANSC 2520	Anatomy and Physiology 2: Nutrient Utilization	3
ANSC 3500	Principles of Animal Genetics	3
ANSC 3510	Feeds and Feeding	3
ANSC 3520	Animal Reproduction	3
ANSC 3530	The Animal and Its Environment	3
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>3</sup>	3
CHEM 2740	Introduction to the Biochemistry Laboratory <sup>3,4</sup>	3
<b>Restricted Electives</b>		
Select 3 credit hours from Group 1 - Ruminant Production		3
Select 3 credit hours from Group 2 - Monogastric Production		3
Select 6 credit hours from Group 3 - Advanced Animal Science		6
Select 3 credit hours from Group 4 - Human Resources		3
<b>Free Electives</b>		
Select 27 credit hours <sup>5</sup>		27
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).

<sup>2</sup> Students are recommended to take one of the MATH courses listed in the program requirements above however may also use either MATH 1220 or MATH 1230 to meet the requirement.

<sup>3</sup> Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1) and may use CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).

<sup>4</sup> While CHEM 2740 is the recommended lab course for this program, student who are completing the Pre-Vet requirements may use either CHEM 1120 or CHEM 2740 to complete this requirement for Animal Systems as well. If a student has both courses, one is used towards free electives.

<sup>5</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

## Restricted Electives

### Group 1 - Ruminant Production

Course	Title	Hours
ANSC 4520	Ruminant Production Systems-Meat	3
ANSC 4530	Ruminant Production Systems-Milk	3

### Group 2 – Monogastric Production

Course	Title	Hours
ANSC 4550	Avian Production Systems	3
ANSC 4640	Swine Production Systems	3

### Group 3 – Advanced Animal Science

Course	Title	Hours
ANSC 2XXX	Any ANSC course at the 2000 level	3
ANSC 3XXX	Any ANSC course at the 3000 level	3
ANSC 4XXX	Any ANSC course at the 4000 level	3
FOOD 3500	Processing of Animal Food Products	3
ENTM 3160	Veterinary and Wildlife Entomology	3

### Group 4 – Human Resources

Course	Title	Hours
ABIZ 2620	Agricultural Human Resource Management	3
GMGT 2070	Introduction to Organizational Behaviour	3
HRIR 2440	Human Resource Management	3

## Progression Plan

### Suggested Animal Systems Program Progression

Course	Title	Hours
<b>Year 1</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 1600	Introduction to Agrifood Systems	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
ECON 1010	Introduction to Microeconomic Principles	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies or Nutrition for Health and Changing Lifestyles	3
Select one of the following:		3
MATH 1210	Techniques of Classical and Linear Algebra	3
MATH 1300	Vector Geometry and Linear Algebra	
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
Free Elective		3
<b>Hours</b>		<b>30</b>

#### Year 2

ABIZ 2510	Introduction to Agricultural and Food Marketing	3
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AGEC 2370/ BIOL 2300	Principles of Ecology	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
ANSC 2500	Animal Production	3
ANSC 2510	Anatomy and Physiology 1: Control Systems	3
ANSC 2520	Anatomy and Physiology 2: Nutrient Utilization	3
CHEM/MBIO 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
Restricted/Free Electives/Co-op		3
<b>Hours</b>		<b>30</b>

#### Year 3

ANSC 3510	Feeds and Feeding	3
ANSC 3520	Animal Reproduction	3
ANSC 3500	Principles of Animal Genetics	3
ANSC 3530	The Animal and Its Environment	3
PLNT 2500	Crop Production	3
PLNT 2520/ BIOL 2500	Genetics	3
SOIL 3600	Soils and Landscapes in Our Environment	3
Restricted/Free Electives/Co-op		9
<b>Hours</b>		<b>30</b>

#### Year 4

AGRI 4100	Current Issues in Agricultural Systems	3
Restricted/Free Electives/Co-op		27
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

### Degree Program

Admission: Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education

Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

**Employment Term Requirements:** The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

## Diploma Program

**Admission:** To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is dependant upon the student receiving a job placement through the Cooperative Education Office.

**Employment Term Requirements:** The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

# Plant Biotechnology, B.Sc. - Agriculture

## Overview/Entrance Requirements

The B.Sc. (Agriculture) is a professional program which prepares graduates for careers in the public and private sectors related to the production and distribution of agricultural commodities. Graduates are prepared to enter directly into a related graduate studies program.

The Plant Biotechnology Program will provide an integrated and comprehensive study of genetic, physiological and pathological factors and modern technological processes associated with the sciences of plant improvement, production, protection, and utilization. The program will provide an understanding of the biological principles that determine the heredity, growth, and responses of plants and plant pathogens to cultural and environmental factors. All students are required to take the following B.Sc. (Agriculture) degree core requirements and the respective program core courses.

## Degree Requirements

Course	Title	Hours
<b>B.Sc. Agriculture Degree Core</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
AGEC 2370/ BIOL 2300	Principles of Ecology	3
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
AGRI 4100	Current Issues in Agricultural Systems	3
ANSC 2500	Animal Production	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130 or CHEM 1110	Introduction to Organic Chemistry <sup>1</sup> Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
ECON 1010	Introduction to Microeconomic Principles	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies Nutrition for Health and Changing Lifestyles	3
Select one of the following: <sup>2</sup>		3
MATH 1210	Techniques of Classical and Linear Algebra	
MATH 1300	Vector Geometry and Linear Algebra	
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
PLNT 2500	Crop Production	3
PLNT 2520 or BIOL 2500	Genetics Genetics 1	3
SOIL 3600	Soils and Landscapes in Our Environment	3
<b>Plant Biotechnology Core</b>		
BIOL 2242	The Flowering Plants	3
BIOL 2520	Cell Biology	3
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>3</sup>	3
CHEM 2740	Introduction to the Biochemistry Laboratory <sup>4</sup>	3
CHEM/MBIO 2750	Elements of Biochemistry 2 <sup>5</sup>	3
MBIO 1010	Microbiology I	3
PLNT 2530	Plant Biotechnology	3
PLNT/BIOL 3400	Plant Physiology	3
<b>Restricted Electives</b>		
Select 6 credit hours from Group 1		6
Select 15 credit hours from Group 2		15
<b>Free Electives</b>		
Select 21 credit hours <sup>6</sup>		21
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).
- <sup>2</sup> Students are recommended to take one of the MATH courses listed in the program requirements above however may also use either MATH 1220 or MATH 1230 to meet the requirement.
- <sup>3</sup> Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1).
- <sup>4</sup> Under required courses, student can use CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).
- <sup>5</sup> Under required courses, students can use CHEM 2710/MBIO 2710 (Biochemistry 2: Catabolism, Synthesis, and Information Pathway) in place of CHEM 2750/MBIO 2750 (Elements of Biochemistry 2).
- <sup>6</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

## Restricted Electives

### Group 1

Course	Title	Hours
ANSC/PLNT 4410	Grassland Agriculture: Plant, Animal and Environment	3
ENTM 3170	Crop Protection Entomology	3
PLNT 2510	Fundamentals of Horticulture	3
PLNT 3540	Weed Science	3

### Group 2

Course	Title	Hours
PLNT 3520	Principles of Plant Improvement	3
PLNT 3570	Fundamentals of Plant Pathology	3
PLNT 4310	Introductory Plant Genomics	3
PLNT 4330	Intermediate Plant Genetics	3
PLNT 4550	Developmental Plant Biology	3
PLNT 4570	Research Methods in Plant Pathology	3
PLNT 4580	Molecular Plant-Microbe Interactions	3
PLNT 4590	Physiology of Crop Plants	3
PLNT 4610	Bioinformatics	3

## Progression Plan

### Suggested Plant Biotechnology Program Progression

Course	Title	Hours
<b>Year 1</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 1600	Introduction to Agrifood Systems	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3

ECON 1010	Introduction to Microeconomic Principles	3
HNSC 1200 or HNSC 1210	Food: Facts and Fallacies or Nutrition for Health and Changing Lifestyles	3
Select one of the following:		3
MATH 1210	Techniques of Classical and Linear Algebra	
MATH 1300	Vector Geometry and Linear Algebra	
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
Free Elective		3

**Hours 30**

<b>Year 2</b>		
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
BIOL 2242	The Flowering Plants	3
BIOL 2520	Cell Biology	3
CHEM/MBIO 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
CHEM/MBIO 2750	Elements of Biochemistry 2	3
PLNT 2520/BIOL 2500	Genetics	3
PLNT 2530	Plant Biotechnology	3
Free Electives		3

**Hours 30**

<b>Year 3</b>		
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
AGEC 2370/BIOL 2300	Principles of Ecology	3
PLNT/BIOL 3400	Plant Physiology	3
SOIL 3600	Soils and Landscapes in Our Environment	3
MBIO 1010	Microbiology I	3
PLNT 2500	Crop Production	3
Restricted / Free Electives / Co-op		12

**Hours 30**

<b>Year 4</b>		
ANSC 2500	Animal Production	3
AGRI 4100	Current Issues in Agricultural Systems	3
Restricted / Free Electives / Co-op		24

**Hours 30**

**Total Hours 120**

## Food Science, B.Sc.

### Overview/Entrance Requirements

The B.Sc. Food Science provides the academic foundation of knowledge and skills for the wide range of opportunities in food science and technology. The degree program is structured in course offerings and content to enhance the competence of graduating students by providing greater emphasis in communications, critical thinking, computer literacy

and statistics which are basic requirements of a modern professional environment. The B.Sc. Food Science (Science Option) program is accredited by the Institute of Food Technologists (IFT). (<https://www.ift.org/>)

The B.Sc. Food Science degree program offers two options: a Science Option and a Business Option. Students will elect one of the two options of study. Both options require students to complete the Food Science Degree Core courses.

## Degree Requirements

Course	Title	Hours
<b>B.Sc. Food Science Degree Core</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences <sup>1</sup>	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130 or CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>3</sup>	3
CHEM 2740	Introduction to the Biochemistry Laboratory <sup>3</sup>	3
ECON 1010	Introduction to Microeconomic Principles	3
FOOD 2500	Food Chemistry	3
FOOD 3010	Food Process 1	3
FOOD 4100	Current Issues in Food and Human Nutrition	3
FOOD 4150	Food Microbiology 1	3
FOOD 4160	Food Analysis 1	3
FOOD 4200	Quality Control in Foods	3
FOOD 4510	Food Product Development	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
MATH 1210 or MATH 1300	Techniques of Classical and Linear Algebra <sup>4</sup> Vector Geometry and Linear Algebra	3
Select one of the following: <sup>5</sup>		3
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
<b>Free Electives</b>		
Select 24 credit hours <sup>6</sup>		24
<b>Options</b>		
Select one of the following options:		30
Business Option Core		
Science Option Core		
<b>Total Hours</b>		<b>120</b>

- STAT 2000 (Basic Statistical Analysis 2) can be substituted for AGRI 2400 (Experimental Methods in Agricultural and Food Sciences).
- Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).
- Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1) and may use CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).
- Students are recommended to take one of MATH 1210 or MATH 1300 however may also substitute MATH 1220 to meet the requirement.
- Students are recommended to take one of MATH 1500 or MATH 1510 or MATH 1520 however may also substitute MATH 1230 to meet the requirement.
- Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

## Program Progression

### Suggested Food Science (Science Option) Program Progression

Course	Title	Hours
<b>Year 1</b>		
AGRI 1600	Introduction to Agrifood Systems	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
ECON 1010	Introduction to Microeconomic Principles	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
MATH 1210 or MATH 1300	Techniques of Classical and Linear Algebra or Vector Geometry and Linear Algebra	3
Select one of the following:		3
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3



CHEM/MBIO 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
FOOD 2500	Food Chemistry	3
MBIO 1010	Microbiology I	3
Free Electives/Co-op		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
BIOE 3530	Engineering Fundamentals	3
FOOD 3010	Food Process 1	3
FOOD 3210	Food Engineering Fundamentals	3
FOOD 4150	Food Microbiology 1	3
FOOD 4160	Food Analysis 1	3
FOOD 4250	Food Analysis 2	3
MKT 2210	Fundamentals of Marketing	3
Restricted Electives		6
Free Electives/Co-op		3
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
FOOD 4010	Food Process 2	3
FOOD 4100	Current Issues in Food and Human Nutrition	3
FOOD 4200	Quality Control in Foods	3
FOOD 4510	Food Product Development	3
Restricted Elective		3
Free Electives/Co-op		15
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

While both CHEM 1110 and CHEM 1130 are required for the Food Science-Science Option program, normally only one is taken at a time.

## Suggested Food Science (Business Option) Program Progression

Course	Title	Hours
<b>Year 1</b>		
AGRI 1600	Introduction to Agrifood Systems	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
HNSC 1200	Food: Facts and Fallacies	3
MATH 1210 or MATH 1300	Techniques of Classical and Linear Algebra or Vector Geometry and Linear Algebra	3
Select one of the following:		3
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	

MATH 1520	Introductory Calculus for Management and Social Sciences	
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
ACC 1100	Introductory Financial Accounting	3
AGRI 2030	Technical Communications	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
CHEM/MBIO 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
FOOD 2500	Food Chemistry	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HRIR 2440	Human Resource Management	3
Free Electives/Co-op		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
FOOD 3010	Food Process 1	3
FOOD 4150	Food Microbiology 1	3
FOOD 4160	Food Analysis 1	3
FOOD 4500	Food Safety and Regulations	3
MKT 2210	Fundamentals of Marketing	3
Free Elective/Co-op		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
ABIZ 3510	Economics of Food Policy	3
FOOD 4100	Current Issues in Food and Human Nutrition	3
FOOD 4200	Quality Control in Foods	3
FOOD 4510	Food Product Development	3
Restricted Elective		3
Free Electives/Co-op		15
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

## Concentrations

### Science Option

The principal areas covered are food processing, chemistry, analysis and safety.

In addition to the courses required for the Food Science Degree Core the following courses are prescribed for the program leading to a B.Sc. in Food Science – Science Option.

Course	Title	Hours
<b>Science Option Core</b>		
BIOE 3530	Engineering Fundamentals	3

CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
or CHEM 1130	Introduction to Organic Chemistry	
FOOD 3210	Food Engineering Fundamentals	3
FOOD 4010	Food Process 2	3
FOOD 4250	Food Analysis 2	3
MBIO 1010	Microbiology I <sup>2</sup>	3
MKT 2210	Fundamentals of Marketing	3

**Restricted Electives**

## Group 1 - Food Safety:

Select one of the following: 3

FOOD 1000	Food Safety Today and Tomorrow	
FOOD 4310	Introduction to HACCP	
FOOD 4500	Food Safety and Regulations	

## Group 2 - General:

Select two of the following: 6

FOOD 3160	Frozen Dairy Products	
FOOD 3170	Cheese and Fermented Milk Products	
FOOD 3220	Grains for Food and Beverage	
FOOD 3500	Processing of Animal Food Products	
FOOD 4230	Food Research	
FOOD 4260	Water Management in Food Processing	
FOOD 4540	Functional Foods and Nutraceuticals	
HNSC 4270	Sensory Evaluation of Food	

**Total Hours** 30

<sup>1</sup> Both CHEM 1110 and CHEM 1130 are required for the Food Science – Science Option program. One of these courses will be credited as part of the Degree Core.

<sup>2</sup> Students who already have credit for MBIO 1220 before entering the program can use it towards MBIO 1010.

**Business Option**

The Business option provides students specialization in the areas of economics, finance, marketing and management.

In addition to the courses required for the Food Science Degree Core the following courses are prescribed for the program leading to a B.Sc. in Food Science – Business Option.

Course	Title	Hours
<b>Business Option Core</b>		
ABIZ 3510	Economics of Food Policy	3
ACC 1100	Introductory Financial Accounting	3
ECON 1020	Introduction to Macroeconomic Principles	3
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
FOOD 4500	Food Safety and Regulations	3
HRIR 2440	Human Resource Management	3

**Restricted Electives**

## Group 1 - Marketing:

ABIZ 2510	Introduction to Agricultural and Food Marketing	3
MKT 2210	Fundamentals of Marketing	3

## Group 2 - General:

Select one of the following:		3
FOOD 1000	Food Safety Today and Tomorrow	
FOOD 3160	Frozen Dairy Products	
FOOD 3170	Cheese and Fermented Milk Products	
FOOD 3220	Grains for Food and Beverage	
FOOD 3500	Processing of Animal Food Products	
FOOD 4250	Food Analysis 2	
FOOD 4260	Water Management in Food Processing	
FOOD 4310	Introduction to HACCP	
FOOD 4540	Functional Foods and Nutraceuticals	

**Total Hours** 30**Cooperative Education Program**

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

**Degree Program**

Admission: Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

Employment Term Requirements: The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

## Diploma Program

Admission: To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is defendant upon the student receiving a job placement through the Cooperative Education Office.

Employment Term Requirements: The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

# Food Industry Option, B.Sc. - Human Nutritional Sciences

## Overview/Entrance Requirements

Students majoring in Human Nutritional Sciences (HNS) will be admitted to the 4-year degree program, the second-degree program, or the Human Nutritional Sciences/Culinary Arts program. Students in the 4-year degree program must choose from the Nutrition Option, the Foods Option, or the Food Industry Option.

## Degree Requirements

### Bachelor of Science (Human Nutritional Sciences) - Food Industry Option

Course	Title	Hours
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences <sup>1</sup>	3
Select one of the following <sup>2</sup>		3-6
BIOL 1410	Anatomy of the Human Body	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130 or CHEM 1110	Introduction to Organic Chemistry <sup>3</sup> / Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>4</sup>	3
CHEM 2740	Introduction to the Biochemistry Laboratory <sup>5</sup>	3
CHEM/MBIO 2750	Elements of Biochemistry 2 <sup>6</sup>	3
FOOD 4150	Food Microbiology 1	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3000	Introduction to Social Epidemiology	3

HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2000	Research Methods and Presentation	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Principles of Food Preparation and Preservation	3
HNSC 4100	Current Issues in Food and Human Nutrition	3
PSYC 1200 or SOC 1000	Introduction to Psychology / Introduction to Sociology	3-6

**Total Hours** **63-69**

- <sup>1</sup> STAT 2000 (Basic Statistical Analysis 2) can be substituted for AGRI 2400 (Experimental Methods in Agricultural and Food Sciences).
- <sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the 3 additional credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.
- <sup>3</sup> Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).
- <sup>4</sup> Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1).
- <sup>5</sup> Under required courses, students can take either CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).
- <sup>6</sup> Under required courses, students can use CHEM 2710/MBIO 2710 (Biochemistry 2: Catabolism, Synthesis, and Information Pathway) in place of CHEM 2750/MBIO 2750 (Elements of Biochemistry 2).

## Food Industry Option

Course	Title	Hours
ABIZ 1000 or GMGT 1010	Introduction to Agribusiness Management / Business and Society	3
FOOD 4310	Introduction to HACCP	3
HNSC 3260	Food Quality Evaluation	3
HNSC 3300 or HNSC 3310	Vitamins and Minerals in Human Health / Macronutrients and Human Health	3
HNSC 3330	Ingredient Technology for Designed Foods	3
HNSC 4280	Food Product Development	3
HNSC 4364	Foods Industry Option Practicum	6
MKT 2210	Fundamentals of Marketing	3
Free Electives <sup>1,2</sup>		9-15
Select one of the following concentrations:		15
Quality Assurance Concentration		
Food Product Development Concentration		

## Food Industry Management Concentration

<b>Total Hours</b>	<b>51-57</b>
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<sup>1</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the additional 3 credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.

<sup>2</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

## Progression Plan

### Suggested Progression of Program: Food Industry Option

Course	Title	Hours
<b>Year 1</b>		
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
AGRI 1600	Introduction to Agrifood Systems	3
Select one of the following		3
BIOL 1410	Anatomy of the Human Body (or	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
PSYC 1200 or SOC 1000	Introduction to Psychology or Introduction to Sociology	6
Free Elective(s) - credit hours (0-6) depend on selections above		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
HNSC 2000	Research Methods and Presentation	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Principles of Food Preparation and Preservation	3
ABIZ 1000 or GMGT 1010	Introduction to Agribusiness Management or Business and Society	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
CHEM/MBIO 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
CHEM/MBIO 2750	Elements of Biochemistry 2	3
<b>Hours</b>		<b>30</b>

### Year 3

HNSC 3260	Food Quality Evaluation	3
HNSC 3330	Ingredient Technology for Designed Foods	3
FOOD 4150	Food Microbiology 1	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3000	Introduction to Social Epidemiology	3
MKT 2210	Fundamentals of Marketing	3
Concentration Electives		6
Free Electives		6
<b>Hours</b>		<b>30</b>

### Year 4

HNSC 3300 or HNSC 3310	Vitamins and Minerals in Human Health or Macronutrients and Human Health	3
HNSC 4100	Current Issues in Food and Human Nutrition	3
HNSC 4280	Food Product Development	3
HNSC 4364	Foods Industry Option Practicum	6
FOOD 4310	Introduction to HACCP	3
Concentration Electives		9
Free Elective		3
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

## Concentrations

Students in the Food Industry Option must complete one of the following three concentrations (15 credit hours). Select 15 credit hours of course work from one of the lists that follow.

Students are required to ensure prerequisites will be met for the courses in their selected concentration. Prerequisites for concentration courses may result in additional courses or free electives needed.

### Quality Assurance Concentration

Course	Title	Hours
FOOD 4160	Food Analysis 1	3
FOOD 4250	Food Analysis 2	3
FOOD 4500	Food Safety and Regulations	3
HNSC 4270	Sensory Evaluation of Food	3
STAT 3000	Applied Linear Statistical Models	3
STAT 3170	Statistical Quality Control	3

### Food Product Development Concentration

Course	Title	Hours
FOOD 4160	Food Analysis 1	3
FOOD 4250	Food Analysis 2	3
FOOD 4500	Food Safety and Regulations	3
Select up to one of the following:		
FOOD 3160	Frozen Dairy Products	
FOOD 3170	Cheese and Fermented Milk Products	
FOOD 3200	Baking Science and Technology	
HNSC 4270	Sensory Evaluation of Food	3
HNSC 4290	Food, Nutrition and Health Policies	3

HNSC 4540	Functional Foods and Nutraceuticals	3
STAT 3000	Applied Linear Statistical Models	3

## Food Industry Management Concentration

Course	Title	Hours
ACC 1100	Introductory Financial Accounting	3
GMGT 2060	Management and Organizational Theory	3
GMGT 3010	Management Decision-Making	3
HRIR 2440	Human Resource Management	3
MKT 3220	Marketing Research	3
HNSC 3342	Management for Food and Nutrition Professionals	3
GMGT 3XXX	Select any GMGT course at the 3000 level	3

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

### Degree Program

Admission: Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

Employment Term Requirements: The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

### Diploma Program

Admission: To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is dependant upon the student receiving a job placement through the Cooperative Education Office.

Employment Term Requirements: The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

## Foods Option, B.Sc. - Human Nutritional Sciences

### Overview/Entrance Requirements

Students majoring in Human Nutritional Sciences (HNS) will be admitted to the 4-year degree program, the second-degree program, or the Human Nutritional Sciences/Culinary Arts program. Students in the 4-year degree program must choose from the Nutrition Option, the Foods Option, or the Food Industry Option.

### Degree Requirements

#### Bachelor of Science (Human Nutritional Sciences)-Foods Option

Course	Title	Hours
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences <sup>1</sup>	3
Select one of the following <sup>2</sup>		3-6
BIOL 1410	Anatomy of the Human Body	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130 or CHEM 1110	Introduction to Organic Chemistry <sup>3</sup> or Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>4</sup>	3
CHEM 2740	Introduction to the Biochemistry Laboratory <sup>5</sup>	3
CHEM/MBIO 2750	Elements of Biochemistry 2 <sup>6</sup>	3
FOOD 4150	Food Microbiology 1	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3000	Introduction to Social Epidemiology	3

HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2000	Research Methods and Presentation	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Principles of Food Preparation and Preservation	3
HNSC 4100	Current Issues in Food and Human Nutrition	3
PSYC 1200 or SOC 1000	Introduction to Psychology Introduction to Sociology	3-6
<b>Total Hours</b>		<b>63-69</b>

- <sup>1</sup> STAT 2000 (Basic Statistical Analysis 2) can be substituted for AGRI 2400 (Experimental Methods in Agricultural and Food Sciences).
- <sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the 3 additional credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.
- <sup>3</sup> Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).
- <sup>4</sup> Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1).
- <sup>5</sup> Under required courses, students can take either CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).
- <sup>6</sup> Under required courses, students can use CHEM 2710/MBIO 2710 (Biochemistry 2: Catabolism, Synthesis, and Information Pathway) in place of CHEM 2750/MBIO 2750 (Elements of Biochemistry 2).

## Foods Option

Course	Title	Hours
HNSC 3300 or HNSC 3310	Vitamins and Minerals in Human Health Macronutrients and Human Health	3
HNSC 3260	Food Quality Evaluation	3
HNSC 3330	Ingredient Technology for Designed Foods	3
HNSC 3350	Culture and Food Patterns	3
HNSC 4270	Sensory Evaluation of Food	3
HNSC 4280	Food Product Development	3
HNSC 4290	Food, Nutrition and Health Policies	3
MKT 2210	Fundamentals of Marketing	3
Program Electives <sup>1</sup>		9
Free Electives <sup>2,3</sup>		18-24
<b>Total Hours</b>		<b>51-57</b>

- <sup>1</sup> Program Electives – can be from either the Asper School of Business (any level), or any 3000 or 4000 level FOOD (Food Science) courses (note some FOOD courses are co-taught with HNSC courses). Students must have the correct pre-requisites for the Program Elective and need to plan accordingly.
- <sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the additional 3 credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.
- <sup>3</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

## Progression Plan

### Suggested Progression of Program: Foods Option

Course	Title	Hours
<b>Year 1</b>		
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
AGRI 1600	Introduction to Agrifood Systems	3
Select one of the following:		3
BIOL 1410	Anatomy of the Human Body (or)	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
PSYC 1200 or SOC 1000	Introduction to Psychology or Introduction to Sociology	6
Free Elective(s) - credit hours (0-6) depend on selections above		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
HNSC 2000	Research Methods and Presentation	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Principles of Food Preparation and Preservation	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
CHEM/MBIO 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
CHEM/MBIO 2750	Elements of Biochemistry 2	3
HEAL 2600	Integration of Health Determinants of Individuals	3
<b>Hours</b>		<b>30</b>

Year 3		
HNSC 3260	Food Quality Evaluation	3
HNSC 3350	Culture and Food Patterns	3
HNSC 3330	Ingredient Technology for Designed Foods	3
FOOD 4150	Food Microbiology 1	3
HEAL 3000	Introduction to Social Epidemiology	3
MKT 2210	Fundamentals of Marketing	3
Program Electives		6
Free Electives		6
<b>Hours</b>		<b>30</b>
Year 4		
HNSC 3300 or HNSC 3310	Vitamins and Minerals in Human Health or Macronutrients and Human Health	3
HNSC 4100	Current Issues in Food and Human Nutrition	3
HNSC 4270	Sensory Evaluation of Food	3
HNSC 4280	Food Product Development	3
HNSC 4290	Food, Nutrition and Health Policies	3
Program Elective		3
Free Electives		12
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

### Degree Program

Admission: Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

Employment Term Requirements: The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

### Diploma Program

Admission: To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is defendant upon the student receiving a job placement through the Cooperative Education Office.

Employment Term Requirements: The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

## Nutrition Option, B.Sc. - Human Nutritional Sciences

### Overview/Entrance Requirements

Students majoring in Human Nutritional Sciences (HNS) will be admitted to the 4-year degree program, the second-degree program, or the Human Nutritional Sciences/Culinary Arts program. Students in the 4-year degree program must choose from the Nutrition Option, the Foods Option, or the Food Industry Option.

#### Bachelor of Science (Human Nutritional Sciences) - Dietetics Preparation

Entry into a dietetic internship is competitive. It is strongly recommended that students seek advice from the Department on all aspects of preparing an application to a dietetic practicum program.

The educational requirements to qualify for a dietetic practicum and membership with the College of Dietitians of Manitoba (CDM) or dietetic colleges in other Canadian provinces may be met within the Nutrition Option with the recommended selection of Dietetics Preparation and supporting courses. Students should review the Partnership for Dietetic Education and Practice (<https://client-snap.dev8.leefrog.com/umanitoba-ca/external.html?link=https://www.pdep.ca/>) website for a listing of accredited post-degree practicum options in Canada.

## Degree Requirements

### Bachelor of Science (Human Nutritional Sciences)- Nutrition Option

Course	Title	Hours
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences <sup>1</sup>	3
Select one of the following <sup>2</sup>		3-6
BIOL 1410	Anatomy of the Human Body	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130 or CHEM 1110	Introduction to Organic Chemistry <sup>3</sup> Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>4</sup>	3
CHEM 2740	Introduction to the Biochemistry Laboratory <sup>5</sup>	3
CHEM/MBIO 2750	Elements of Biochemistry 2 <sup>6</sup>	3
FOOD 4150	Food Microbiology 1	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3000	Introduction to Social Epidemiology	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2000	Research Methods and Presentation	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Principles of Food Preparation and Preservation	3
HNSC 4100	Current Issues in Food and Human Nutrition	3
PSYC 1200 or SOC 1000	Introduction to Psychology Introduction to Sociology	3-6
<b>Total Hours</b>		<b>63-69</b>

<sup>1</sup> STAT 2000 (Basic Statistical Analysis 2) can be substituted for AGRI 2400 (Experimental Methods in Agricultural and Food Sciences).

<sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the 3 additional credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.

<sup>3</sup> Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).

<sup>4</sup> Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1).

<sup>5</sup> Under required courses, students can take either CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).

<sup>6</sup> Under required courses, students can use CHEM 2710/MBIO 2710 (Biochemistry 2: Catabolism, Synthesis, and Information Pathway) in place of CHEM 2750/MBIO 2750 (Elements of Biochemistry 2).

### Nutrition Option

Course	Title	Hours
HNSC 3220	Food and Nutrition Literacy Education	3
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
HNSC 4300 or HNSC 4500	Community Nutrition Intervention Clinical Nutrition I	3
Restricted Electives <sup>1</sup>		21
Free Electives <sup>2,3</sup>		18-24
<b>Total Hours</b>		<b>51-57</b>

<sup>1</sup> Restricted Electives can be AGRI 2300 and/or any 3000/4000 level HNSC courses, not already required as part of the Nutrition Option.

<sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the additional 3 credit hours will be used towards free electives. Under required courses, students must take either BIOL 1412. Students can substitute with both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.

<sup>3</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

### Bachelor of Science (Human Nutritional Sciences)- Dietetics Preparation

Course	Title	Hours
COURSES REQUIRED TO BUILD INTO THE NUTRITION OPTION PROGRAM <sup>1</sup>		
ABIZ 1000 or GMGT 1010	Introduction to Agribusiness Management (Free Elective) Business and Society	3
HNSC 3342	Management for Food and Nutrition Professionals (Restricted Elective)	3
HNSC 3350	Culture and Food Patterns (Restricted elective)	3
HNSC 3400	Nutrition Assessment and Counselling (Free Elective)	3
HNSC 4140	Quantity Food Production and Management (Restricted Elective)	3
HNSC 4300	Community Nutrition Intervention (Restricted Elective)	3
HNSC 4310 or HNSC 4340	Nutrition and the Elderly (Restricted Elective) Maternal and Child Nutrition	3
HNSC 4500	Clinical Nutrition I (HNSC 4300 or HNSC 4500)	3
HNSC 4550	Clinical Nutrition II (Free Elective)	3

<sup>1</sup> The course placement in the program is in parenthesis following the course title.



## Progression Plan

### Suggested Progression of Program: Nutrition Option

Course	Title	Hours
<b>Year 1</b>		
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
AGRI 1600	Introduction to Agrifood Systems	3
Select one of the following:		3
BIOL 1410	Anatomy of the Human Body (or)	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
PSYC 1200 or SOC 1000	Introduction to Psychology or Introduction to Sociology	6
Free Elective(s) - credit hours (0-6) depend on selections above		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
HNSC 2000	Research Methods and Presentation	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Principles of Food Preparation and Preservation	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
CHEM/MBIO 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
CHEM/MBIO 2750	Elements of Biochemistry 2	3
HEAL 2600	Integration of Health Determinants of Individuals	3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
HNSC 3220	Food and Nutrition Literacy Education	3
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
FOOD 4150	Food Microbiology 1	3
HEAL 3000	Introduction to Social Epidemiology	3
Restricted Electives		6
Free Electives		9
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
HNSC 4100	Current Issues in Food and Human Nutrition	3
HNSC 4300 or HNSC 4500	Community Nutrition Intervention or Clinical Nutrition I	3

Restricted Electives	15
Free Electives	9
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

### Suggested Progression of Program: Dietetics Preparation

Course	Title	Hours
<b>Year 1</b>		
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
AGRI 1600	Introduction to Agrifood Systems	3
Select one of the following:		3
BIOL 1410	Anatomy of the Human Body (or)	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110 or CHEM 1130	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties or Introduction to Organic Chemistry	3
PSYC 1200 or SOC 1000	Introduction to Psychology or Introduction to Sociology	6
Free Elective(s) - credit hours (0-6) depend on selection above		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
HNSC 2000	Research Methods and Presentation	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Principles of Food Preparation and Preservation	3
ABIZ 1000 or GMG 1010	Introduction to Agribusiness Management or Business and Society	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
CHEM/MBIO 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
CHEM/MBIO 2750	Elements of Biochemistry 2	3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
HNSC 3220	Food and Nutrition Literacy Education	3
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
HNSC 3342	Management for Food and Nutrition Professionals	3
HNSC 3350	Culture and Food Patterns	3
HNSC 3400	Nutrition Assessment and Counselling	3
FOOD 4150	Food Microbiology 1	3

HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3000	Introduction to Social Epidemiology	3
Free Electives		3
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
HNSC 4100	Current Issues in Food and Human Nutrition	3
HNSC 4140	Quantity Food Production and Management	3
HNSC 4300	Community Nutrition Intervention	3
HNSC 4310 or HNSC 4340	Nutrition and the Elderly or Maternal and Child Nutrition	3
HNSC 4500	Clinical Nutrition I	3
HNSC 4550	Clinical Nutrition II	3
Restricted Electives		6
Free Electives		6
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

### Degree Program

**Admission:** Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

**Employment Term Requirements:** The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-

operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

### Diploma Program

**Admission:** To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is dependant upon the student receiving a job placement through the Cooperative Education Office.

**Employment Term Requirements:** The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

## Human Nutritional Sciences, B.Sc. - Second Degree Program

### Overview/Entrance Requirements

Students majoring in Human Nutritional Sciences (HNS) will be admitted to the 4-year degree program, the second-degree program, or the Human Nutritional Sciences/Culinary Arts program. Students in the 4-year degree program must choose from the Nutrition Option, the Foods Option, or the Food Industry Option.

The educational requirements to qualify for a dietetic practicum and membership with the College of Dietitians of Manitoba (CDM) or dietetic colleges in other Canadian provinces may be met within the Second Degree program. For those intending to apply for a dietetic practicum, the Second Degree's Dietetics Concentration (p. 177) program meets the course requirements to obtain the B.Sc. in Human Nutritional Sciences, but not all the other supporting course requirements, for example, psychology/sociology, humanities or social sciences, microbiology, research methods, communication arts, basic principles of management and counselling. Check with an Academic Advisor to review the supporting course requirements from previous academic work. Students should review the Partnership for Dietetic Education and Practice (<https://www.pdep.ca/>) website for a listing of accredited post-degree practicum options in Canada.

Students must complete 60 credit hours while enrolled in the second degree program. If any of the required courses have been completed in the previous degree, free electives must be chosen to meet the 60 credit hour requirement. Students are not required to satisfy the Written English requirement. Estimated time to completion based on prerequisites is 3 years.

## Degree Requirements

Course	Title	Hours
AGRI 2400	Experimental Methods in Agricultural and Food Sciences <sup>1</sup>	3
Select one of the following: <sup>2</sup>		3
BIOL 1410	Anatomy of the Human Body (or)	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130	Introduction to Organic Chemistry <sup>3</sup>	3
or CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>4</sup>	3
CHEM 2740	Introduction to the Biochemistry Laboratory <sup>5</sup>	3
CHEM/MBIO 2750	Elements of Biochemistry 2 <sup>6</sup>	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2160	Principles of Food Preparation and Preservation	3
Select one of the following concentrations:		30
Dietetics		
Human Nutrition		
Foods		
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> STAT 2000 (Basic Statistical Analysis 2) can be substituted for AGRI 2400 (Experimental Methods in Agricultural and Food Sciences).

<sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.

<sup>3</sup> Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).

<sup>4</sup> Under required courses, students can use CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1).

<sup>5</sup> Under required courses, student can use CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).

<sup>6</sup> Under required courses, students can use CHEM 2710/MBIO 2710 (Biochemistry 2: Catabolism, Synthesis, and Information Pathway) in place of CHEM 2750/MBIO 2750 (Elements of Biochemistry 2).

## Concentrations

### Dietetics <sup>1</sup>

Course	Title	Hours
HNSC 3220	Food and Nutrition Literacy Education	3
HNSC 3300	Vitamins and Minerals in Human Health	3

HNSC 3310	Macronutrients and Human Health	3
HNSC 3342	Management for Food and Nutrition Professionals	3
HNSC 3400	Nutrition Assessment and Counselling	3
HNSC 4140	Quantity Food Production and Management	3
HNSC 4300	Community Nutrition Intervention	3
HNSC 4500	Clinical Nutrition I	3
HNSC 4550	Clinical Nutrition II	3
Free Electives - credit hours (0-3) depend on BIOL course selections <sup>2,3</sup>		3
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> In order to meet PDEP Accreditation Standards, Second Degree students intending to apply for Dietetic Practicum would also need to complete the following Dietetics Supporting Courses:

- ABIZ 1000 or GMGT 1010
- HNSC 2000
- HNSC 2130 or HNSC 2150
- HNSC 3350
- HNSC 4100
- HNSC 4310 or HNSC 4340
- FOOD 4150 or MBIO 1220 or MBIO 1010
- Psychology or Sociology (3-6 credit hours)

<sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the additional 3 credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.

<sup>3</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

## Human Nutrition

Course	Title	Hours
HNSC 3220	Food and Nutrition Literacy Education	3
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
HNSC 4300	Community Nutrition Intervention	3
or HNSC 4500	Clinical Nutrition I	
Restricted Electives <sup>1</sup>		12
Free Electives - credit hours (3-6) depend on BIOL course selections <sup>2,3</sup>		6
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Restricted electives can be either AGRI 2300 and/or any 3000/4000 level HNSC courses, not already required as part of the degree.

<sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the additional 3 credit hours will be used towards free electives. Under required courses, students must take either BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.

<sup>3</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

## Foods

Course	Title	Hours
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 3260 or HNSC 4270	Food Quality Evaluation Sensory Evaluation of Food	3
HNSC 3300 or HNSC 3310	Vitamins and Minerals in Human Health Macronutrients and Human Health	3
HNSC 3330	Ingredient Technology for Designed Foods	3
HNSC 3350	Culture and Food Patterns	3
HNSC 4290	Food, Nutrition and Health Policies	3
HNSC 4540	Functional Foods and Nutraceuticals	3
Program Elective <sup>1</sup>		3
Free Electives - credit hours (3-6) depend on BIOL course selections <sup>2,3</sup>		6
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> The Program Elective required can be from either the Asper School of Business (any level), or any 3000 or 4000 level FOOD (Food Science) courses (note some FOOD courses are co-taught with HNSC courses). Students must have the correct pre-requisites for the Program Elective and need to plan accordingly.

<sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the additional 3 credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.

<sup>3</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.

## Cooperative Education Program

Co-operative Education is a process that alternates periods of academic study with periods of paid work experience relating to the co-op student's area of study. Through the Co-operative Education Program, full-time, paid work terms provide the students with practical experience and provide guidance for further career specialization or further academic study.

Students secure full-time, paid co-op work placements with a faculty-approved employer(s) that are each a minimum of 420 hours, to be completed within 4 months. The faculty supports students on both a group and individual basis to determine his/her learning goals for the work placement. Students are expected to attend an orientation session as well as participate in a series of self-evaluations under the guidance of a sessional instructor. Prior to starting each work term, students are register in AGRI 2002 (first placement), AGRI 3002 (2nd placement), AGRI 4002 (3rd placement) within the term that their co-op placement will take place and pay the fees. Students submit a reflective written report at the end of the work term and are evaluated for both overall participation and the report on a Pass/Fail basis.

## Degree Program

Admission: Students who have been admitted to an undergraduate program within the faculty are eligible to apply to the Co-operative Education Program. Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Program. Full admission into the Program is dependent upon a student's

ability to secure a work term placement. . Normally, the first work term would take place at the end of the second academic year allowing students to pursue professional development activities in year one. However, with approval of the Faculty and employer, the first work term could commence after the first year of a four-year or second-degree program. Students admitted into the Program must maintain good academic standing (minimum DGPA of 2.0).

Employment Term Requirements: The Co-operative Education Program requires the student to secure two full-time, paid co-op work terms (minimum of 420 hours each) with a faculty approved employer(s). A third work term is optional. Prior to starting the work term, students are required to register in the appropriate Agricultural and Food Sciences Co-operative Education Work Term Course within the set deadlines and pay the fee. Successful completion of a work term includes participating in a mid-work term interview with the Co-op Coordinator and completion of a written work term report at the end of each work term. Students who receive a passing grade on the work term reports for all required work terms graduate with the Co-operative Education designation acknowledged on their parchment.

During a work term, a co-op student may take a maximum of one additional course worth up to six credit hours for a total of nine (9). Co-op credit hours earned can be used towards free elective requirements in any degree program.

## Diploma Program

Admission: To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum Degree GPA of 2.0, and have completed at least 24 Credit Hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Full admission into the program is defendant upon the student receiving a job placement through the Cooperative Education Office.

Employment Term Requirements: The student will receive three credits for completing the Cooperative Education Program. Students are required to register in the employment term course and pay the fee prior to starting the employment term.

## Human Nutritional Sciences, B.Sc. - Agreement with Red River College Culinary Arts

### Overview/Entrance Requirements

Students majoring in Human Nutritional Sciences (HNS) will be admitted to the 4-year degree program, the second-degree program, or the Human Nutritional Sciences/Culinary Arts program. Students in the 4-year degree program must choose from the Nutrition Option, the Foods Option, or the Food Industry Option.

Estimated time to completion based on prerequisites is 3 years.

## Degree Requirements

Course	Title	Hours
<b>Required Courses</b>		
AGRI 1600	Introduction to Agrifood Systems	3

AGRI 2400	Experimental Methods in Agricultural and Food Sciences <sup>1</sup>	3
Select one of the following: <sup>2</sup>		3
BIOL 1410	Anatomy of the Human Body (or)	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130	Introduction to Organic Chemistry <sup>3</sup>	3
or CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>4</sup>	3
CHEM 2740	Introduction to the Biochemistry Laboratory <sup>5</sup>	3
CHEM/MBIO 2750	Elements of Biochemistry 2 <sup>6</sup>	3
HNSC 2000	Research Methods and Presentation	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 3220	Food and Nutrition Literacy Education	3
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
HNSC 3330	Ingredient Technology for Designed Foods	3
HNSC 4100	Current Issues in Food and Human Nutrition	3
HNSC 4290	Food, Nutrition and Health Policies	3
Select one of the following concentrations:		6
Human Nutrition		
Foods		
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> STAT 2000 (Basic Statistical Analysis 2) can be substituted for AGRI 2400 (Experimental Methods in Agricultural and Food Sciences).

<sup>2</sup> Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. Under required courses, students must take BIOL 1412 or can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.

<sup>3</sup> Students can hold CHEM 2100 (Organic Chemistry I: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).

<sup>4</sup> Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1).

<sup>5</sup> Under required courses, students can use CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).

<sup>6</sup> Under required courses, students can use CHEM 2710/MBIO 2710 (Biochemistry 2: Catabolism, Synthesis, and Information Pathway) in place of CHEM 2750/MBIO 2750 (Elements of Biochemistry 2).

<sup>7</sup> Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses are 3 credit hours each.

## Concentrations

### Human Nutrition

Course	Title	Hours
HNSC 4300	Community Nutrition Intervention	3
or HNSC 4500	Clinical Nutrition I	
Select one of the following:		3
HNSC 4310	Nutrition and the Elderly	
HNSC 4340	Maternal and Child Nutrition	
HNSC 4350	Nutrition in Exercise and Sport	
<b>Total Hours</b>		<b>6</b>

### Foods

Course	Title	Hours
Select two of the following:		6
HNSC 3260	Food Quality Evaluation	
HNSC 4270	Sensory Evaluation of Food	
HNSC 4540	Functional Foods and Nutraceuticals	
<b>Total Hours</b>		<b>6</b>

## General Agriculture, Agriculture Diploma

### Overview/Entrance Requirements

**Director:** Sue Clayton

**Campus Address/General Office:** 160 Agriculture Building

**Telephone:** (204) 474 9295

**Email Address:** aginfo@umanitoba.ca

### Diploma in Agriculture

The program is designed for those who plan to manage farms or pursue careers in the agricultural and food service and/or value added sectors.

Classes begin in late September and end in March to accommodate students with obligations to plant and harvest crops. The program is also designed for those who plan to transfer credits earned from the Agriculture Diploma program to one of the Faculty of Agricultural and Food Sciences' degree programs.

#### Program Core

The Program Core, common to all students, provides a broad yet integrated education in the production, management and marketing of agricultural and food products and the principles of managing a business. Students are taught to use this knowledge to evaluate the technical and economic feasibility of a variety of alternative agricultural practices.

## Degree Requirements

### Diploma in Agriculture

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
ANSC 0420	Animal Biology and Nutrition	4

ABIZ 0460	Financial Management 1	4
DAGR 0410	Skills for Agricultural Communication and Decision Making	4
DAGR 0480	Introductory Farm Management	3
PLNT 0410	Crop Production Principles and Practices	4
SOIL 0420	Soil Resources and Productivity	4
<b>Hours</b>		<b>23</b>
<b>Winter</b>		
ABIZ 0470	Financial Management 2	4
ABIZ 0440	Agricultural Economics & Marketing 1	4
BIOE 0222	Precision Agriculture- Technological Tools for Decision Making	4
DAGR 0490	Applied Farm Management	3
DAGR 0430	Crop Production Specialization and Innovation	4
SOIL 0620	Soil and Water Management	4
<b>Hours</b>		<b>23</b>
<b>Year 2</b>		
<b>Fall</b>		
ABIZ 0450	Agricultural Economics and Marketing 2	4
DAGR 0980	Farm Management Project 1	3
<b>Hours</b>		<b>7</b>
<b>Winter</b>		
DAGR 0910	Integrated Sustainable Agri-Food Systems	3
DAGR 0920	Current Issues in Agriculture and Food	3
DAGR 0990	Farm Management Project 2	3
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>62</b>

### General Agriculture Option

In order to accommodate a modest level of specialization, the students will be required to elect one of four options by the end of first year.

This option is designed for those who desire a broad general education in applied agricultural and food sciences. The flexibility it provides in course selection makes it well suited for those who plan to manage diversified farm operations and for those who intend to pursue careers in the agricultural and food service and/or value added sectors.

Course	Title	Hours
<b>Program Core</b>		
Program Core credit hours		62
<b>Restricted Electives - General Agriculture</b>		
Group 1 - Select at least one of the following:		3-4
ANSC 0670	Beef Cattle Production and Management	
ANSC 0680	Dairy Cattle Production and Management	
ANSC 0690	Swine Production and Management	
ANSC 0700	Poultry Production and Management	
ANSC 0730	Horse and Stable Management	
Group 2 - Select at least one of the following:		3-4
PLNT 0750	Forage and Pasture Management	
PLNT 0820	Organic Crop Production on the Prairies	
PLNT 0770	Weed Management	
PLNT 0780	Plant Disease Management	
SOIL 0630	Soil Fertility	

Group 3 - Select at least one of the following:		3
ABIZ 0710	Agricultural Policy	
ABIZ 0730	Financial Risk Management	
ABIZ 0750	Advanced Agricultural Financial Management and Lending	
ABIZ 1000	Introduction to Agribusiness Management	
ABIZ 3530	Farm Management	
Group 4 - Select at least one of the following:		3-4
BIOE 0600	Farm Machinery	
BIOE 0710	Materials Handling and Electrical Controls	
BIOE 0700	Agricultural Buildings and Environments	
Group 5 - Select at least one of the following:		2-4
ENTM 0610	Beekeeping	
ENTM 0620	Insect Pest Management	
Group 6 - Select at least one of the following:		3-4
DAGR 0540	Exploring New Opportunities in Adding On-Farm Value	
FOOD 1000	Food Safety Today and Tomorrow	
HNSC 1200	Food: Facts and Fallacies	
HNSC 1210	Nutrition for Health and Changing Lifestyles	
Group 7 - Select at least one of the following:		3
ABIZ 2610	Agricultural Law	
ABIZ 2620	Agricultural Human Resource Management	
AGRI 2500	Managing Farm Safety	
AGRI 2510	Managing Farm Business Transition	
DAGR 0610	Advanced Communication and Leadership	
DAGR 0630	Special Project	

### Program Electives

Select 5-11 credit hours, to complete a minimum of 93 credit hours in 5-11 the program

**Total Hours 87-99**

### Program Electives

Students can select program electives to fulfill the program's 93 credit hour requirement. The following Faculty of Agricultural and Food Sciences' courses are approved as program electives for the Agriculture Diploma program. In addition, students may be allowed to register for a maximum of three credit hours of electives from degree or diploma programs offered outside the Faculty of Agricultural and Food Sciences for credit towards the Agriculture Diploma. Credit for these courses will be granted on the condition that there is not significant overlap of course content. Students planning to register for degree courses should contact the Student

Services Office to discuss implications for scheduling and graduation, as these courses start earlier in September and end later in April.

Course	Title	Hours
ABIZ 0710	Agricultural Policy	3
ABIZ 0730	Financial Risk Management	3
ABIZ 0740	Special Topics in Business Management	3
ABIZ 0750	Advanced Agricultural Financial Management and Lending	3
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 1010	Economics of World Food Issues and Policies	3
ABIZ 2610	Agricultural Law	3

ABIZ 2620	Agricultural Human Resource Management	3
ABIZ 3530	Farm Management	3
AGRI 2002	Agricultural and Food Sciences Co-operative Education Work Term 1	3
AGRI 2300	Indigenous Issues in Food Systems	3
AGRI 2500	Managing Farm Safety	3
AGRI 2510	Managing Farm Business Transition	3
AGRI 3030	Modern Topics in Agriculture 1 <sup>1</sup>	3
ANSC 0600	Animal Health and Welfare	3
ANSC 0670	Beef Cattle Production and Management	4
ANSC 0680	Dairy Cattle Production and Management	4
ANSC 0690	Swine Production and Management	4
ANSC 0700	Poultry Production and Management	4
ANSC 0720	Special Topics in Livestock Management	3
ANSC 0730	Horse and Stable Management	3
BIOE 0600	Farm Machinery	4
BIOE 0700	Agricultural Buildings and Environments	4
BIOE 0710	Materials Handling and Electrical Controls	3
DAGR 0510	Farm Management Practicum	3
DAGR 0540	Exploring New Opportunities in Adding On-Farm Value	4
DAGR 0610	Advanced Communication and Leadership	3
DAGR 0630	Special Project	3
DAGR 0660	Special Topics in General Agriculture	3
ENTM 0610	Beekeeping	2
ENTM 0620	Insect Pest Management	4
ENTM 1000	World of Bugs	3
FOOD 1000	Food Safety Today and Tomorrow	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
PLNT 0750	Forage and Pasture Management	4
PLNT 0770	Weed Management	4
PLNT 0780	Plant Disease Management	4
PLNT 0810	Special Topics in Crop Management	3
PLNT 0820	Organic Crop Production on the Prairies	3
PLNT 1000	Urban Agriculture	3
SOIL 0630	Soil Fertility	4

<sup>1</sup> AGRI 3030 Modern Topics in Agriculture 1 is a topics course that will vary term to term with a variety of subject areas. The course may be completed more than once for credit, if taken under different course titles.

# Business Management, Agriculture Diploma

## Overview/Entrance Requirements

**Director:** Sue Clayton

**Campus Address/General Office:** 160 Agriculture Building

**Telephone:** (204) 474 9295

**Email Address:** aginfo@umanitoba.ca

## Diploma in Agriculture

The program is designed for those who plan to manage farms or pursue careers in the agricultural and food service and/or value added sectors.

Classes begin in late September and end in March to accommodate students with obligations to plant and harvest crops. The program is also designed for those who plan to transfer credits earned from the Agriculture Diploma program to one of the Faculty of Agricultural and Food Sciences' degree programs.

### Program Core

The Program Core, common to all students, provides a broad yet integrated education in the production, management and marketing of agricultural and food products and the principles of managing a business. Students are taught to use this knowledge to evaluate the technical and economic feasibility of a variety of alternative agricultural practices.

## Degree Requirements

### Diploma in Agriculture

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
ANSC 0420	Animal Biology and Nutrition	4
ABIZ 0460	Financial Management 1	4
DAGR 0410	Skills for Agricultural Communication and Decision Making	4
DAGR 0480	Introductory Farm Management	3
PLNT 0410	Crop Production Principles and Practices	4
SOIL 0420	Soil Resources and Productivity	4
<b>Hours</b>		<b>23</b>
<b>Winter</b>		
ABIZ 0470	Financial Management 2	4
ABIZ 0440	Agricultural Economics & Marketing 1	4
BIOE 0222	Precision Agriculture- Technological Tools for Decision Making	4
DAGR 0490	Applied Farm Management	3
DAGR 0430	Crop Production Specialization and Innovation	4
SOIL 0620	Soil and Water Management	4
<b>Hours</b>		<b>23</b>
<b>Year 2</b>		
<b>Fall</b>		
ABIZ 0450	Agricultural Economics and Marketing 2	4
DAGR 0980	Farm Management Project 1	3
<b>Hours</b>		<b>7</b>
<b>Winter</b>		
DAGR 0910	Integrated Sustainable Agri-Food Systems	3
DAGR 0920	Current Issues in Agriculture and Food	3
DAGR 0990	Farm Management Project 2	3
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>62</b>

## BUSINESS MANAGEMENT OPTION

In order to accommodate a modest level of specialization, the students will be required to elect one of four options by the end of first year.

This option offers a more in-depth education in business management to those who intend to manage farms or work as employees, managers and/or business owners in the agricultural and food service and/or value added sectors.

Course	Title	Hours
<b>Program Core</b>		
Complete program core		62
<b>Restricted Electives – Business Management</b>		
Group 1 - Select at least three of the following:		9
ABIZ 0710	Agricultural Policy	
ABIZ 0730	Financial Risk Management	
ABIZ 0750	Advanced Agricultural Financial Management and Lending	
ABIZ 1000	Introduction to Agribusiness Management	
ABIZ 3530	Farm Management	
Group 2 - Select at least one of the following:		3-4
BIOE 0600	Farm Machinery	
BIOE 0710	Materials Handling and Electrical Controls	
ENTM 0620	Insect Pest Management	
PLNT 0750	Forage and Pasture Management	
PLNT 0770	Weed Management	
PLNT 0780	Plant Disease Management	
PLNT 0820	Organic Crop Production on the Prairies	
SOIL 0630	Soil Fertility	
Group 3 - Select at least one of the following:		3-4
ABIZ 2610	Agricultural Law	
ABIZ 2620	Agricultural Human Resource Management	
AGRI 2500	Managing Farm Safety	
AGRI 2510	Managing Farm Business Transition	
DAGR 0540	Exploring New Opportunities in Adding On-Farm Value	
DAGR 0610	Advanced Communication and Leadership	
Group 4 - Select at least one of the following:		3-4
ANSC 0670	Beef Cattle Production and Management	
ANSC 0680	Dairy Cattle Production and Management	
ANSC 0690	Swine Production and Management	
ANSC 0700	Poultry Production and Management	
ANSC 0730	Horse and Stable Management	
<b>Program Electives</b>		
Select 10-13 credit hours, to complete a minimum of 93 credit hours <sup>1</sup> 0-13 in the program		
<b>Total Hours</b>		<b>90-96</b>

### Program Electives

Students can select program electives to fulfill the program's 93 credit hour requirement. The following Faculty of Agricultural and Food Sciences' courses are approved as program electives for the Agriculture Diploma program. In addition, students may be allowed to register for a maximum of three credit hours of electives from degree or diploma programs offered outside the Faculty of Agricultural and Food Sciences for credit towards the Agriculture Diploma. Credit for these courses will

be granted on the condition that there is not significant overlap of course content. Students planning to register for degree courses should contact the Student Services Office to discuss implications for scheduling and graduation, as these courses start earlier in September and end later in April.

Course	Title	Hours
ABIZ 0710	Agricultural Policy	3
ABIZ 0730	Financial Risk Management	3
ABIZ 0740	Special Topics in Business Management	3
ABIZ 0750	Advanced Agricultural Financial Management and Lending	3
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 1010	Economics of World Food Issues and Policies	3
ABIZ 2610	Agricultural Law	3
ABIZ 2620	Agricultural Human Resource Management	3
ABIZ 3530	Farm Management	3
AGRI 2002	Agricultural and Food Sciences Co-operative Education Work Term 1	3
AGRI 2300	Indigenous Issues in Food Systems	3
AGRI 2500	Managing Farm Safety	3
AGRI 2510	Managing Farm Business Transition	3
AGRI 3030	Modern Topics in Agriculture 1 <sup>1</sup>	3
ANSC 0600	Animal Health and Welfare	3
ANSC 0670	Beef Cattle Production and Management	4
ANSC 0680	Dairy Cattle Production and Management	4
ANSC 0690	Swine Production and Management	4
ANSC 0700	Poultry Production and Management	4
ANSC 0720	Special Topics in Livestock Management	3
ANSC 0730	Horse and Stable Management	3
BIOE 0600	Farm Machinery	4
BIOE 0700	Agricultural Buildings and Environments	4
BIOE 0710	Materials Handling and Electrical Controls	3
DAGR 0510	Farm Management Practicum	3
DAGR 0540	Exploring New Opportunities in Adding On-Farm Value	4
DAGR 0610	Advanced Communication and Leadership	3
DAGR 0630	Special Project	3
DAGR 0660	Special Topics in General Agriculture	3
ENTM 0610	Beekeeping	2
ENTM 0620	Insect Pest Management	4
ENTM 1000	World of Bugs	3
FOOD 1000	Food Safety Today and Tomorrow	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
PLNT 0750	Forage and Pasture Management	4
PLNT 0770	Weed Management	4
PLNT 0780	Plant Disease Management	4
PLNT 0810	Special Topics in Crop Management	3
PLNT 0820	Organic Crop Production on the Prairies	3
PLNT 1000	Urban Agriculture	3
SOIL 0630	Soil Fertility	4



<sup>1</sup> AGRI 3030 Modern Topics in Agriculture 1 is a topics course that will vary term to term with a variety of subject areas. The course may be completed more than once for credit, if taken under different course titles.

# Crop Management, Agriculture Diploma

## Overview/Entrance Requirements

**Director:** Sue Clayton

**Campus Address/General Office:** 160 Agriculture Building

**Telephone:** (204) 474 9295

**Email Address:** aginfo@umanitoba.ca

### Diploma in Agriculture

The program is designed for those who plan to manage farms or pursue careers in the agricultural and food service and/or value added sectors.

Classes begin in late September and end in March to accommodate students with obligations to plant and harvest crops. The program is also designed for those who plan to transfer credits earned from the Agriculture Diploma program to one of the Faculty of Agricultural and Food Sciences' degree programs.

#### Program Core

The Program Core, common to all students, provides a broad yet integrated education in the production, management and marketing of agricultural and food products and the principles of managing a business. Students are taught to use this knowledge to evaluate the technical and economic feasibility of a variety of alternative agricultural practices.

## Degree Requirements

### Diploma in Agriculture

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
ANSC 0420	Animal Biology and Nutrition	4
ABIZ 0460	Financial Management 1	4
DAGR 0410	Skills for Agricultural Communication and Decision Making	4
DAGR 0480	Introductory Farm Management	3
PLNT 0410	Crop Production Principles and Practices	4
SOIL 0420	Soil Resources and Productivity	4
<b>Hours</b>		<b>23</b>
<b>Winter</b>		
ABIZ 0470	Financial Management 2	4
ABIZ 0440	Agricultural Economics & Marketing 1	4
BIOE 0222	Precision Agriculture- Technological Tools for Decision Making	4
DAGR 0490	Applied Farm Management	3
DAGR 0430	Crop Production Specialization and Innovation	4
SOIL 0620	Soil and Water Management	4
<b>Hours</b>		<b>23</b>

### Year 2

#### Fall

ABIZ 0450	Agricultural Economics and Marketing 2	4
DAGR 0980	Farm Management Project 1	3
<b>Hours</b>		<b>7</b>

#### Winter

DAGR 0910	Integrated Sustainable Agri-Food Systems	3
DAGR 0920	Current Issues in Agriculture and Food	3
DAGR 0990	Farm Management Project 2	3
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>62</b>

### Crop Management Option

In order to accommodate a modest level of specialization, the students will be required to elect one of four options by the end of first year.

This option is designed for those who plan to manage farms where crops are the primary enterprise or for those who are interested in careers in related agricultural and food service and/or value-added sectors.

Course	Title	Hours
<b>Program Core</b>		
Program Core credit hours		62
<b>Option Core – Crop Management</b>		
PLNT 0770	Weed Management	4
PLNT 0780	Plant Disease Management	4
SOIL 0630	Soil Fertility	4
ENTM 0620	Insect Pest Management	4
<b>Restricted Electives – Crop Management</b>		
Select at least two of the following:		6-8
BIOE 0600	Farm Machinery	
BIOE 0710	Materials Handling and Electrical Controls	
PLNT 0750	Forage and Pasture Management	
PLNT 0820	Organic Crop Production on the Prairies	
<b>Program Electives</b>		
Select 7-9 credit hours, to complete a minimum of 93 credit hours in the program		7-9
<b>Total Hours</b>		<b>91-95</b>

### Program Electives

Students can select program electives to fulfill the program's 93 credit hour requirement. The following Faculty of Agricultural and Food Sciences' courses are approved as program electives for the Agriculture Diploma program. In addition, students may be allowed to register for a maximum of three credit hours of electives from degree or diploma programs offered outside the Faculty of Agricultural and Food Sciences for credit towards the Agriculture Diploma. Credit for these courses will be granted on the condition that there is not significant overlap of course content. Students planning to register for degree courses should contact the Student Services Office to discuss implications for scheduling and graduation, as these courses start earlier in September and end later in April.

Course	Title	Hours
ABIZ 0710	Agricultural Policy	3
ABIZ 0730	Financial Risk Management	3
ABIZ 0740	Special Topics in Business Management	3

ABIZ 0750	Advanced Agricultural Financial Management and Lending	3
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 1010	Economics of World Food Issues and Policies	3
ABIZ 2610	Agricultural Law	3
ABIZ 2620	Agricultural Human Resource Management	3
ABIZ 3530	Farm Management	3
AGRI 2002	Agricultural and Food Sciences Co-operative Education Work Term 1	3
AGRI 2300	Indigenous Issues in Food Systems	3
AGRI 2500	Managing Farm Safety	3
AGRI 2510	Managing Farm Business Transition	3
AGRI 3030	Modern Topics in Agriculture 1 <sup>1</sup>	3
ANSC 0600	Animal Health and Welfare	3
ANSC 0670	Beef Cattle Production and Management	4
ANSC 0680	Dairy Cattle Production and Management	4
ANSC 0690	Swine Production and Management	4
ANSC 0700	Poultry Production and Management	4
ANSC 0720	Special Topics in Livestock Management	3
ANSC 0730	Horse and Stable Management	3
BIOE 0600	Farm Machinery	4
BIOE 0700	Agricultural Buildings and Environments	4
BIOE 0710	Materials Handling and Electrical Controls	3
DAGR 0510	Farm Management Practicum	3
DAGR 0540	Exploring New Opportunities in Adding On-Farm Value	4
DAGR 0610	Advanced Communication and Leadership	3
DAGR 0630	Special Project	3
DAGR 0660	Special Topics in General Agriculture	3
ENTM 0610	Beekeeping	2
ENTM 0620	Insect Pest Management	4
ENTM 1000	World of Bugs	3
FOOD 1000	Food Safety Today and Tomorrow	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
PLNT 0750	Forage and Pasture Management	4
PLNT 0770	Weed Management	4
PLNT 0780	Plant Disease Management	4
PLNT 0810	Special Topics in Crop Management	3
PLNT 0820	Organic Crop Production on the Prairies	3
PLNT 1000	Urban Agriculture	3
SOIL 0630	Soil Fertility	4

<sup>1</sup> AGRI 3030 Modern Topics in Agriculture 1 is a topics course that will vary term to term with a variety of subject areas. The course may be completed more than once for credit, if taken under different course titles.

## Livestock, Agriculture Diploma

### Overview/Entrance Requirements

**Director:** Sue Clayton

**Campus Address/General Office:** 160 Agriculture Building

**Telephone:** (204) 474 9295

**Email Address:** [aginfo@umanitoba.ca](mailto:aginfo@umanitoba.ca)

### Diploma in Agriculture

The program is designed for those who plan to manage farms or pursue careers in the agricultural and food service and/or value added sectors.

Classes begin in late September and end in March to accommodate students with obligations to plant and harvest crops. The program is also designed for those who plan to transfer credits earned from the Agriculture Diploma program to one of the Faculty of Agricultural and Food Sciences' degree programs.

#### Program Core

The Program Core, common to all students, provides a broad yet integrated education in the production, management and marketing of agricultural and food products and the principles of managing a business. Students are taught to use this knowledge to evaluate the technical and economic feasibility of a variety of alternative agricultural practices.

### Degree Requirements

#### Diploma in Agriculture

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
ANSC 0420	Animal Biology and Nutrition	4
ABIZ 0460	Financial Management 1	4
DAGR 0410	Skills for Agricultural Communication and Decision Making	4
DAGR 0480	Introductory Farm Management	3
PLNT 0410	Crop Production Principles and Practices	4
SOIL 0420	Soil Resources and Productivity	4
<b>Hours</b>		<b>23</b>
<b>Winter</b>		
ABIZ 0470	Financial Management 2	4
ABIZ 0440	Agricultural Economics & Marketing 1	4
BIOE 0222	Precision Agriculture- Technological Tools for Decision Making	4
DAGR 0490	Applied Farm Management	3
DAGR 0430	Crop Production Specialization and Innovation	4
SOIL 0620	Soil and Water Management	4
<b>Hours</b>		<b>23</b>
<b>Year 2</b>		
<b>Fall</b>		
ABIZ 0450	Agricultural Economics and Marketing 2	4
DAGR 0980	Farm Management Project 1	3
<b>Hours</b>		<b>7</b>
<b>Winter</b>		
DAGR 0910	Integrated Sustainable Agri-Food Systems	3
DAGR 0920	Current Issues in Agriculture and Food	3
DAGR 0990	Farm Management Project 2	3
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>62</b>

## LIVESTOCK MANAGEMENT OPTION

In order to accommodate a modest level of specialization, the students will be required to elect one of four options by the end of first year.

This option is designed for those who plan to manage operations where animal management and/or production is the primary enterprise or for those who are interested in careers in related agricultural and food service and/or value added sectors.

Course	Title	Hours
<b>Program Core</b>		
Program Core credit hours		62
<b>Option Core – Livestock Management</b>		
ANSC 0600	Animal Health and Welfare	3
ENTM 0620	Insect Pest Management	4
<b>Restricted Electives – Livestock Management</b>		
Group 1 - Select at least one of the following:		4
ANSC 0670	Beef Cattle Production and Management	
ANSC 0680	Dairy Cattle Production and Management	
Group 2 - Select at least one of the following:		3-4
ANSC 0690	Swine Production and Management	
ANSC 0700	Poultry Production and Management	
ANSC 0730	Horse and Stable Management	
Group 3 - Select at least one of the following:		4
BIOE 0700	Agricultural Buildings and Environments	
PLNT 0750	Forage and Pasture Management	
<b>Program Electives</b>		
Select 12-13 credit hours, to complete a minimum of 93 credit hours <sup>1</sup> 2-13 in the program		
<b>Total Hours</b>		<b>92-94</b>

### Program Electives

Students can select program electives to fulfill the program's 93 credit hour requirement. The following Faculty of Agricultural and Food Sciences' courses are approved as program electives for the Agriculture Diploma program. In addition, students may be allowed to register for a maximum of three credit hours of electives from degree or diploma programs offered outside the Faculty of Agricultural and Food Sciences for credit towards the Agriculture Diploma. Credit for these courses will be granted on the condition that there is not significant overlap of course content. Students planning to register for degree courses should contact the Student Services Office to discuss implications for scheduling and graduation, as these courses start earlier in September and end later in April.

Course	Title	Hours
ABIZ 0710	Agricultural Policy	3
ABIZ 0730	Financial Risk Management	3
ABIZ 0740	Special Topics in Business Management	3
ABIZ 0750	Advanced Agricultural Financial Management and Lending	3
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 1010	Economics of World Food Issues and Policies	3
ABIZ 2610	Agricultural Law	3
ABIZ 2620	Agricultural Human Resource Management	3
ABIZ 3530	Farm Management	3

AGRI 2002	Agricultural and Food Sciences Co-operative Education Work Term 1	3
AGRI 2300	Indigenous Issues in Food Systems	3
AGRI 2500	Managing Farm Safety	3
AGRI 2510	Managing Farm Business Transition	3
AGRI 3030	Modern Topics in Agriculture 1 <sup>1</sup>	3
ANSC 0600	Animal Health and Welfare	3
ANSC 0670	Beef Cattle Production and Management	4
ANSC 0680	Dairy Cattle Production and Management	4
ANSC 0690	Swine Production and Management	4
ANSC 0700	Poultry Production and Management	4
ANSC 0720	Special Topics in Livestock Management	3
ANSC 0730	Horse and Stable Management	3
BIOE 0600	Farm Machinery	4
BIOE 0700	Agricultural Buildings and Environments	4
BIOE 0710	Materials Handling and Electrical Controls	3
DAGR 0510	Farm Management Practicum	3
DAGR 0540	Exploring New Opportunities in Adding On-Farm Value	4
DAGR 0610	Advanced Communication and Leadership	3
DAGR 0630	Special Project	3
DAGR 0660	Special Topics in General Agriculture	3
ENTM 0610	Beekeeping	2
ENTM 0620	Insect Pest Management	4
ENTM 1000	World of Bugs	3
FOOD 1000	Food Safety Today and Tomorrow	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
PLNT 0750	Forage and Pasture Management	4
PLNT 0770	Weed Management	4
PLNT 0780	Plant Disease Management	4
PLNT 0810	Special Topics in Crop Management	3
PLNT 0820	Organic Crop Production on the Prairies	3
PLNT 1000	Urban Agriculture	3
SOIL 0630	Soil Fertility	4

<sup>1</sup> AGRI 3030 Modern Topics in Agriculture 1 is a topics course that will vary term to term with a variety of subject areas. The course may be completed more than once for credit, if taken under different course titles.

## Agronomy Minor Minor Requirements

Students may obtain a minor in Agronomy (18 credit hours) by completing:

Course	Title	Hours
PLNT 2500	Crop Production	3
SOIL 3600	Soils and Landscapes in Our Environment	3
Select two of the following:		6
ENTM 3170	Crop Protection Entomology	
PLNT 3540	Weed Science	
PLNT 3560	Organic Crop Production on the Prairies	

PLNT 4270	Plant Disease Control	
PLNT/ANSC 4410	Grassland Agriculture: Plant, Animal and Environment	
PLNT 4510	Advanced Cropping Systems	
Select two of the following:		6
SOIL 3060	Introduction to Agrometeorology	
SOIL 4510	Soil and Water Management	
SOIL 4520	Soil Fertility	
<b>Total Hours</b>		<b>18</b>

## Animal Systems Minor Minor Requirements

Students may obtain a minor in Animal Systems (18 credit hours) by completing:

Course	Title	Hours
ANSC 2500	Animal Production	3
ANSC XXXX	Select 15 credit hours in any ANSC courses	15
<b>Total Hours</b>		<b>18</b>

## Crop Protection Minor Minor Requirements

Students may obtain a minor in Crop Protection (18 credit hours) by completing:

Course	Title	Hours
ENTM 3170	Crop Protection Entomology	3
or ENTM 3190	Introduction to Applied Entomology	
PLNT 3540	Weed Science	3
PLNT 3570	Fundamentals of Plant Pathology	3
PLNT 4270	Plant Disease Control	3
Select two of the following:		6
AGRI 2180	Introductory Toxicology	
BIOE 3100	Agricultural Engineering Fundamentals for Agronomists	
ENTM 2050	Introductory Entomology	
ENTM 3180	Field Techniques in Entomology	
PLNT 3520	Principles of Plant Improvement	
PLNT 4510	Advanced Cropping Systems	
PLNT 4570	Research Methods in Plant Pathology	
PLNT 4580	Molecular Plant-Microbe Interactions	
SOIL 3520	Pesticides: Environment, Economics and Ethics	
<b>Total Hours</b>		<b>18</b>

## Entomology Minor Minor Requirements

Students may obtain a minor in Entomology (18 credit hours) by completing:

Course	Title	Hours
ENTM 2050	Introductory Entomology	3
ENTM XXXX	Select 15 credit hours in any ENTM courses	15
<b>Total Hours</b>		<b>18</b>

Many courses are offered in alternating years, so students should consult the Department Head of Entomology to plan their program.

## Food Science Minor Minor Requirements

Students may obtain a minor in Food Science (18 credit hours) by completing:

Course	Title	Hours
FOOD 1000	Food Safety Today and Tomorrow	3
FOOD 2500	Food Chemistry	3
FOOD XXXX	Select 12 credit hours in any FOOD courses <sup>1</sup>	12
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Excluding FOOD 4230 and FOOD 4100.

Prerequisites for required courses may result in more than 18 credit hours.

## Human Nutrition and Metabolism Minor

### Minor Requirements

Students may obtain a minor in Human Nutrition and Metabolism (18 credit hours) by completing the following courses:

Course	Title	Hours
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
HNSC 4120	Senior Thesis	3
or HNSC 4540	Functional Foods and Nutraceuticals	
<b>Total Hours</b>		<b>18</b>

Prerequisites for required courses may result in more than 18 credit hours.

## Plant Biotechnology Minor Minor Requirements

Students may obtain a minor in Plant Biotechnology (18 credit hours) by completing:

Course	Title	Hours
PLNT 2530	Plant Biotechnology	3
Select five of the following:		15
PLNT 3140	Introductory Cytogenetics	
PLNT 3520	Principles of Plant Improvement	

PLNT 3570	Fundamentals of Plant Pathology	
PLNT 4330	Intermediate Plant Genetics	
PLNT 4310	Introductory Plant Genomics	
PLNT 4550	Developmental Plant Biology	
PLNT 4570	Research Methods in Plant Pathology	
PLNT 4580	Molecular Plant-Microbe Interactions	
PLNT 4590	Physiology of Crop Plants	
PLNT 4610	Bioinformatics	
<b>Total Hours</b>		<b>18</b>

## Soil Science Minor

### Minor Requirements

Students may obtain a minor in Soil Science (18 credit hours) by completing:

Course	Title	Hours
SOIL 3600	Soils and Landscapes in Our Environment	3
Select five of the following:		15
SOIL 3060	Introduction to Agrometeorology	
SOIL 3520	Pesticides: Environment, Economics and Ethics	
SOIL 3610	Field Methods in Land Resource Science	
SOIL 4060	Physical Properties of Soils	
SOIL 4130	Soil Chemistry and Mineralogy	
SOIL 4400	SOIL ECOLOGY	
SOIL 4500	Remediation of Contaminated Land	
SOIL 4510	Soil and Water Management	
SOIL 4520	Soil Fertility	
<b>Total Hours</b>		<b>18</b>

## Internationally Educated Agrologists Post-Baccalaureate Diploma

### Intake suspended

The Faculty of Agricultural and Food Sciences currently offers the Internationally Educated Agrologists Post-Baccalaureate Diploma Program (IEAP).

The IEAP is a pathway for Internationally Educated Agrologists (IEAs) to gain formal recognition of their non-Canadian credentials by the Manitoba Institute of Agrologists (MIA), the professional regulatory body for Agrologists in Manitoba.

The program facilitates the integration of foreign-trained Agrologists into the Canadian agriculture sector, through a one-year program of coursework and work experience. The program also stresses the importance of essential skills and professional branding by Canadian Standards.

The program assists new Manitobans with an agricultural degree from outside of Canada to achieve meaningful work in their field, and to help the Manitoba agricultural industry discover new talent.

### Admission Requirements

Applicants must:

1. Have a degree in agriculture from another country
2. Be a permanent resident or Canadian citizen
3. Have met the English Language Proficiency Requirements
4. Have a valid driver's license, and
5. Have a letter from the Manitoba Institute of Agrologists (MIA) indicating their application for registration has been accepted.

## Pre-Veterinary Program

### Overview/Entrance Requirements

A pre-veterinary program is offered to students who plan to take the degree Doctor of Veterinary Medicine. Pre-veterinary students whose academic standing is acceptable can apply to the Western College of Veterinary Medicine (WCVN) (<https://admissions.usask.ca/veterinary-medicine.php>), University of Saskatchewan. Acceptance into the Western College of Veterinary Medicine from the pre-veterinary program at the University of Manitoba is normally restricted to residents of Manitoba. Students from outside Manitoba may be accepted as residents of their own province or country. Students entering the pre-veterinary program are responsible for establishing their residence status.

## Western College of Veterinary Medicine, Saskatoon

Two full years of university training are required for admission comprised of a minimum 60 credit hours. Refer to the University of Saskatchewan's website to review the admission requirements (<https://admissions.usask.ca/veterinary-medicine.php#Admissionrequirements>). The following program is designed to meet the requirements to apply to the Western College of Veterinary Medicine, while allowing students to also progress in parallel with other programs in the Faculty of Agricultural and Food Sciences. CHEM 1120 is required for admission to WCVN, however, does not count towards the 60 credit hours therefore students must take a total of 63 UM credit hours.

### Degree Requirements

The following program is designed to meet the requirements to apply to the Western College of Veterinary Medicine, while allowing students to also progress in parallel with other programs in the Faculty of Agricultural and Food Sciences.

Course	Title	Hours
<b>Year 1</b>		
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 1600	Introduction to Agrifood Systems	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques	3
CHEM 1130	Introduction to Organic Chemistry <sup>1</sup>	3
ECON 1010	Introduction to Microeconomic Principles	3
ENGL 1340	Introduction to Literary Analysis <sup>2</sup>	3
or ENGL 1400	or Thematic Approaches to the Study of Literature	

HNSC 1200 or HNSC 1210	Food: Facts and Fallacies or Nutrition for Health and Changing Lifestyles	3
Select one of the following: <sup>3</sup>		3
MATH 1210	Techniques of Classical and Linear Algebra	
MATH 1300	Vector Geometry and Linear Algebra	
MATH 1500	Introduction to Calculus	
MATH 1510	Applied Calculus 1	
MATH 1520	Introductory Calculus for Management and Social Sciences	
<b>Hours</b>		<b>33</b>
<b>Year 2</b>		
AGRI 2030	Technical Communications <sup>2</sup>	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM/MBIO 2730	Elements of Biochemistry 1 <sup>4</sup>	3
MBIO 1010	Microbiology I	3
PHYS 1020	General Physics 1	3
PLNT 2520 or BIOL 2500	Genetics or Genetics 1	3
Free Electives <sup>5</sup>		9
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>63</b>

<sup>1</sup> Students can hold CHEM 2100 (Organic Chemistry I: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).

<sup>2</sup> AGRI 2030 and ENGL 1340/ENGL 1400 together meet the English requirements of 6 credit hours. Students may elect to take either ENGL 1200 or ENGL 1300 for the Pre-Veterinary program.

<sup>3</sup> Students are recommended to take one of the MATH courses listed in the program requirements above however may also use either MATH 1220 or MATH 1230 to meet the requirement.

<sup>4</sup> Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) or CHEM 2730/MBIO 2730 (Elements of Biochemistry 1).

<sup>5</sup> Note that ANSC 2500, ANSC 2510, and ANSC 2520 are recommended as electives for students to progress in parallel with the Animal Systems program.

# Faculty of Architecture

## General Office

**Dean:** Mira (Mimi) Locher

**Associate Dean(s):** Dr. Susan Close (Academic); Dr. Lisa Landrum (Research)

**Program Director:** Environmental Design Program Chair: Dr. Susan Close

**Campus Address/General Office:** 201 Russell Building

**Telephone:** (204) 474 6578

**Fax:** (204) 474 7532

**Email Address:**

Undergraduate Program Inquiries: env.design@umanitoba.ca

(Env.Design@umanitoba.ca)

Graduate Program Inquiries: gradarch@umanitoba.ca

(gradarch@umanitoba.ca)

**Website:**

umanitoba.ca/architecture (<http://www.umanitoba.ca/architecture/>)

**Academic Staff:**

Please refer to the Faculty website at Faculty and staff | Faculty of Architecture | University of Manitoba (umanitoba.ca) (<https://umanitoba.ca/architecture/faculty-staff/#administrative-staff>)

## Degree Programs Offered

### Available Options

The Bachelor of Environmental Design Degree Program requires students to declare a specific Program Option after the second year of studies (ED2) in the Environmental Design Program. Of the approximately 100 students moving into the third year of studies (ED3), admission into the Options will be divided equally. Students will be required to rank their Program Options in order of preference (1st, 2nd, 3rd choice). The selection of students into these Options will be based on the GPA, a Portfolio and Statement of Intent. Students entering the Program should be aware that entry into the Options will be assigned on a competitive basis, and that not all students may be successfully placed in their first choice. Students who have not completed 2nd year studios or who still have more than 1 three credit hour lecture course to complete will not be eligible for admission into the Option years.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Environmental Design, B.Env.D. (p. 194)	4	129	Yes
Environmental Design, B.Env.D. Architecture Master Preparation Option (ED AMP 1 and ED AMP 2) (p. 195)	1 or 2	33 or 66	Yes

## Faculty Academic Regulations

### Admission Requirements

#### Bachelor of Environmental Design (B.Env.D)

To be considered for admission into the Bachelor of Environmental Design Program an applicant must have completed 30 credit hours of university-level coursework with an overall minimum adjusted grade point average of 2.50. All admission requirements, as well as application deadline dates and forms, are included in the applicant

### Architecture Option

The Architecture Option offers a program of studies that focuses on transforming the lessons of history, technology, culture, the environment, and regional and social aspirations into a program for architecture. Students have the academic freedom, one of the program's highlights, to experiment with ideas and methods as they develop their own personal and critical approaches to architectural design. The sequential design studios and supporting courses cover a wide spectrum of investigations ranging in scale from urban design to individual buildings to their construction details, examining the impact of all of these on the environment.

### Interior Environments Option

The Interior Environments Option provides an opportunity to study the design of interior spaces within the context of architecture and to investigate the design of objects within the contexts of the human body and interior spaces. Students enrol in a series of design studios and courses to explore the impact of interior environments on human beings and vice versa. The impact of technology – especially sustainable strategies – on buildings and their inhabitants is also studied.

### Landscape + Urbanism Option

The departments of Landscape Architecture and City Planning offer a joint option in Landscape + Urbanism for students who have a broad interest in understanding and shaping human settlement and habitat. Design studios and supporting courses recognize that we live in an increasingly globalized world where issues of natural resource depletion, climate change and the demand for sustainable development are paramount. Design and planning issues are addressed within the social, economic, and political contexts that drive development and of the cultural and ecological forces that create the built environment.

### Available Streams (ED AMP only)

ED AMP students entering either Stream One or Stream Two of the program will enter into the Architecture Option years three (ED AMP 1's) or four (ED AMP 2's).

## Programs

information bulletin ([https://umanitoba.ca/student/admissions/media/env\\_design\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/env_design_bulletin.pdf)).

Course	Title	Hours
<b>Required Courses</b>		
EVDS 1600	Introduction to Environmental Design (with C+ minimum grade)	3
EVDS 1602	Visual Literacy (with C+ minimum grade)	3
EVDS 1680	Environmental Technology (with C+ minimum grade)	3

University Written English Course (with a C minimum grade) <sup>1</sup>	3
University Mathematics Course (with a C minimum grade) <sup>1</sup>	3
Open Electives (with a C minimum grade) <sup>2</sup>	15
<b>Total Hours</b>	<b>30</b>

<sup>1</sup> Students must satisfy the University Written English (W) and Mathematics (M) course at the 1000 level or higher.

<sup>2</sup> EVDS 1660 and EVDS 1670 must be completed as part of the degree program prior to, or after, admission to the ED program, with a C+ minimum grade. Students should be aware that EVDS 1670 is a prerequisite for EVDS 2600.

### Bachelor of Environmental Design - Architecture Master Preparation Option (ED AMP)

Enrollment in the Environmental Design Program: Master Preparation Option (ED AMP) is competitive and limited. Students will be admitted on the basis of an annual selection process. Applicants satisfying the minimum academic requirements are eligible for consideration at the discretion of the Department of Architecture Admissions Selection Committee. For a detailed list of the admission requirements please refer to the bulletin ([https://umanitoba.ca/student/admissions/media/amp\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/amp_bulletin.pdf)).

### Undergraduate Scholastic Standards

A Grade Point Average (GPA) of 2.00 is required as an acceptable standard of performance.

To be eligible for the degree of Bachelor of Environmental Design a student is required to complete a minimum of two full academic years of studies in the Environmental Design Program including Years 3 and 4.

### Supplementary Regulations

Supplementary Program Requirements, Structure of Program, Degree Performance Regulations and Policy

#### Preamble

Each faculty and school has its own supplementary regulations and requirements. These are published in the faculty or school chapters of the Academic Calendar. Some faculties and schools also have additional regulations and requirements governing their programs - these are available from the faculty or school. It is the responsibility of each student to be familiar with the academic regulations and requirements of the University of Manitoba in general and of the specific academic regulations and requirements of their faculty or school of registration.

Accordingly, students are asked to seek the advice of advisors in faculty and school general offices whenever there is any question concerning how specific regulations apply to their situations. Please see the University of Manitoba Academic Calendar, General Academic Regulations (p. 118)

#### I. Admissions and Structure of the Program

To be considered for admission into the Bachelor of Environmental Design Program all applicants must have completed the required 30 credit hours of university level course work with an overall minimum adjusted grade point average of 2.50. Successful applicants are likely to require an Adjusted Grade Point Average well in excess of this minimum because admission is academically competitive based on scholastic achievement. Please see the current Environmental Design Application Information Bulletin ([https://umanitoba.ca/student/admissions/media/env\\_design\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/env_design_bulletin.pdf)) or specific entry requirements. The application deadline is April 1 of each year.

The Bachelor of Environmental Design Degree is a four-year program of studies consisting of one qualifying year plus one year of common 'Foundation Studies' (ED2) followed by two years of pre-professional 'Intermediate Studies' (ED3 and ED4). The third and fourth years are referred to as the 'Option Years' and include Architecture, Interior Environments, and Landscape + Urbanism. The Bachelor of Environmental Design Degree Program requires students to declare a specific program Option after the second year of studies (ED2) in the Environmental Design Program.

Of the approximately 100 students moving into the third year of studies (ED3), admission into these Options will be divided equally. Students will be required to rank their Program Options in order of preference (1st, 2nd, 3rd choice). The selection of students into these Options will be based on GPA, Portfolio and a Statement of Intent.

Students entering the program should be aware that entry into the Options will be assigned on a competitive basis, and that not all students will be placed in their first Option choice. Students who have not successfully completed studios or more than one three-credit-hour lecture course will not be eligible for admission into the Option Years.

- Complete 30 credit hours of university study.
- Apply to Environmental Design
- Environmental Design Year 2
- Option Selection
  - ED3 Arch Option or ED3 IE Option or ED3 L + U Option
  - ED4 Arch Option or ED4 IE Option or ED4 L + U Option

### II. Environmental Design Program: Architecture Master Preparation Option (ED AMP)

The Faculty of Architecture offers a Bachelor of Environmental Design Architecture: Master Preparation Option (ED AMP) for students who have a recognized first degree in either a non-design or a design-related field of study and who have an interest in pursuing the graduate degree in Architecture. These students may apply and be admitted through the Environmental Design Program where they will be enrolled in the Environmental Design Program: Architecture Master Preparation Option. There are two different streams available:

#### Stream One

ED Architecture Master Preparation Option 1 (ED AMP 1 – two years of study). For those who have no formal design education and have a recognized undergraduate first degree (or are currently enrolled in the final year of a degree program). In order to graduate students must complete the ED 3 and ED4 Architecture Master Preparation Option (total of 66 credit hours). Upon successful completion of all the requirements for this two-year program, students will be eligible to receive a Bachelor of Environmental Design degree.

#### Stream Two

ED Architecture Master Preparation Option 2 (ED AMP 2 – one year of study). For those who already have an undergraduate design degree (or are currently enrolled in the final year of a design degree program) in an allied design field such as Interior Design or Landscape Architecture, and wish to pursue studies in a graduate degree in Architecture. These students will be considered on a case-by-case basis for placement into the fourth year of Environmental Design Architecture Option, but will be ineligible to receive the Bachelor of Environmental Design degree.

**Note:** Upon successful completion of the undergraduate ED Architecture Master Preparation Option (ED AMP 1 and ED AMP 2), students who wish to continue into the Master of Architecture Program must officially apply



for graduate admission. Evaluation is based on the student's progress in either the one or two-year ED Architecture Master Preparation Option, as evidenced in a portfolio submission, GPA and a Faculty of Graduate Studies application.

For further information on the Environmental Design Program: Architecture Master Preparation Option, please refer to the bulletin ([https://www.umanitoba.ca/student/admissions/media/ampp\\_bulletin.pdf](https://www.umanitoba.ca/student/admissions/media/ampp_bulletin.pdf)).

### III. Degree Performance Regulations Qualifications for Graduation

To be eligible for the degree of Bachelor of Environmental Design, a student must successfully complete 129 credit hours of coursework with a passing grade in each course and have attained a Degree Grade Point Average (DGPA) of at least 2.0 (C).

Students who do not achieve the minimum passing grade for each course or do not meet the 2.0 (C) Term Grade Point Average (TGPA) requirement will be permitted only one more attempt to achieve the required scholastic performance levels.

Students who fail to achieve the minimum passing grade and/or the minimum TGPA will be placed on Academic Suspension. Students who fail to achieve the minimum passing grade on the second attempt will be required to withdraw from the Environmental Design Program (see Section V below (p. 192)).

#### Dean's Honour List

To qualify for the Dean's Honour List a student must register for and successfully complete at least 80 per cent of a full year's coursework and attain a minimum TGPA of 4.0. The notation "Dean's Honour List" will be inscribed on the Student History.

#### University Gold Medal

The University Gold Medal in Environmental Design will be awarded to the graduating student who:

1. has achieved the highest grade point average (minimum 3.75) in courses constituting the last two years of an eligible program (and including no transfer courses in the applicable years); and
2. has completed at least 80 per cent of the normal full course load in each of the last two years of the eligible program

In the event of a tie, preference will be given to the student with the higher DPGA in the final year.

### IV. Residency Requirement

Students must normally complete the last 66 credit hours of the Program at the University of Manitoba. Completion of any of the 66 credit hours through participation in an International Exchange must be approved in advance by the Department Head and Program Chair.

Any student considering time away from the Program must first meet with the Student Advisor and/or Program Chair to discuss their intentions.

Students who have been admitted to the Program and who have not been in attendance for at least one term but less than two years must inform the Student Advisor in writing before June 1st of their intention to return to the Program. Requests for a leave of absence will be reviewed by the Environmental Design Program Chair prior to approval.

Students who have been absent from the Program for two (2) years or more must apply for readmission through the online application process

(application deadline April 1st), and must inform the Student Advisor before June 1st. Their acceptance back into the Program will be subject to quota restrictions and compliance with existing Program requirements.

Coursework completed at a post-secondary institution ten (10) years prior to registration will not be considered for transfer credit.

### V. Probation and Academic Suspension

Failure to meet the minimum TGPA of 2.0 (C) will result in a student being placed on probation. A student with a term grade point average (TGPA) of less than 1.5 shall be required to withdraw permanently from the program.

A student's status is determined at the end of the Fall and Winter examination periods.

Students on probation are required to meet with a Student Advisor to discuss their program of studies prior to their next registration. When next assessed, students must exceed the minimum TGPA (2.0) to be removed from probation or they will be placed on academic suspension.

Students placed on academic suspension will be required to withdraw from the Program for a minimum of one (1) academic year. They may be required to complete a remedial program designated by the ED Program Chair. They will normally be permitted to apply for re-entry to the Environmental Design Program after one year has elapsed. Such application should be made in writing before July 1st.

**Reinstatement is not automatic**, but subject to review by the ED Program Chair.

The purpose of the remedial program is to remove the status of Academic Suspension so that he/she can complete the B.Env.D. degree or pursue career studies in another Faculty or at another university.

### VI. General Regulations and Policy

Students should also make themselves familiar with the General Academic Regulations (p. 118) and the University Policy and Procedures (p. 37).

#### Attendance

Students must attend and participate in all lectures, laboratories, studios and studio reviews, including final reviews in accordance with the sections assigned on the University of Manitoba website. Students who attend the wrong section or course will receive a grade of F.

Regular attendance is expected of all students in all courses. The ED Program Chair may initiate at the request of an Instructor, procedures to bar a student from attending classes, studios and final examinations and/or from receiving credit where absences exceed 10 per cent of the scheduled classes. Students so barred will have failed the course.

A medical certificate must be submitted to the General Office if a student is ill and unable to attend class and/or complete work by a specified due date. Late work will only be allowed on medical grounds with a medical certificate. Any absence not supported by a medical certificate will be considered unexcused.

#### Accessibility

The Environmental Design Program is committed to providing and maintaining an accessible learning environment in accordance with the University of Manitoba Accessibility Policy. In order to facilitate the appropriate accommodation of students' disability-related needs, students with documented disabilities requesting accommodations

are required to register with Student Accessibility Services. (<https://umanitoba.ca/student-supports/accessibility/>)

### The Grading System

The Environmental Design grading system consists of eight grades:

Grade	GPA	Grade Point Range	Grade Range	Category
A+	4.5	4.26 – 4.50	90 – 100	Exceptional
A	4	3.76 – 4.25	80 – 89	Excellent
B+	3.5	3.26 – 3.75	75 – 79	Very Good
B	3	2.76 – 3.25	70 – 74	Good
C+	2.5	2.26 – 2.75	65 – 69	Satisfactory
C	2	1.90 – 2.25	60 – 64	Adequate
D	1	1.00 – 1.89	50 – 59	Failure
F	0		0 – 49	Failure

Note: A minimum grade of C (2.0) is required to pass all courses offered within the Environmental Design Program in the Faculty of Architecture.

### Grade Points

“Grade Point” refers to a numerical value assigned to a letter grade received in a course.

### Calculating the Grade Point Average

“Grade Point Average” or “GPA” is the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted. This calculation can be applied to determine the following types of GPA:

1. “Cumulative Grade Point Average” or “CGPA” which is the calculated GPA of all courses, institutional and transferred, completed at the same Level;
2. “Degree Grade Point Average” or “DGPA” which is the calculated GPA of all courses accepted for credit by the University towards a designated degree; students who repeat a course will receive credit only once – based on the latest grade, not the highest grade;
3. “Sessional Grade Point Average” or “SGPA” which is the calculated GPA of all courses completed at the same Level during the Fall and Winter Terms of one academic year; and
4. “Term Grade Point Average” or “TGPA” which is the calculated GPA of all courses completed during a single Term at the same Level.

### Voluntary Withdrawal

“Voluntary Withdrawal” or “VW” is a registration option that enables students to withdraw from a course or courses without academic penalty.

The onus for initiating Voluntary Withdrawal from a course rests solely with a student. Neither a verbal request nor discontinuance from class attendance will suffice. Students who do not follow this procedure will receive a grade of F in the course. Refer to the University Policy and Procedure on Voluntary Withdrawal (p. 116).

### Incomplete Term Work

Students who are unable to complete the term’s work prescribed in a course must contact the Instructor prior to the end of term for consideration (based on medical or compassionate reasons) of an Incomplete grade and a time extension for work completion.

In the event a student is unable to complete the term’s work due to medical reasons, a medical certificate (indicating the period of illness or time the student is able to return to classes) must be submitted to the ED Program Student Advisor as soon as reasonably possible.

In no case will the satisfaction of the incomplete course requirements cause a grade to be lowered. However, if a student does not submit/present the outstanding work by the stipulated deadline, his/her opportunity to improve the grade will lapse. All courses that have outstanding course work will be given a letter grade with an “I” to indicate an extension has been granted. If outstanding work is not submitted or a time frame of three months passes, the “I” will automatically be removed and the letter grade will stand as is.

The following maximum time extensions are allowed:

- August 1st for courses terminated in April
- December 1st for courses terminated in May/August
- April 1st for courses terminated in December

All registration and registration revisions must be completed in Aurora by the student through the University of Manitoba website registration before the stipulated deadlines.

### Repeating a Course

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

When a student repeats a course or takes an equivalent course or mutually exclusive course (for example, a course that may not be held for credit with the original course), all attempts at that course shall be used in the calculation of the TGPA and CGPA. Students who repeat a course will receive credit only once – based on the latest grade, not the highest grade. All other grades for repeat courses will remain on a student’s academic record but will be eliminated from Hours Passed, Hours Earned, DGPA hours, DGPA calculation, and will be included in credit hours attempted.

A student may only repeat a required course one time, provided he/she is eligible to proceed and such repetition does not introduce a conflict with the student’s lecture, studio, examination schedule and/or space availability.

A failed Elective course may either be repeated or another Elective may be selected.

### Communication and Record Keeping

For communication and record keeping purposes, students should make every effort to inform the Student Advisor if any part of their records and status have changed, or will change, on a continuous basis.

Students should inform the Student Advisor of any extraneous circumstances that may affect their academic performance.

### VII. Appeals on Matters Regarding Academic Regulations

The Faculty of Architecture Rules, Regulations, Student Appeals and Discipline Committee meets from time to time throughout the year to consider appeals from students who request special consideration in respect of rules and regulations governing their progress in the program and qualifications for graduation.

Students who intend to appeal matters concerning Environmental Design Program Rules and Regulations affecting their registration for the next Regular Academic Session must submit a written appeal to the Committee Chair no later than August 1st.

Appeals should be addressed to the Chair of the Rules, Regulations, Student Appeals and Discipline Committee, Office of the Dean, Faculty of

Architecture, University of Manitoba, Winnipeg, MB, R3T 2N2 with a copy to the Environmental Design Program Chair.

## Dean's Honour List

Students who achieve a term GPA of 4.0 or better, while registered in 80 per cent of a full course load will be included in the Dean's Honour List for the Faculty of Architecture.

# Environmental Design, B.Env.D.

## Overview/Entrance Requirements

### Supplies and Expenses

The Faculty of Architecture has an Information Technology Program fee for all enrolling students. A portion of those fees contributes to a Technology Endowment Fund managed by a student-run committee. Remaining funds will be expended on current technology items of direct benefit to students. Further details regarding fees may be found at: <http://umanitoba.ca/student/records/fees/986.html#Arch>

In addition to tuition, student fees, and related expenses, students will be accountable for any additional expenses related to required materials, equipment, and textbooks.

The Environmental Design Program offers Field Studies in Years 2, 3 and 4 either as stand alone courses or in conjunction with a design studio offering. These may be regional, national or international. All related costs are to be borne by the students. A valid passport is required. A visa may also be required.

Please refer to the Environmental Design website for camera, laptop computer and software specifications.

The Environmental Design Program has an Urban Media Lab fee. The Urban Media Lab course is offered at the start of Year 2 and is hosted off campus in advance of the regular academic session in late August.

For information about professional studies leading to the degrees of Master of Architecture, Master of City Planning, Master of Interior Design and Master of Landscape Architecture, please refer to the University of Manitoba's Graduate Calendar (p. 1233).

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
EVDS 1600	Introduction to Environmental Design	3
EVDS 1602	Visual Literacy	3
EVDS 1660	History of Culture, Ideas and Environment 1	3
EVDS 1670	History of Culture, Ideas and Environment 2	3
EVDS 1680	Environmental Technology	3
University Written English Course <sup>1</sup>		3
University Mathematics Course <sup>1</sup>		3
Open Elective Credits		9
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
EVDS 2100	Urban Media Lab	3
EVDS 2200	Ecology and Design	3
EVDS 2300	Materials, Structures and Assemblies	3
EVDS 2400	Visual Media 1	3

EVDS 2500	Design Studio 1	6
EVDS 2600	Tectonic Precedent	3
EVDS 2702	Natural and Human Systems	3
EVDS 2800	Visual Media 2	3
EVDS 2900	Design Studio 2	6
<b>Hours</b>		<b>33</b>

### Years 3-4

Select one of the following options:	66
Architecture Option	
Interior Environments Option	
Landscape + Urbanism Option	
<b>Hours</b>	<b>66</b>
<b>Total Hours</b>	<b>129</b>

<sup>1</sup> The University Written English (W) and Mathematics (M) course (p. 118) requirements and Open Electives must be at the 1000 level or higher.

## Architecture Option

Course	Title	Hours
<b>Year 3</b>		
EVAR 3000	Pre-Modern Architectural History and Theory I	3
EVAR 3002	Pre-Modern Architectural History and Theory II	3
EVAR 3004	ARCH TECH 1	3
EVAR 3006	Architectural Technology 2-Building Construction, Structures & Envelopes	3
EVAR 3008	Architecture Design Studio 1	9
EVAR 3010	Architecture Design Studio 2	9
EVAR 3014	Drawing: Freehand/Digital	3
<b>Hours</b>		<b>33</b>
<b>Year 4</b>		
EVAR 4000	Modern Architectural History and Theory I	3
EVAR 4002	Architectural Technology 3-Building Systems	3
EVAR 4004	Architecture Design Studio 3	9
EVAR 4006	Modern Architectural History and Theory II	3
EVAR 4008	Arch Tech 4: Comprehensive Design Technology Report	3
EVAR 4010	Architecture Design Studio 4	9
Elective		3
<b>Hours</b>		<b>33</b>
<b>Total Hours</b>		<b>66</b>

## Interior Environments Option

Course	Title	Hours
<b>Year 3</b>		
EVIE 3002	Interior Design History and Theory 1	3
EVIE 3004	Materials, Assemblies and Detailing	3
EVIE 3006	Interior Design Media	3
EVIE 3008	Interior Design Studio 3.1	6
EVIE 3010	Interior Design Studio 3.2	6
EVIE 3012	Interior Light and Colour	3

EVIE 4006	Design Methods and Processes	3
EVIE 4008	Digital Media (AutoCAD)	3
Elective		3
<b>Hours</b>		<b>33</b>
<b>Year 4</b>		
EVIE 3014	Human Factors and Environmental Experience	3
EVIE 4000	Interior Design History and Theory 2	3
EVIE 4002	Indoor Systems 1	3
EVIE 4004	Indoor Systems 2	3
EVIE 4010	Interior Design Studio 4.1	6
EVIE 4012	Interior Design Studio 4.2	6
EVIE 4014	Advanced Interior Design Media	3
Electives <sup>1</sup>		6
<b>Hours</b>		<b>33</b>
<b>Total Hours</b>		<b>66</b>

<sup>1</sup> Please note: All students in 4th Year IE Option must complete 6 credit hours of Elective courses. EVIE 3000 and/or EVIE 3016 can be used towards this requirement, if offered.

## Landscape + Urbanism Option

Course	Title	Hours
<b>Year 3</b>		
EVLU 3000	History of Designed Environments	3
EVLU 3002	Site Planning	3
EVLU 3004	Ecology and Design 2	3
EVLU 3006	Studio 3: Dwelling/ Precinct/ Everyday Life	9
EVLU 3008	Studio 4: Networks and Infrastructure	9
EVLU 3010	Landscape and Urbanism Theory	3
EVLU 3012	Site Morphology and Grading	3
<b>Hours</b>		<b>33</b>
<b>Year 4</b>		
EVLU 4000	Philosophy, Ethics and Aesthetics	3
Select one of the following:		3
EVLU 4002	Construction Materials <sup>1,2</sup>	
EVLU 4004	Inquiry by Environmental Design: Researching Space-Place Transformation <sup>1</sup>	
EVLU 4006	Special Topics in Community Design <sup>1</sup>	
EVLU 4008	Plants, Ecosystems and Design <sup>1,2</sup>	
EVLU 4010	Community Design Process and Method: Advanced Placemaking <sup>1</sup>	3
EVLU 4012	Studio 5: Possible Urbanism(s)	9
EVLU 4014	Studio 6: Emergent Futures	9
EVLU 4016	History of Landscape and Urbanism	3
EVLU 4018	Principles of Urban Design	3
<b>Hours</b>		<b>33</b>
<b>Total Hours</b>		<b>66</b>

<sup>1</sup> Students must complete at least 2 of these courses.

<sup>2</sup> Students progressing to the Master of Landscape Architecture at the University of Manitoba are required to take courses EVLU 4002 and EVLU 4008.

## Electives

University credit courses may be taken as electives. They may come from the Faculties of Arts, Science, Engineering, Fine Arts, Management, Agricultural and Food Sciences among others, or with the permission of the Environmental Design Program Chair in special circumstances.

## Environmental Design, B.Env.D. Architecture Master Preparation Option (ED AMP 1 and ED AMP 2)

### Overview/Entrance Requirements

The Faculty of Architecture offers an Environmental Design Program: Architecture Master Preparation Option (ED AMP) for students who have a recognized first degree in either a non-design or a design-related field of study and who have an interest in pursuing the graduate degree in Architecture. These students may apply and be admitted through the Environmental Design Program where they will be enrolled in the Environmental Design Program: Architecture Master Preparation Option. There are two different streams available:

#### Stream One

Environmental Design Program: Architecture Master Preparation Option 1 (ED AMP 1 - two years of study). For those who have no formal design education and have a recognized undergraduate first degree (or are currently enrolled in the final year of a degree program). In order to graduate, students must complete the ED3 and ED4 Architecture Master Preparation Option (total of 66 credit hours). Upon successful completion of all the requirements for this two-year program, students will be eligible to receive a Bachelor of Environmental Design degree.

#### Stream Two

Environmental Design Program: Architecture Master Preparation Option 2 (ED AMP 2 - one year of study). For those who already have an undergraduate design degree (or are currently enrolled in the final year of a design degree program) in an allied design field such as Interior Design or Landscape Architecture, and wish to pursue studies in a graduate degree in Architecture. These students will be considered on a case-by-case basis for placement into the fourth year of Environmental Design Architecture Option, but will be ineligible to receive the Bachelor of Environmental Design degree.

**Note:** Upon successful completion of the undergraduate Environmental Design Program: Architecture Master Preparation Option (ED AMP 1 and ED AMP 2), students who wish to continue into the Master of Architecture Program must officially apply for graduate admission. Evaluation is based on the student's progress in either the one or two-year Environmental Design Program: Architecture Master Preparation Option, as evidenced in a portfolio submission, GPA and a Faculty of Graduate Studies application.

Students seeking admission on the basis of work completed elsewhere must have the equivalent coursework and scholastic achievement levels to be admitted. A portfolio review will be part of the admission process along with a statement of intent (300 word maximum). Equivalencies to ED course requirements will be determined by individual instructors of relevant courses and approved by the Environmental Design Program Chair.

For further information on the Environmental Design Program: Architecture Master Preparation Option, please refer to the following: [http://www.umanitoba.ca/student/admissions/media/ampp\\_bulletin.pdf](http://www.umanitoba.ca/student/admissions/media/ampp_bulletin.pdf)

## Supplies and Expenses

The Faculty of Architecture has an Information Technology Program fee for all enrolling students. A portion of those fees contributes to a Technology Endowment Fund managed by a student-run committee. Remaining funds will be expended on current technology items of direct benefit to students. Further details regarding fees may be found at: <http://umanitoba.ca/student/records/fees/986.html#Arch>

The Faculty of Architecture offers Field Studies in Years 3 and 4 either as stand alone courses or in conjunction with a design studio offering. These may be regional, national or international. All related costs are to be borne by the students. A valid passport is required. Visas may also be required.

Please refer to the Faculty of Architecture website to note laptop computer and software specifications.

In addition to tuition, student fees, and related expenses, the estimated cost of materials, equipment, and textbooks for students in Environmental Design After Degree is approximately \$7,000 per year.

## Degree Requirements

### Course Sequence

Course	Title	Hours
<b>Pre-Term</b>		
EVAR 3012	Architecture Technology Preparation: Structural Concepts	3
<b>Total Hours</b>		<b>3</b>

Course	Title	Hours
<b>Year 3</b>		
EVAR 3000	Pre-Modern Architectural History and Theory I	3
EVAR 3002	Pre-Modern Architectural History and Theory II	3
EVAR 3004	ARCH TECH 1	3
EVAR 3006	Architectural Technology 2-Building Construction, Structures & Envelopes	3
EVAR 3008	Architecture Design Studio 1	9
EVAR 3010	Architecture Design Studio 2	9
EVAR 3014	Drawing: Freehand/Digital	3
	<b>Hours</b>	<b>33</b>

<b>Year 4</b>		
EVAR 4000	Modern Architectural History and Theory I	3
EVAR 4002	Architectural Technology 3-Building Systems	3
EVAR 4004	Architecture Design Studio 3	9
EVAR 4006	Modern Architectural History and Theory II	3
EVAR 4008	Arch Tech 4: Comprehensive Design Technology Report	3
EVAR 4010	Architecture Design Studio 4	9
	<b>Hours</b>	<b>30</b>
	<b>Total Hours</b>	<b>63</b>

## Program Requirements for Environmental Design, Cooperative Education Integrated Work Program (Co op/I)

**Campus Address/General Office:** Room 212 J.A. Russell Building

**Telephone:** 204 474 9432

**Fax:** 204 474 7532

**Email Address:** [Corrine.klekta@umanitoba.ca](mailto:Corrine.klekta@umanitoba.ca)

**Academic Liaison:** Dr. Lisa Landrum

### Program Description

The Faculty of Architecture offers a Cooperative Education/Integrated Work Program (Co op/I) option designed to complement and enrich our academic programs with work experience. The work term/s provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

A student in good academic standing, currently enrolled in the Faculty of Architecture who will have successfully completed 85 credit hours towards a university degree prior to the start of their work placement, may apply to participate in the Co op/I option. The Co op/I program is open to students registered in the Environmental Design Program and the Environmental Design Program: Architecture Masters Preparation program. Acceptance to the program will be based on a statement of interest, résumé, portfolio and interview with the Coop/I Program Coordinator and Academic Liaison. Acceptance will be confirmed in writing. Progress of all students through Coop/I option is dependent upon the student obtaining a job placement.

Upon securing a placement, Faculty of Architecture students enroll in the course EVDS 3800 (and subsequently, EVDS 3900, EVDS 4800 and EVDS 4900) for the specific work term of employment.

Students participating in the Coop/I option must complete all the degree requirements for their program of study as outlined in the Academic Course Calendar. Depending on the term and length of a Coop/I job placement, timetables may need to be altered to satisfy course/studio prerequisite requirements. This may lengthen the time to program completion. Students should consult with the Coop/I Coordinator, Student Advisor, and Program Head prior to accepting a job placement. The Academic Liaison (ADR) and/or relevant option head will oversee curricular implications.

Students on probation or academic suspension will either be removed from Coop/I option or have their acceptance deferred until they have completed two consecutive terms with an Academic Standing of "Satisfactory". Students on probation are required to meet with a Student Advisor to discuss their program of studies prior to their next registration and when next assessed, must exceed the minimum TGPA (2.0).

Written reports must be completed at the end of each work term. Each successfully completed work term and its corresponding work term report receives a Pass/Fail grade and is rated at one credit hour. Students who successfully complete at least two work terms and the required work term reports will have the Coop/I Option acknowledged on their graduation parchment.

**For more information regarding the Cooperative Education/Integrated Work Program option in the Faculty of Architecture please refer to the website (<https://umanitoba.ca/architecture/cooperative-education/>).**

## School of Art

### General Office

**Director:** (Acting) Dr. Ed Jurkowski

**Campus Address/General Office:** 313 ARTlab, 180 Dafoe Road, Fort Garry Campus

**Telephone:** 204 474 9367

**Fax:** 204 474 7605

**Email Address:** [fineart@umanitoba.ca](mailto:fineart@umanitoba.ca)

**Website:** [umanitoba.ca/schools/art/](http://umanitoba.ca/schools/art/) (<http://umanitoba.ca/schools/art/>)

## Program and Graduation Requirements

### Bachelor of Fine Arts Studio Programs

The School of Art offers degrees that cover the history, theory, and techniques of art. Students may also take elective courses outside the School of Art. These programs provide a general cultural background as well as the technical education necessary to become an educator, or a professional creative artist in fine art or applied fields. The programs reflect the assumption that in a time of fluctuating cultural values, technical training alone is not sufficient for significant work in any branch of the arts.

The first two years offer basic instruction in the fundamental principles of drawing, design and representation. In the fine arts studio electives in second year, the student selects courses that provide specialization in one or more of the following: ceramics, drawing, graphic design, painting, photography, print media, sculpture and video.

The School of Art offers a General and an Honours Degree Program in Studio. In order to be transferred from the General Degree to the Honours

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Art History, B.F.A. General (p. 201)	3	90	
Art History, B.F.A. Honours (p. 200)	4	120	
Fine Arts, B.F.A. General (p. 203)	3	93	
Fine Arts, B.F.A. Honours (p. 202)	4	123	
Fine Arts, Dip.Art (p. 204)	4	93	

Admission for Fine Arts programs is by direct entry from high school with portfolio or through University 1 with portfolio.

Art History programs include 24 to 30 credit hours of study in University 1 before admission to Art History. No portfolio required.

## Faculty Academic Regulations

### Admission Requirements

The following is a summary of admission requirements in the School of Art. There is an annual admission quota and admission is competitive.

Entry requirements to the University of Manitoba are listed in the Admissions chapter of this Calendar.

All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the School of Art's website under "Undergraduate Admission Information (<http://umanitoba.ca/schools/art/>)".

Degree Programs, a student must have completed 63 credit hours and have a minimum grade point average of 2.5 (C). The Student Advisor will be able to transfer the student from General to Honours.

In order to be eligible to do the final fourth year Honours year (the Senior Studio and Honours Seminar courses), students in the Honours Degree must have completed 15 credit hours of Studio courses at the 3000 level and have successfully passed a minimum of 93 credit hours.

The school reserves the right to retain temporarily or permanently any work done by students in fulfilment of course requirements.

### Diploma in Art Program

The Diploma in Art (p. 204) is a four-year program, essentially technical in nature, which prepares students for careers as practising artists in either the fine or applied fields. Beginning in Fall 2014 a minimum of 93 credit hours are required for the Diploma in Art. Students admitted to Diploma Program in the School of Art prior to September 2014 should contact the School of Art Office for more information.

### Bachelor of Fine Arts - Art History Programs

The Art History program at the School of Art offers students an opportunity to consider, in a cultural context, both Western and non-Western artistic traditions with an emphasis on the former from the Renaissance to the present. While all courses acknowledge methodological issues, the program also offers courses in art theory and criticism at the second- and third-year levels. Students enrolled in this program broaden their knowledge of art production with studio electives.

## Programs

An acceptance deposit of \$100 is required and will be credited towards tuition when registration is complete.

### Studio Programs

#### Bachelor of Fine Arts – General Studio Program

Initially, all students wishing to complete a Fine Arts studio degree must be admitted to the Bachelor of Fine Arts General Program. Admission to the Bachelor of Fine Arts General Program is directly from high school or from University 1. Grade 12 Art is recommended. In addition to academic standing in high school or University 1, each applicant must submit a portfolio. Information about the admission and portfolio requirements is available on the School of Art website under "Undergraduate Admission Information (<http://umanitoba.ca/schools/art/>)".

#### Bachelor of Fine Arts – Honours Studio Program

To transfer to the BFA Honours Program, a student must have completed 63 credit hours in the Bachelor of Fine Arts General Program and have a minimum grade point average of 2.5 (C+). Students who wish to transfer to the BFA Honours Program must contact the Student Advisor in the School of Art.

## Diploma in Art

Admission to the Diploma in Art requires a high school diploma. Applicants must submit a portfolio and satisfy high school course requirements as described in the application bulletin ([https://umanitoba.ca/student/admissions/media/fine\\_arts\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/fine_arts_bulletin.pdf)) available from the Admissions Office.

## Art History Programs

### Bachelor of Fine Arts Art History - General Program

Initially, all students wishing to complete a Fine Arts Art History degree must be admitted to the Bachelor of Fine Arts Art History General Program. No portfolio is required. To be admitted to this program students must first complete 24-30 credit hours in University 1, including 12 credit hours from the list that follows, and achieve a minimum degree GPA of 2.5.

Course	Title	Hours
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3
Select one of the following:		3-6
ENGL 1200	Representative Literary Works	
ENGL 1310	Course no longer offered	
ENGL 1300	Literature since 1900	
Select one of the following:		6
HIST 1200	An Introduction to the History of Western Civilization (G)	
PHIL 1200	Introduction to Philosophy	
ASIA 1420 & ASIA 1430	Asian Civilizations to 1500 (B) and Asian Civilization from 1500 (B)	
PHIL 1510	Course no longer offered	
Select one of the following:		3
FA 1020	Mathematics in Art	
MATH 1020	Mathematics in Art	
Or any other course that meets the University of Manitoba Math requirement		
A language course - French, German, or Italian - is recommended		6
Science or Social Science Electives		6

**Note:** If only 24 credit hours are completed in year one, the student must take an additional 6 credit hours elsewhere in the program.

### Bachelor of Fine Arts Art History - Honours Program

To transfer to the Art History Honours program, a student must successfully complete 69 credit hours of study in the Art History General Program, with a degree GPA of 2.5. Students who wish to transfer to the BFA Art History Honours program must contact the Student Advisor in the School of Art.

## Additional Admission Categories

**Mature Students:** A mature student is eligible to enter the School of Art as a student in the Diploma in Art program. A Diploma student may transfer into the Bachelor of Fine Arts General Studio Program after completing 24 credit hours in the Diploma Program.

**Transfer Students:** A student seeking transfer to the School of Art from another faculty at the University of Manitoba should contact the School of Art Student Advisor regarding transfer of credit. Academic courses completed at other institutions will be assessed for equivalency only after a student is admitted to the School and paid the deposit. The

maximum transferable to the B.F.A. General Program is 30 credit hours. The maximum transferable to the B.F.A. Honours Program is 60 credit hours.

**Special Students:** A special student is someone who is permitted by the Director of the School of Art to take courses for interest and whose basis of admission is normally possession of a first Fine Arts degree. The student should check with the School of Art Student Advisor first about the application; the student's course choice is dependent on previous courses taken as pre-requisites and space availability in the class.

**Audit Students:** Art history courses may be audited with the permission of the instructor. Studio courses cannot be audited.

**Visiting Students:** A visiting student can take courses in the School of Art on a letter of permission from the home university. The specific courses for which permission is granted must be listed in the Letter of Permission.

## Faculty Academic and Other Regulations

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

The provisions of the General Academic Regulations (p. 118), and University Policies and Procedures (p. 37) apply to all students. In addition, the School of Art has the following regulations and requirements.

Students should be aware that some studio mediums will have health and safety concerns. Faculty and instructors will, for each course that they teach, provide all students with the necessary health and safety instructions for that class.

### Scholastic Standards

#### General Scholastic Standards for all Degree and Diploma Programs

A minimum grade of "C" is required in all School of Art courses unless otherwise stated. For courses taken in other faculties, the minimum passing grade is "D".

All students are automatically assessed by Aurora Student at the end of each term, for those students with a term GPA below 2.0, an Academic Warning will appear on their record.

Students who fall below the minimum GPA required in their program of study will be placed on probation at the end of an academic year. Students must clear the probationary status by the end of the next academic year or may be required to withdraw permanently from the School of Art.

### Studio Programs

Students in the BFA General degree must maintain a minimum Degree GPA of 2.0.

Students in the Diploma Program and BFA Honours degree must maintain a minimum Degree GPA of 2.5.

Students in BFA Honours Studio must obtain a minimum grade of B for the following:

Course	Title	Hours
STDO 4810	Senior Studio 1	6
STDO 4710	Design Senior Studio 1	6



STDO 4820	Senior Studio 2	6
STDO 4720	Design Senior Studio 2	6
STDO 4910	Honours Seminar 1	3
STDO 4730	Design Honours Seminar 1	3
STDO 4920	Honours Seminar 2	3

### Studio First Class Honours

Students admitted to the School of Art prior to September 2014 upon completion of the requirements for the BFA Honours Program, a student who achieves a degree GPA of 3.5 in courses applicable to the last two years of the Honours program will be awarded the BFA Honours Degree First Class.

Students admitted to the School of Art in September 2014 and thereafter who graduate with a B.F.A.(Honours) degree will have their degree granted with "First Class Honours" if they obtain a Degree Grade Point Average of 3.75 or better in all courses required for graduation in the program.

### Art History Programs

Students in the BFA Art History General degree must maintain a minimum Degree GPA of 2.0.

Students in the BFA Art History Honours degree must maintain a minimum Degree GPA of 2.5.

### Art History First Class Honours

Students admitted to the School of Art prior to September 2014 upon completion of the requirements for a BFA Art History Honours Program, a student who achieves a degree GPA of 3.75 in courses taken in the last two years will be awarded BFA Art History Honours Degree First Class.

Students admitted to the School of Art in September 2014 and thereafter who graduate with a B.F.A. Art History (Honours) degree will have their degree granted with "First Class Honours" if they obtain a Degree Grade Point Average of 3.75 or better in all courses required for graduation in the program.

### Field Trip Policy

The Field Trip is a requirement for all School of Art programs. It is the student's responsibility to acquire all necessary travel documentation at least three months prior to departure. This includes a valid passport, and for international students, a travel visa for the United States. Students under the age of eighteen require written parental or guardian permission. Students with questions should check with Canada Border Services Agency (<http://www.cbsa-asfc.gc.ca/>) to determine the correct documentation required for their citizenship status.

Exemption is granted only on compassionate, medical or legal grounds. In case of accommodation, the student must register for the field trip and pay the fee and an alternate assignment must be completed successfully for credit.

### University Written English and Mathematics Requirement

Students in the BFA Studio and Art History Programs are required to complete, within the first 60 credit hours of their programs, the Written English and Mathematics requirements.

The School of Art accepts all courses from any department with a "W" designation to fulfill the Written English Requirement for BFA Studio General/Honours Students. Students in the studio programs are recommended to take FAAH 2930, Writing About Art to fulfil the

"W" Requirement. Art History General and Art History Honours Degree Programs require three credit hours of any English Literature.

The Mathematics requirement for all Studio and Art History Degree Programs in the School of Art can be met through FA 1020 Mathematics in Art, or any other university course designated as satisfying the mathematics requirement.

Students in the Diploma Program do not need to fulfil the Written English or Mathematics requirement.

Refer to the General Academic Regulations for the Written English and Mathematics Requirements (p. 118).

### Attendance

The School of Art supports and follows the University of Manitoba policies on attendance and withdrawal found in the General Academic Regulations - Attendance and Withdrawal (p. 123), which states that regular attendance is expected of all students in all courses. Students who fail to attend class but do not withdraw by each term's stated Voluntary Withdrawal deadline will receive a grade of F.

### Voluntary Withdrawal Policy

Refer to the general policy on voluntary withdrawal from programs and courses in the, General Academic Regulations (p. 123).

### Residency Requirement

#### Studio Programs

A student in the BFA General Studio degree may take up to 45 credit hours applicable to the program at another institution allowable for transfer. All Senior Studio courses must be taken at this University.

### Dean's Honour List

Students registered in a minimum of 9 credit hours within a single term and who achieve a Term Grade Point Average of 3.3 or better will receive the notation of "Dean's Honour List" on their transcript for that term.

### Academic Dishonesty and Inappropriate Behaviour Policy

The School of Art supports and follows the University of Manitoba policies on academic dishonesty found in the General Academic Regulations, Academic Integrity (p. 122).

The School of Art will follow the University of Manitoba's policies on inappropriate behavior, University Policies and Procedures, Student Discipline Bylaw (p. 84).

## Art History, B.F.A. Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FAAH 1030 or EVDS 1660	Introduction to Art 1A or History of Culture, Ideas and Environment 1	3
FAAH 1040 or EVDS 1670	Introduction to Art 2A or History of Culture, Ideas and Environment 2	3
	English Literature Requirement <sup>1,2</sup>	3
	Mathematics Requirement <sup>1,3</sup>	3
	Select 6 credit hours of Academic Electives <sup>4</sup>	6
	Select 6 credit hours of Social Science or Science Elective <sup>5</sup>	6

Choose 6 credit hours from Approved List of Courses	6
<b>Hours</b>	<b>30</b>
<b>Year 2</b>	
FA 1990 First Year Field Trip	0
Select 9 credit hours of 1000 level studio courses <sup>6</sup>	9
Select 6 credit hours in Academic or Studio Electives <sup>4,6</sup>	6
Select 15 credit hours of 2000 level Art History Electives <sup>7</sup>	15
<b>Hours</b>	<b>30</b>
<b>Year 3</b>	
FAAH 3212 Introduction to The Theory of Art	3
Select 9 credit hours at the 1000 level or 6 credit hours at the 2000 level of Studio Electives	6-9
Select 15 or 18 credit hours (dependent on the whether 1000 level or 2000 level studio electives have been chosen) of Art History Electives	15-18
FAAH 3260 Canadian Art and Architecture to World War or FAAH 3270 2	3
or Canadian Art Since World War 2	
<b>Hours</b>	<b>27-33</b>
<b>Year 4</b>	
Select 15 credit hours of Art History Electives	15
Select 3 credits of 4000 level Art History Elective	3
Select 12 Other Academic or Studio Electives <sup>6,8</sup>	12
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>117-123</b>

- <sup>1</sup> Students are recommended to complete these requirements in the first 60 credit hours of their program.
- <sup>2</sup> The School of Art offers FA 1020 to fulfil this requirement. See the General Academic Regulations section of the Undergraduate Calendar for a full list of courses that meet this requirement.
- <sup>3</sup> The English Literature Requirement can be fulfilled by any course taught by the English Department under the course code ENGL.
- <sup>4</sup> Academic Electives can be fulfilled by courses from departments outside of the School of Art.
- <sup>5</sup> Most 2000 level studio courses will require completion of a minimum 21 credit hours of 1000 level studio courses, therefore students should be advised that this component is normally fulfilled by 9 credit hours of 1000 level courses.
- <sup>6</sup> Studio Electives can be fulfilled by any course taught by the School of Art under the course code STDO except STDO 1510 which is not considered a Studio Elective course for the purposes of this program.
- <sup>7</sup> Art History electives can be fulfilled by any 2000 level FAAH course and those courses listed below.
- <sup>8</sup> Honours Students wishing to take more than the 18 credit hours of Art History courses listed above may use their Academic Electives to do so.

## Elective Subjects and Academic Requirements

In addition to the Art History courses in the School of Art, the following courses from other faculties fulfill the Art History elective requirement. Not all courses are offered every year.

Course	Title	Hours
CLAS 2670	Greek Art and Archaeology	3
CLAS 2680	Roman Art and Archaeology	3
RLGN 2570	Indian Religious Art and Architecture	3

## Approved List of Courses

Course	Title	Hours
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
CATH 1190	Introduction to Catholic Studies	3
CDN 1000	Introduction to Canada	3
CLAS 1270	Introduction to Ancient Greek Culture	3
CLAS 1280	Introduction to Ancient Roman Culture	3
FILM 1290	The Art of the Film 1	3
FILM 1310	Film History	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
HIST 1200	An Introduction to the History of Western Civilization (G)	6
HIST 1350	An Introduction to the History of Western Civilization to 1500 (G)	3
HIST 1360	An Introduction to the History of Western Civilization from 1500 (G)	3
HIST 1370	Modern World History: 1500-1800 (M)	3
HIST 1380	Modern World History: 1800-Present (M)	3
HIST 1440	History of Canada (C)	6
HIST 2390	Early Modern Europe, 1450-1789 (E)	6
HIST 2420	The Medieval World (D)	6
INDG 1200	Indigenous Peoples in Canada	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
MUSC 1930	Rudiments of Music	3
PHIL 1200	Introduction to Philosophy	6
PHIL 1290	Critical Thinking	3
RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RUSN 2290	Russian Culture from 1900 to the Present	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3

## Art History, B.F.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FAAH 1030 or EVDS 1660	Introduction to Art 1A or History of Culture, Ideas and Environment 1	3
FAAH 1040 or EVDS 1670	Introduction to Art 2A or History of Culture, Ideas and Environment 2	3

English Literature Requirement <sup>1,2</sup>	3
Mathematics Requirement <sup>1,3</sup>	3
Select 6 credit hours of Academic Electives <sup>4</sup>	6
Select 6 credit hours of Social Science or Science Elective <sup>5</sup>	6
Choose 6 credit hours from Approved List of Courses	6
<b>Hours</b>	<b>30</b>
<b>Year 2</b>	
FA 1990 First Year Field Trip	0
Select 9 credit hours of 1000 level studio courses <sup>6</sup>	9
Select 6 credit hours in Academic or Studio Electives <sup>4,6</sup>	6
Select 15 credit hours of 2000 level Art History Electives <sup>7</sup>	15
<b>Hours</b>	<b>30</b>
<b>Year 3</b>	
FAAH 3212 Introduction to The Theory of Art	3
Select 9 credit hours at the 1000 level or 6 credit hours at the 2000 level of Studio Electives	6-9
Select 15 or 18 credit hours (dependent on the whether 1000 level or 2000 level studio electives have been chosen) of Art History Electives	15-18
FAAH 3260 Canadian Art and Architecture to World War 2 or FAAH 3270 2 or Canadian Art Since World War 2	3
<b>Hours</b>	<b>27-33</b>
<b>Total Hours</b>	<b>87-93</b>

<sup>1</sup> Students are recommended to complete these requirements in the first 60 credit hours of their program.

<sup>2</sup> The School of Art offers FA 1020 to fulfil this requirement. See the General Academic Regulations section of the Undergraduate Calendar for a full list of courses that meet this requirement.

<sup>3</sup> The English Literature Requirement can be fulfilled by any course taught by the English Department under the course code ENGL.

<sup>4</sup> Academic Electives can be fulfilled by courses from departments outside of the School of Art.

<sup>5</sup> Most 2000 level studio courses will require completion of a minimum 21 credit hours of 1000 level studio courses, therefore students should be advised that this component is normally fulfilled by 9 credit hours of 1000 level courses.

<sup>6</sup> Studio Electives can be fulfilled by any course taught by the School of Art under the course code STDO except STDO 1510 which is not considered a Studio Elective course for the purposes of this program.

<sup>7</sup> Art History electives can be fulfilled by any 2000 level FAAH course and those courses listed below.

## Elective Subjects and Academic Requirements

In addition to the Art History courses in the School of Art, the following courses from other faculties fulfill the Art History elective requirement. Not all courses are offered every year.

Course	Title	Hours
CLAS 2670	Greek Art and Archaeology	3
CLAS 2680	Roman Art and Archaeology	3
RLGN 2570	Indian Religious Art and Architecture	3

## Approved List of Courses

Course	Title	Hours
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
CATH 1190	Introduction to Catholic Studies	3
CDN 1000	Introduction to Canada	3
CLAS 1270	Introduction to Ancient Greek Culture	3
CLAS 1280	Introduction to Ancient Roman Culture	3
FILM 1290	The Art of the Film 1	3
FILM 1310	Film History	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
HIST 1200	An Introduction to the History of Western Civilization (G)	6
HIST 1350	An Introduction to the History of Western Civilization to 1500 (G)	3
HIST 1360	An Introduction to the History of Western Civilization from 1500 (G)	3
HIST 1370	Modern World History: 1500-1800 (M)	3
HIST 1380	Modern World History: 1800-Present (M)	3
HIST 1440	History of Canada (C)	6
HIST 2390	Early Modern Europe, 1450-1789 (E)	6
HIST 2420	The Medieval World (D)	6
INDG 1200	Indigenous Peoples in Canada	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
MUSC 1930	Rudiments of Music	3
PHIL 1200	Introduction to Philosophy	6
PHIL 1290	Critical Thinking	3
RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RUSN 2290	Russian Culture from 1900 to the Present	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3

## Fine Arts, B.F.A. Honours

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
STDO 1210	Drawing: Studio 1	3
STDO 1240	Figure Study 1	3
STDO 1410	Visual Language	3
STDO 1510	Art Now	3
FA 1990	First Year Field Trip	0
FAAH 1030 or EVDS 1660	Introduction to Art 1A or History of Culture, Ideas and Environment 1	3
STDO 1250	Drawing: Studio 2	3
STDO 1480	Digital Essentials	3

STDO 1470	Materials Studio	3
FAAH 1040 or EVDS 1670	Introduction to Art 2A or History of Culture, Ideas and Environment 2	3
Written English Requirement <sup>1,2</sup>		3
Mathematics Requirement <sup>1,3</sup>		3
<b>Hours</b>		<b>33</b>
<b>Year 2</b>		
FAAH 2080 & FAAH 2090	Modern to Contemporary Art and Art of the North American Aboriginal Peoples	6
Select 15 credit hours in Fine Arts Studio Electives		15
Select 3 credit hours in Art History Electives		3
Select 6 credit hours in Academic Electives <sup>4</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
FAAH 3202	Contemporary Art History	3
FAAH 3212	Introduction to The Theory of Art	3
STDO 3710 or STDO 3720	Special Topics in Indigenous Contemporary Art Practices or Special Topics in BIPOC Contemporary Art Practices	3
Select 12 credit hours in Fine Arts Studio Electives <sup>5</sup>		12
Select 3 credit hours in Art History Electives		3
Select 6 credit hours in Academic Electives <sup>4</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
STDO 4710 or STDO 4810	Design Senior Studio 1 or Senior Studio 1	6
STDO 4720 or STDO 4820	Design Senior Studio 2 or Senior Studio 2	6
STDO 4730 or STDO 4910	Design Honours Seminar 1 or Honours Seminar 1	3
and		
STDO 4920	Honours Seminar 2	3
Select 6 credit hours of Fine Arts Studio Electives		6
Select 6 credit hours of Academic Electives		6
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>123</b>

<sup>1</sup> Students are recommended to complete these requirements in the first 60 credit hours of their program.

<sup>2</sup> The School of Art offers FAAH 2930 to fulfil this requirement. See the General Academic Regulations (p. 118) for a full list of courses that meet this requirement.

<sup>3</sup> The School of Art offers FA 1020 to fulfil this requirement. See the General Academic Regulations (p. 118) for a full list of courses that meet this requirement.

<sup>4</sup> Students are permitted to take any courses to fulfill the Academic Elective requirement. This includes courses taught by the School of Art such as Studio or Art History courses or courses taught by other faculties.

<sup>5</sup> Students wishing to pursue the BFA Honours program should be advised that a minimum of 15 credit hours of 3000 level studio courses must be taken to be eligible to register for STDO 4810 and STDO 4910,

## Elective Subjects and Academic Requirements

In addition to the Art History courses in the School of Art, the following courses from other faculties fulfill the Art History elective requirement. Not all courses are offered every year.

Course	Title	Hours
CLAS 2670	Greek Art and Archaeology	3
CLAS 2680	Roman Art and Archaeology	3
RLGN 2570	Indian Religious Art and Architecture	3

## Fine Arts, B.F.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
STDO 1210	Drawing: Studio 1	3
STDO 1240	Figure Study 1	3
STDO 1410	Visual Language	3
STDO 1510	Art Now	3
FA 1990	First Year Field Trip	0
FAAH 1030 or EVDS 1660	Introduction to Art 1A or History of Culture, Ideas and Environment 1	3
STDO 1250	Drawing: Studio 2	3
STDO 1480	Digital Essentials	3
STDO 1470	Materials Studio	3
FAAH 1040 or EVDS 1670	Introduction to Art 2A or History of Culture, Ideas and Environment 2	3
Written English Requirement <sup>1,2</sup>		3
Mathematics Requirement <sup>1,3</sup>		3
<b>Hours</b>		<b>33</b>
<b>Year 2</b>		
FAAH 2080 & FAAH 2090	Modern to Contemporary Art and Art of the North American Aboriginal Peoples	6
Select 15 credit hours in Fine Arts Studio Electives		15
Select 3 credit hours in Art History Electives		3
Select 6 credit hours in Academic Electives <sup>4</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
FAAH 3202	Contemporary Art History	3
FAAH 3212	Introduction to The Theory of Art	3
Select 12 credit hours in Fine Arts Studio Electives <sup>5</sup>		12
STDO 3710 or STDO 3720	Special Topics in Indigenous Contemporary Art Practices or Special Topics in BIPOC Contemporary Art Practices	3
Select 3 credit hours in Art History Electives		3

Select 6 credit hours in Academic Electives <sup>4</sup>	6
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>93</b>

- <sup>1</sup> Students are recommended to complete these requirements in the first 60 credit hours of their program.
- <sup>2</sup> The School of Art offers FAAH 2930 to fulfil this requirement. See the General Academic Regulations (p. 118) for a full list of courses that meet this requirement.
- <sup>3</sup> The School of Art offers FA 1020 to fulfil this requirement. See the General Academic Regulations (p. 118) for a full list of courses that meet this requirement.
- <sup>4</sup> Students are permitted to take any courses to fulfill the Academic Elective requirement. This includes courses taught by the School of Art such as Studio or Art History courses or courses taught by other faculties.
- <sup>5</sup> Students wishing to pursue the BFA Honours program should be advised that a minimum of 15 credit hours of 3000 level studio courses must be taken to be eligible to register for STDO 4810 and STDO 4910,

## Elective Subjects and Academic Requirements

In addition to the Art History courses in the School of Art, the following courses from other faculties fulfill the Art History elective requirement. Not all courses are offered every year.

Course	Title	Hours
CLAS 2670	Greek Art and Archaeology	3
CLAS 2680	Roman Art and Archaeology	3
RLGN 2570	Indian Religious Art and Architecture	3

## Fine Arts, Dip.Art

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
STDO 1210	Drawing: Studio 1	3
STDO 1240	Figure Study 1	3
STDO 1410	Visual Language	3
STDO 1510	Art Now	3
FA 1990	First Year Field Trip	0
FAAH 1030	Introduction to Art 1A	3
STDO 1250	Drawing: Studio 2	3
STDO 1480	Digital Essentials	3
STDO 1470	Materials Studio	3
FAAH 1040	Introduction to Art 2A	3
<b>Hours</b>		<b>27</b>

#### Year 2

Select 24 credit hours from the following:	24
STDO 2210	Introduction to Sculpture
STDO 2220	Introduction to Painting
STDO 2230	Ceramics 1
STDO 2250	Drawing 1
STDO 2400	Introduction to Photography
STDO 2500	Printmaking Intaglio A

STDO 2502	Printmaking Intaglio B
STDO 2510	Printmaking Silkscreen A
STDO 2512	Printmaking Silkscreen B
STDO 2520	Printmaking Lithography A
STDO 2522	Printmaking Lithography B
STDO 2610	Video 1
STDO 2630	Introduction to Design
STDO 2640	Intermediate Design

Select 3 credit hours in Fine Arts Studio Electives	3
<b>Hours</b>	<b>27</b>

#### Year 3

Select 24 credit hours from the following:	24
STDO 3330	Advanced Drawing 2
STDO 3370	Advanced Ceramics
STDO 3420	Advanced Painting
STDO 3460	Advanced Sculpture
STDO 3480	Advanced Photography 1
STDO 3830	Advanced Printmaking A
STDO 3840	Advanced Printmaking B

Select 3 credit hours in Fine Arts Studio Electives	3
<b>Hours</b>	<b>27</b>

#### Year 4

Select 12 credit hours from the following:	12
STDO 4450	Advanced Drawing 3
STDO 4520	Advanced Ceramics 2
STDO 4530	Advanced Painting 2
STDO 4550	Advanced Sculpture 2
STDO 4700	Advanced Photography 2

<b>Hours</b>	<b>12</b>
<b>Total Hours</b>	<b>93</b>

# Faculty of Arts

## General Office

**Dean:** Jeffery Taylor

**Associate Dean(s):** Jason Leboe-McGowan (Academic Affairs), Jila Ghomeshi (Undergraduate Student Affairs), Heidi Marx (Graduate Studies, Curriculum, Space & Internationalization), Robert Hoppa (Research)

**Campus Address/General Office:** 134 Fletcher Argue Building

**Telephone:** 204 474 9100

**Fax:** 204 474 7590

**Email Address:** arts\_inquiry@umanitoba.ca

**Website:** [umanitoba.ca/arts/](http://umanitoba.ca/arts/) (<http://umanitoba.ca/arts/>)

**Academic Staff:** For complete listings of the Faculty of Arts Academic Staff, please refer to departmental websites.

## Student Responsibilities

### Students' Code of Responsibilities

#### A Community of Scholars

The Faculty of Arts at the University of Manitoba defines itself as a community of scholars, all citizens of which must commit themselves to the advancement of learning, the dissemination of knowledge, and the well-being of all its members. Essential to these goals is each individual's commitment to the following values:

- The affirmation of the dignity, worth, and equality of all citizens in the community;
- The importance of reasoned debate and inquiry in all academic pursuits;
- The practise of ethical conduct and personal integrity in all aspects of academic life.

Students who enrol in the Faculty of Arts voluntarily choose to join this community of scholars, and in doing so they accept the responsibilities as well as the benefits of living within it.

The Faculty of Arts offers its students remarkable opportunities for the acquisition of knowledge, the development of skills, and the free exchange of ideas that will shape their future lives. The scholarly community also provides a forum for extra-curricular activities, personal growth and social relationships that are equally important to one's sense of fulfilment. This should be an exciting process of discovering new goals, new points of view, and, indeed, a new and better sense of one's ideals and potential. But it is also a process of coming to recognize the value and special nature of the academic community itself.

The dynamic freedom of student life in the Faculty of Arts carries a special obligation that each individual act in such a way as to promote the well-being of other members – to accept willingly the categorical imperative of behaving in such a way that, if everyone else did the same, the good of all would prevail. This is a matter of accepting the differences of others, respecting the rights of others, and not abusing the resources that the faculty and the university put at your disposal. It is also a matter of acting honourably in all personal and academic relationships, and not tolerating through diffidence or neglect any violations of such obligations on the part of others. Our common commitment as citizens of the scholarly community will then work to enhance every individual member's experience and likelihood of success. Only with such a commitment from everyone can the Faculty of Arts fulfil its mission at the core of a public institution charged with educating the leaders of tomorrow's society. And

only with such a commitment can we make wise use of the public funds for which we are accountable.

#### Rights and Responsibilities

As a student in the Faculty of Arts you are entitled to the use of all appropriate resources (human and other) for the successful completion of your studies. But you are also responsible for the use of those resources in a manner that is honest, fair and equitable. For example, when you enrol in a course you implicitly accept the terms of a contract whereby the professor is committed to teaching to the best of his/her ability, while you and the other students are committed to learning to the best of yours. Repeated absences, or the neglect of reading or writing assignments, are not just matters of individual concern; because they undermine the effectiveness of discussion for others as well, they are a failure to honour the academic and social contract that is implicitly a part of your membership in this community. Similarly, borrowing a book from the library is a direct commitment to honour the rules and regulations governing the circulation of such material. To damage a library book by writing in it, highlighting, or worse, is not just an act of individual vandalism; it is the wilful partial destruction of a resource that other students (and even other generations of students) have the right and the need to consult. It is to forget, in other words, that public property is not no one's property; it is everyone's property.

Similar obligations to ethical conduct are an inherent part of all the academic work you do as requirements of your program. Participation in the free exchange of ideas, upon which the scholarly community depends, obligates all members of that community to complete honesty and to adequate documentation of their intellectual debts. Plagiarism, the representing of someone else's words or ideas as your own, or any other form of academic dishonesty such as cheating, is a betrayal not just of individual honour, but of the whole basis of civilized discourse upon which all other members of the community depend.

The Manitoba Code of Human Rights guarantees everyone the right to be free of discrimination on the basis of ancestry, nationality or nation origin, ethnic background or origin, religion or creed, age, sex, including pregnancy, gender determined characteristics, sexual orientation, marital or family status, income, political belief, association or activity and physical or mental disability. The rights and responsibilities of students thus go well beyond the classroom, library, or computer facility. Every student in the Faculty of Arts is at all times entitled to pursue his/her activities and program of study free of any social discrimination, harassment, exploitation or abuse of power on the part of others, staff or students. Consequently, every student also has a reciprocal obligation to act in a similarly ethical fashion toward all other members of the community. In order that we all be fully empowered to take advantage of the pursuit of knowledge, the development of skills and the special opportunities for personal growth offered by the faculty, there must be on everyone's part a commitment to avoid irresponsible behaviour that damages the academic potential or self-esteem of others.

#### Rules and Regulations

It is the intention of the Faculty of Arts to discourage any conduct that is detrimental to the welfare of the scholarly community and its individual members. In this *Undergraduate Calendar* there are many regulations governing the expectations and standards of academic work in the faculty, and there are mechanisms of appeal at the department and faculty level for those who feel that the application of these regulations has been unfair or unjust. There are also rules and regulations governing the use of university resources and facilities, and others governing the social conduct of members of the community – for example, a policy on sexual harassment and a policy banning weapons from campus. Any violations

of these rules and regulations should be reported to the appropriate administrative agency or authority (e.g., the director of Libraries, the sexual harassment investigation officer or the Security Services). It must be remembered, too, that all federal, provincial and municipal laws (regarding, for example, violence, alcohol, and drugs) are enforced on campus.

There are, however, some kinds of behaviour that fall between these academic and legal concerns, which are nevertheless inappropriate in the context of an academic community. Any disruptive action or physically or verbally aggressive behaviour that serves to threaten or intimidate another member of the community (staff or student) should be immediately reported to the relevant head of department or dean. Persons who are found to have violated the rights of other individuals, or to have subverted the welfare of the academic community, will face disciplinary action, which may include expulsion from the faculty. It is important to recognize, though, that such discipline is always less effective than a common commitment to respect the rights of others.

### Conclusion

The foregoing statement of responsibilities applies to all student members of the Faculty of Arts. Faculty members and support staff are governed by a number of university, Senate and faculty policies that set out similar standards of ethical and professional conduct. This code is meant to give the students in the Faculty of Arts a sense of the relation that exists between their rights and their responsibilities and how these rights and responsibilities in turn sustain the welfare of the whole academic community.

### General Responsibilities

Every effort is made to ensure that students in the Faculty of Arts have access to sound information and individual advice and guidance. Within this context and within the framework of faculty and department requirements indicated above, students are personally responsible for course selection and conforming to regulations regarding continuation in, and graduating from, the four undergraduate programs.

Students should take special care to ensure:

That each time they register that the courses they choose meet all requirements for graduation;

- That the courses they choose meet prerequisite conditions;
- That the courses they choose are not exclusions of, or the equivalent of, other courses already taken;

- The accuracy of their registration records, including all changes; and
- That they have noted and are following all deadlines and procedures published in the Calendar and elsewhere.

A copy of the Policy on Disclosure and Security of Student Academic Records is available for students to read in the Faculty of Arts General Office.

## Special Circumstances and Appeals of Matters Regarding Academic Regulations

Students should promptly consult the Faculty of Arts General Office when special circumstances warrant consideration of exceptions to regulations. In addition, the Academic Regulations Appeals Committee meets throughout the year to consider appeals from students who request special consideration with respect to rules and regulations governing their programs of study and qualifications for graduation.

Students who intend to appeal matters concerning regulations or decisions of the Faculty which may affect their registration must arrange to submit a written appeal including all pertinent documentation to the secretary normally within three months following the term in which the course was taken or from the date of the academic decision. Appeals will not be considered beyond three years after the end of the course or from the date of the academic decision:

Deadline to Submit Appeal	ARAC Meeting Date
June 30	Third week of August
October 1	Third week of November
December 1	Third week of February
April 1	Third or fourth week of May

Deadlines falling on a Saturday or Sunday will be observed on the preceding Friday.

Meeting dates are subject to change by the chair.

Appeals should be addressed to: The Secretary of the Academic Regulations Appeals Committee, c/o Faculty of Arts General Office. Special forms are available in the General Office.

## Programs

Minors (optional or required) are part of degree programs - for program length, refer to the Years to Completion.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Anthropology, B.A. Double Advanced Major (p. 229)	4	120	
Anthropology, B.A. Double Honours (p. 227)	4	120	
Anthropology, B.A. General (p. 231)	3	90	
Anthropology, B.A. Single Advanced (p. 228)	4	120	
Anthropology, B.A. Single Honours (p. 226)	4	120	
Anthropology Minor (Concentration) (p. 232)		18	
Art History, B.A. General (p. 443)	3	90	
Art History Minor (p. 442)		18	

Asian Studies, B.A. General (p. 232)	3	90	
Asian Studies, Minor (Concentration) (p. 234)		18	
Bachelor of Arts Integrated Studies (p. 235)	3	90	
Canadian Studies, B.A. Double Honours (p. 241)	4	120	
Canadian Studies, B.A. General (p. 244)	3	90	
Canadian Studies, B.A. Single Honours (p. 239)	4	120	
Canadian Studies, Minor (Concentration) (p. 247)		18	
Catholic Studies, Minor (Concentration) (p. 250)		18	
Central and East European Studies, B.A. Double Advanced (p. 257)	4	120	
Central and East European Studies, B.A. Double Honours (p. 251)	4	120	
Central and East European Studies, B.A. General (p. 259)	3	90	
Central and East European Studies, B.A. Single Advanced (p. 253)	4	120	Yes
Central and East European Studies, Minor (Concentration) (p. 261)		18	
Changing Workplace, The (p. 237)		18	
Classical Studies, B.A. Double Advanced Major (p. 264)	4	120	
Classical Studies, B.A. General (p. 265)	3	90	
Classical Studies, B.A. Single Advanced Major (p. 263)	4	120	
Classical Studies, Minor (Concentration) (p. 266)		18	
Criminology, B.A. General (p. 427)	3	90	
Criminology, B.A. Single Honours (p. 426)	4	120	
Economics, B.A. Double Honours (p. 274)	4	120	
Economics, B.A. General (p. 279)	3	90	
Economics, B.A. Single Advanced (p. 275)	4	120	Yes
Economics, B.A. Single Honours (p. 270)	4	120	Yes
Economics Minor (Concentration) (p. 282)		18	
Economics-Mathematics, B.A. Joint Honours (p. 280)	4	120	
Economics-Statistics, B.A. Joint Honours (p. 281)	4	120	
English, B.A. Double Advanced Major (p. 288)	4	120	
English, B.A. Double Honours (p. 285)	4	120	
English, B.A. General (p. 289)	3	90	



English, B.A. Single Advanced Major (p. 286)	4	120	
English, B.A. Single Honours (p. 284)	4	120	
English Minor (Concentration) (p. 290)		18	
Film Studies, B.A. Double Advanced Major (p. 292)	4	120	
Film Studies, B.A. General (p. 293)	3	90	
Film Studies, B.A. Single Advanced Major (p. 291)	4	120	
Film Studies Minor (Concentration) (p. 294)		18	
French, B.A. Double Advanced Major (p. 302)	4	120	
French, B.A. Double Honours (p. 300)	4	120	
French, B.A. General (p. 303)	3	90	
French, B.A. Single Advanced Major (p. 301)	4	120	
French, B.A. Single Honours (p. 300)	4	120	
French Minor (Concentration) (p. 304)		18	
German, B.A. Double Advanced Major (p. 320)	4	120	
German, B.A. Double Honours (p. 332)	4	120	
German, B.A. General (p. 333)	3	90	
German, B.A. Single Advanced Major (p. 315)	4	120	Yes
German, B.A. Single Honours (p. 317)	4	120	Yes
German Minor (Concentration) (p. 334)		18	
Global Political Economy, B.A. General (p. 341)	3	90	
Global Political Economy, B.A. Single Advanced Major (p. 339)	4	120	
Global Political Economy, B.A. Single Honours (p. 338)	4	120	
Greek, B.A. Single Advanced (p. 267)	4	120	
Greek, Minor (Concentration) (p. 268)		18	
History, B.A. Double Advanced Major (p. 350)	4	120	
History, B.A. Double Honours (p. 346)	4	120	
History, B.A. General (p. 351)	3	90	
History, B.A. Single Advanced Major (p. 347)	4	120	Yes
History, B.A. Single Honours (p. 344)	4	120	Yes
History Minor (Concentration) (p. 353)		18	

Icelandic, B.A. Double Honours (p. 354)	4	120	
Icelandic, B.A. General (p. 355)	3	90	
Icelandic, B.A. Single Honours (p. 353)	4	120	
Icelandic Minor (Concentration) (p. 356)		18	
Indigenous Governance, B.A. Single Advanced Major (p. 358)	4	120	
Indigenous Languages Minor (Concentration) (p. 363)		18	
Indigenous Studies, B.A. Double Advanced Major (p. 360)	4	120	
Indigenous Studies, B.A. General (p. 362)	3	90	
Indigenous Studies, B.A. Single Advanced Major (p. 359)	4	120	
Indigenous Studies Minor (Concentration) (p. 364)		18	
Italian Minor (Concentration) (p. 308)		18	
Italian Studies, B.A. General (p. 306)	3	90	
Italian Studies, B.A. Single Advanced Major (p. 305)	4	120	
Judaic Studies Minor (Concentration) (p. 366)		18	
Labour Studies, B.A. General (p. 372)	3	90	
Labour Studies, B.A. Single Advanced Major (p. 368)	4	120	Yes
Labour Studies Minor (Concentration) (p. 374)		18	
Latin, B.A. Single Advanced (p. 268)	4	120	
Latin American Studies Minor (Concentration) (p. 375)		18	
Latin Minor (Concentration) (p. 269)		18	
Linguistics, B.A. Double Advanced Major (p. 382)	4	120	
Linguistics, B.A. Double Honours (p. 378)	4	120	
Linguistics, B.A. General (p. 383)	3	90	
Linguistics, B.A. Single Advanced Major (p. 379)	4	120	Yes
Linguistics, B.A. Single Honours (p. 376)	4	120	Yes
Linguistics Minor (Concentration) (p. 384)		18	
Mathematics, B.A. General (p. 444)	3	90	
Mathematics, B.A. Single Advanced Major (p. 445)	4	90	
Mathematics Minor (p. 446)		18	
Medieval and Early Modern Studies, B.A. General (p. 387)	3	90	

Medieval and Early Modern Studies, B.A. Single Advanced Major (p. 385)	4	120	
Medieval and Early Modern Studies Minor (Concentration) (p. 389)		18	
Philosophy, B.A. Double Advanced Major (p. 394)	4	120	
Philosophy, B.A. Double Honours (p. 391)	4	120	
Philosophy, B.A. General (p. 395)	3	90	
Philosophy, B.A. Single Advanced Major (p. 392)	4	120	
Philosophy, B.A. Single Honours (p. 390)	4	120	
Philosophy Minor (Concentration) (p. 397)		18	
Polish Minor (Concentration) (p. 334)		18	
Political Studies, B.A. Double Honours (p. 400)	4	120	
Political Studies, B.A. General (p. 404)	3	90	
Political Studies, B.A. Single Advanced Major (p. 401)	4	120	Yes
Political Studies, B.A. Single Honours (p. 398)	4	120	Yes
Political Studies Minor (Concentration) (p. 405)		18	
Program for Deaf Studies and the American Sign Language (p. 384)	3	93	
Psychology, B.A. Double Honours (p. 407)	4	96	
Psychology, B.A. General (p. 410)	3	90	
Psychology, B.A. Single Advanced Major (p. 408)	4	120	Yes
Psychology, B.A. Single Honours (p. 406)	4	120	
Psychology Minor (Concentration) (p. 412)		18	
Religion, B.A., Double Advanced Major (p. 417)	4	120	
Religion, B.A. Double Honours (p. 414)	4	96	
Religion, B.A. General (p. 419)	3	90	
Religion, B.A. Single Advanced Major (p. 415)	4	120	
Religion, B.A. Single Honours (p. 413)	4	120	
Religion Minor (Concentration) (p. 420)		18	
Russian, B.A. General (p. 335)	3	90	
Russian Minor (Concentration) (p. 336)		18	
Sociology, B.A. Double Honours (p. 422)	4	120	
Sociology, B.A. General (p. 424)	3	90	

Sociology, B.A. Single Advanced Major (p. 423)	4	120
Sociology, B.A. Single Honours (p. 421)	4	120
Sociology Minor (Concentration) (p. 425)		18
Spanish, B.A. General (p. 310)	3	90
Spanish, B.A. Single Advanced Major (p. 308)	4	120
Spanish Minor (Concentration) (p. 312)		18
Theatre, B.A. Double Advanced Major (p. 295)	4	120
Theatre, B.A. General (p. 296)	3	90
Theatre, B.A. Single Advanced Major (p. 294)	4	120
Theatre Minor (Concentration) (p. 297)		18
Ukrainian, B.A. General (p. 336)	3	90
Ukrainian Canadian Heritage Studies, B.A. General (p. 430)	3	90
Ukrainian Canadian Heritage Studies, B.A. Single Advanced (p. 428)	4	120
Ukrainian Canadian Heritage Studies Minor (p. 432)		18
Ukrainian Minor (Concentration) (p. 337)		18
Women's and Gender Studies, B.A. Double Advanced Major (p. 437)	4	120
Women's and Gender Studies, B.A. Double Honours (p. 435)	4	120
Women's and Gender Studies, B.A. General (p. 439)	3	90
Women's and Gender Studies, B.A. Single Advanced Major (p. 436)	4	120
Women's and Gender Studies, B.A. Single Honours (p. 434)	4	120
Women's and Gender Studies Minor (Concentration) (p. 441)		18

There is no time limit for completion of any of the above degree programs. Students may complete their degree on a full-time or part-time basis.

Bachelor of Arts (Honours) programs effective September 2015, all Honours programs will be 120 credit hours.

### Micro Credentials:

Micro Diploma in Workplace Health and Safety (p. 374)

## Faculty Academic Regulations

### Admission to the Faculty of Arts B.A. General, Advanced or Honours Degree Programs

The following is a summary of the admission requirements. All admission requirements, as well as application deadline dates and forms, are included in the Faculty of Arts Applicant Information Bulletin (<https://>

[www.umanitoba.ca/student/admissions/media/arts\\_bulletin.pdf](http://www.umanitoba.ca/student/admissions/media/arts_bulletin.pdf)) that is available from the Admissions Office (<http://umanitoba.ca/admissions/>), Enrolment Services, 424 University Centre; this information is also posted on the University of Manitoba website.

Other than the Direct Entry and Casual student, completion of a minimum of 24 credit hours of university level courses is required. Depending on the academic performance on the courses acceptable for credit, students may be admitted to or transit into the Faculty in good standing or on the recommendation of the Dean.

At the point of admission or transfer to the Faculty of Arts all students proceeding to an undergraduate B.A. Degree are automatically in the General Degree Program. Subsequently, students may apply through the Faculty of Arts General Office for entry to either the Advanced Degree Program or the Honours Degree program.

The specific requirements for the General, Advanced and Honours Degree programs are in Basic Faculty Regulations (p. 213) for the B.A. General, Advanced and Honours Degree Programs.

Each department and program outlines its entry requirements.

### Direct Entry from High School

Eligible students may apply to enter the Faculty of Arts upon completion of a high school diploma.

Applicants applying directly to the Faculty of Arts from a Manitoba High School (or equivalent) must meet General Entrance Requirements and Specific Admission Requirements.

The General Entrance requirement is Manitoba high school graduation (5 full credits at the Grade 12 level in courses designated S,G, or U).

The Specific Admission Requirement for the Faculty of Arts is a minimum 70% average over the following four courses with no less than 60% in each course:

- Grade 12 English 40S
- Grade 12 Mathematics 40S
- Two additional academic Grade 12 40S courses

### Transit from University 1

Students may transit to the Faculty of Arts from University 1 prior to Fall Term registration only. The transit function is available on Aurora Student. There are no fees for transiting and there is no application form required.

To be eligible to transit, a student must have achieved a minimum Cumulative Grade Point Average (CGPA) of 2.00 on 24 credit hours. Students who have completed more than 24 credit hours at the point of transit must have achieved a minimum Adjusted Grade Point Average (AGPA) of 2.00. The AGPA calculation will be on the best graded 24 credit hours at the point of transit.

Students who do not meet the minimum transit eligibility requirements should refer to the University 1 section of the calendar for information regarding how to establish their eligibility.

When a student transits from University 1 to the Faculty of Arts, they are automatically enrolled in the B.A. General Degree program. If a student wishes to enter the B.A. Advanced or the B.A. Honours degree programs, they should contact the Faculty of Arts Student Services Office for assistance. U1 students planning to pursue a Bachelor of Arts degree should refer to the charts in the departmental sections of the undergraduate calendar for information on prerequisite courses and minimum performance required for entry. Completion of these requirements while in U1 will prepare a student to complete their chosen program in the prescribed timeframe.

For further information, please contact a Faculty of Arts Academic Advisor ([https://umanitoba.ca/faculties/arts/student\\_resources/Student\\_Advisors.html](https://umanitoba.ca/faculties/arts/student_resources/Student_Advisors.html)) and/or refer to the Faculty of Arts Applicant Information Bulletin (<https://umanitoba.ca/explore/sites/explore/files/2020-12/Arts-bulletin.pdf>) and the University of Manitoba Admissions website (<https://umanitoba.ca/admissions/>).

### Admission as a Transfer Student

Students transferring to the Faculty of Arts from another faculty or school at the University of Manitoba are called "internal transfers."

Students transferring to the Faculty of Arts from another university or college are called "external transfers."

Transfer students must apply for admission to the Faculty of Arts, Advanced Entry Option, on-line (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) by the application deadline date.

For the University of Manitoba's general policy on external transfer students and advanced standing, see Admission to the University of Manitoba (p. 129).

Students who apply to transfer to the Faculty of Arts must have completed no fewer than 24 credit hours of university level coursework and must have achieved a minimum cumulative grade point average of 2.00. Students who have completed 24 credit hours or more and who have not achieved at least a 2.00 cumulative grade point average will be considered for admission on the basis of an adjusted grade point average which is a 2.00 grade point average on the best 24 credit hours. Students who have exceeded the maximum number of "F" grades permitted on courses acceptable for credit in Arts (p. 220) should contact the Faculty of Arts for further information and advice.

Anyone who has been placed on academic suspension by another faculty, school, or external institution will not normally be admissible if less than one year has elapsed since they had been placed on suspension. The waiting period will be increased to two years if the student has been placed on suspension more than once in consecutive years. Please refer to information on transfer credit.

### Admission as a Second Degree Student

A student who holds an undergraduate degree from a recognized university program (including the University of Manitoba) may apply for admission to pursue a second undergraduate degree from the Faculty of Arts. For information regarding possible transfer credit please contact a Faculty of Arts Academic Advisor ([https://umanitoba.ca/faculties/arts/student\\_resources/Student\\_Advisors.html](https://umanitoba.ca/faculties/arts/student_resources/Student_Advisors.html)).

### Admission as a Visiting Student

A "visiting" student is one who is pursuing a degree at another institution and whose basis of admission is a Letter of Permission from their home institution granting permission to register at the University of Manitoba. Previously admitted visiting students can register in a subsequent term without applying for admission, provided they have a Letter of Permission and have not changed their home institution. Certain restrictions may be placed on the kind and number of courses in which they will be allowed to register.

### Admission as a Special Student

The Faculty of Arts does not accept students under the special student category. Students seeking admission as a special student should apply to Extended Education (<https://umextended.ca/>).

### Admission as a Dual Credit High School Student

Dual credit courses in high schools may be offered in partnership with school divisions and high schools. This opportunity is designed for students with particular interest in receiving equivalent to university-level training in a subject area and in receiving university-level credit for the training they receive at the high school level. To complete particular courses for university credit prior to their high school graduation by writing a challenge exam, some students may qualify for admission to the Faculty of Arts under our Dual Credit High School Student Admissions Category.

Note that courses offered as dual credit may vary from year to year. Interested high schools should consult the Faculty of Arts Dean's Office for course availability and information on the dual credit course approval processes.

All prospective students must provide the following to be eligible for admission as a Dual Credit High School

Student:

- evidence of full-time registration in a Manitoba high school; and,
- written recommendation of academic ability from their high school principal (or designate) confirming that they are academically in good standing and academically prepared to take equivalent to university-level courses; and,
- written approval of the Head/Program Director of the Department/ Program offering the course that they are seeking to challenge and the Faculty of Arts Dean's Office; and,
- completion of course pre-requisites as approved by Senate.

### Admission as a Casual Student

This admissions category is designed for students who do not meet the requirements for gaining admission to the Faculty of Arts, but who seek to register in particular courses offered by the Faculty of Arts. It is not meant for students who meet the minimum academic criteria and are in pursuit of any of the four Bachelor of Arts degree programs.

To be eligible for admission as a Casual Student, prospective students must be proficient in English (<https://umanitoba.ca/admissions/undergraduate/requirements/english-language-proficiency/>) and must be 18 years of age or older by the first day of classes for the term in which the relevant course is offered. Students admitted under this category can only register in courses offered by the Faculty of Arts. Prior to registration, students shall obtain written approval from: the course instructor, the Head / Program Director of the Department / Program offering the course, and the Dean of the Faculty of Arts (or designate). Students admitted under the Casual Student category are required to follow all University of Manitoba regulations, including course prerequisite requirements.

### Entrance or Admission to the Faculty of Arts Micro Diploma programs

Students may enter a Faculty of Arts Micro Diploma program in two different ways:

1. By declaring their intention to complete a Micro Diploma as a current student in good academic standing within any degree program at the University of Manitoba. The specific entrance criteria are: good academic standing in any current degree or diploma program at the University of Manitoba. or
2. For students not currently enrolled at the University of Manitoba, admission to a Faculty of Arts Micro Diploma program occurs by way of an application to the Faculty of Arts.

Students with fewer than 24 credit hours of Post-Secondary course work completed seeking admission to the Micro Diploma in Workplace Health and Safety:

- must be proficient in English (visit <http://umanitoba.ca/student/admissions/international/english/index.html>);

AND, EITHER:

- must have graduated from high school with at least 5 full credits at the Grade 12 level in courses designated S, G, or U and must have achieved a minimum average of 70% over the following, with no less than 60% in each of:
  - English 40S
  - Mathematics 40S
  - Two academic 40S courses;

OR,

- must meet the Mature Applicant Category Criteria that follows:
  - 21 years of age or older by September 30 for classes starting in September, January 31 for classes starting in January, May 1 for classes starting in May, and July 1 for classes starting in July
  - Must not meet the regular academic requirements of the applicable program, must have limited experience at college or university (fewer than 24 credit hours), and must be a Canadian citizen or Permanent Resident.

Students with 24 or more credit hours of Post-Secondary course work completed seeking admission to the Micro Diploma in Workplace Health and Safety:

- must have completed a minimum of 24 credit hours of coursework at a recognized college or university with a minimum cumulative grade point average (CGPA) of 2.0 (C) or better;

OR

must be admitted on the Dean's recommendation. [Students who have completed the minimum 24 credit hours of coursework, and do not meet the minimum 2.0 CGPA, may be considered on an individual basis for admission on the Recommendation of the Dean. A minimum 2.0 grade point average (GPA) on the best 24 credit hours of coursework that would be acceptable for credit (transferable) in the Bachelor of Arts General degree Program is required to receive consideration for admission on the Dean's recommendation].

Students currently enrolled in a degree program at the University of Manitoba who seek admission to the Micro Diploma in Workplace Health and Safety must be in good academic standing within their current program of study.

### Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs

Students are encouraged, prior to reading the faculty regulations which follow, to review the, General Academic Regulations (p. 118), in the Academic Calendar.

It is **highly recommended** that all students entering the Faculty of Arts to pursue a General, Advanced or Honours Degree complete six credit hours in each of five different subject fields within the first 30 credit hours. If possible, they should include among those courses the subject fields in which they will probably specialize because future choices may be limited by their initial choice of courses. Also, students must meet a subject field requirement to qualify for entrance to both the Advanced and Honours programs.

Honours courses may be taken by students in the General or Advanced Major programs with the written consent of the department head or program coordinator.

## General Degree Program Its General Purpose

The General Degree in the Faculty of Arts involves taking courses in what are traditionally referred to as the "liberal" arts. The goal of a liberal arts education is to provide students with an education in the humanities and social sciences and at the same time prepare them for future careers. An Arts education is intended to provide students with "employability skills" that are highly valued by employers and needed in the contemporary workplace. Some of these skills include reading, writing, listening, speaking effectively, knowledge of language, critical thinking, problem solving, basic numeracy, information literacy, and an appreciation of our cultural, political, and economic milieu.

The General Degree would not normally prepare students for graduate studies. Most graduate programs require students complete a four year degree. Therefore students interested in a graduate program should complete the Bachelor of Arts Advanced or Honours Degree Program following discussion with a departmental graduate program advisor.

### Entrance into the B.A. General Degree Program

1. At the point of entry to the Faculty of Arts all students proceeding to an undergraduate B.A. Degree are automatically in the General Degree Program. Subsequently, students may apply through the Faculty of Arts General Office for admission to either the Advanced Degree Program or the Honours Degree program.
2. All students who have completed 30 credit hours of coursework are encouraged to declare a Major and a Minor. Once the Major or Minor is declared it can be changed at some later registration. Students may also declare a second or Double Major in lieu of a Minor. Students who want to declare a Double Major must complete a Double Major declaration form available in the Faculty of Arts General Office or on the Faculty of Arts website. Students should note that for entry into Majors/Minors, the faculty requirement is a grade of "C" or better in the prerequisite course(s).

For entry into a Major requiring courses from more than one department, the faculty requirement is an average of "C" or better in all courses which are eligible to count towards the Major.

For detailed information regarding entry and specific course requirements for Majors and Minors, see the specific departmental listing in the Academic Calendar.

### Requirements for Continuing in the B.A. General Degree Program

1. By the time students complete 60 credit hours, they should have six credit hours in each of five different subject fields and must have declared a Major and Minor. Students who have not declared a Major or Minor by the time 60 credit hours of coursework have been completed, will not be able to continue registration until a Major/Minor is declared.
2. Students admitted to the Faculty of Arts, must by the time they have completed 60 credit hours have successfully completed or be registered for at least three credit hours in a course with significant content in written English and at least three credit hours in a course in mathematics (Please refer to the General Academic Regulations; Approved Written English and Mathematics courses (p. 118)).
3. Students must meet the minimum performance level.

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C"

average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

### The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.
 

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.
5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.

10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

### Advanced Degree Program Its General Purpose

This program is intended primarily to serve students who desire a general education along with a reasonable degree of specialization in one area of study through the Major. In addition to the basic skills learned in the B.A. General Degree Program, an extra year of study provides the opportunity to learn more advanced skills such as research, critical thinking, information management and public speaking.

The Advanced Degree Program is also well suited to students seeking to build an academic term or year of studies abroad into their undergraduate degree. The Advanced Degree offers the time in the degree to take advantage of opportunities for international focus and experience.

While most graduate programs require students complete an Honours Degree, it may be possible to enter a graduate program on the basis of the Advanced Degree. Students should discuss this possibility with a departmental graduate program advisor.

### Entrance to the B.A. Advanced Degree Program

1. To enter the Bachelor of Arts Advanced Degree program, a student must have successfully completed a minimum of 24 credit hours and attained a minimum DGPA of 2.00 or higher.

For entry to a B.A. Advanced Major requiring courses from only one department, the faculty requirement is a grade of "C" or better in the prerequisite course(s). Prerequisite courses and any supplemental Advanced Major entry requirements are listed in each department's section of the undergraduate calendar.

Together with the above, students who have taken additional courses toward the B.A. Advanced Major require a "C" average in all Advanced Major required courses, including the higher grade of any repeated course(s) and excluding any failed course(s).

For entry to a B.A. Advanced Major program requiring courses from more than one department, students must have an average of "C" or better in the courses eligible to count toward the requirements of the chosen Advanced Major Program.

2. All students are required, upon entering the Single Advanced Major Program, to declare a Major and Minor. Students entering the Double Advanced Major Program are required to declare two Majors.

For additional information regarding entrance into Majors (such as which courses are eligible for counting as fulfilling the Major) see the specific listing for the relevant department (p. 206). Students with questions about an Advanced Major in a particular subject should consult an instructor in the appropriate department.

To officially declare an Advanced Major, students must fill out the application form and meet with an Arts Academic Advisor. Application forms are available in the Faculty of Arts Student Services Office (134 Fletcher Argue) or on the Faculty of Arts website ([https://umanitoba.ca/faculties/arts/student\\_resources/student\\_forms.html](https://umanitoba.ca/faculties/arts/student_resources/student_forms.html)).

3. For entry to the Minor a grade of "C" or better in the prerequisite course(s) is required.

### Requirements for Continuing in the B.A. Advanced Degree Program

1. Students admitted to the Faculty of Arts, must by the time they have completed 60 credit hours have successfully completed or be registered for at least three credit hours in a course with significant content in written English and at least three credit hours in a course in mathematics. (Please refer to the General Academic Regulations; Approved Written English and Mathematics courses) (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Residence-Written-English>)
2. Students must meet the minimum performance level.

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

#### The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor.



A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

- A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 42 credit hours numbered at or above the 2000 level.
- Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

### Honours Degree Program

#### Its General Purpose

This program is designed to provide a high degree of specialization in a subject field. The entrance requirements and evaluation of performance are at a higher level than the General or Advanced Degree programs. The Honours Degree program is the preferred program for students seeking entrance to graduate study.

#### Entrance to the B.A. Honours Degree Program

To enter one of the Bachelor of Arts Honours Degree programs, a student must:

- Complete an application form, available in the Faculty of Arts Student Services Office (134 Fletcher Argue) and on the Faculty of Arts website ([https://umanitoba.ca/faculties/arts/student\\_resources/student\\_forms.html](https://umanitoba.ca/faculties/arts/student_resources/student_forms.html)); and,
- Have successfully completed a minimum of 24 credit hours (including at least three credit hours of coursework required by the selected Honours program); and,
- Have attained a minimum DGPA of 3.00 or higher (minimum 3.50 for Psychology Honours); and,
- Have attained a minimum "B" average ("B+" for Psychology) or better in all course(s) completed in the intended Honours subject field(s) including failed and repeated courses.

Other program specific Honours entry requirements:

Students applying for Honours Psychology must also have a minimum grade of "B" in PSYC 2260.

Students applying for Honours History must also have a grade of "B" or higher in any completed 3000 and 4000 level History courses.

### Requirements for Continuing in the B.A. Honours Degree Program

- Prior to each registration, Honours students must have their courses approved by the department in person, and then by the Faculty of Arts Student Services Office, and cannot make any subsequent changes without receiving prior permission from their department and the Faculty of Arts.
- Students admitted to the Faculty of Arts, must by the time they have completed 60 credit hours have successfully completed or be registered for at least three credit hours in a course with significant content in written English and at least three credit hours in a course in mathematics. (Please refer to the General Academic Regulations; Approved Written English and Mathematics courses) (p. 118)
- To continue in an Honours Degree program, the student must maintain a degree grade point average of 3.0 (3.5 for Psychology) at each point of assessment (as well as meet any additional departmental requirements there may be). In order to continue in Honours History students must also maintain a "B" grade or higher in each History course at the 3000 and 4000 level.

Students who fail to maintain the required minimum degree grade point average are required to withdraw from the Honours Degree program. They will be automatically placed in the General Degree Program and will have the following academic assessment permanently recorded on their transcript: "Required to Withdraw from the Honours Program." These students may be eligible to apply to the Advanced Degree Program.

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

- The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
- In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
- Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
- Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Bachelor of Arts Degree Program Requirements summary

### General Degree Program (90 Credit Hours)

#### Requirement 1: Major(s) or Honours

- Minimum 30 credit hours
- Minimum average of "C" on all courses taken for purposes of satisfying the Major

#### Requirement 2: Minor

- Minimum 18 credit hours; except when Major is Global Political Economy or for students in a Double General Major Program

#### Requirement 3: Options

- Minimum 30 credit hours outside student's chosen Major(s) and Minor
- Minimum 12 credit hours from the Major and/or Minor or other subjects
- Within the above requirements, students must also satisfy the following requirements. Note: a course may satisfy more than one requirement

#### Requirement 4: Written English and Math

- Written English and Math Requirement (minimum 3 credit hours in each)

#### Requirement 5: Humanities Requirement

- 6 credit hours from subjects identified as Humanities

#### Requirement 6: Social Science Requirement

- 6 credit hours from subjects identified as Social Sciences

#### Requirement 7: Science Requirement

- 6 credit hours of coursework that satisfies the Science requirement

#### Requirement 8: Indigenous Content Requirement

- 3 credit hours of coursework that satisfies the Indigenous Content requirement

#### Requirement 9: General Requirements

- 60 credit hours of courses must be taken from courses taught by the Faculty of Arts (may include 24 credit hours of Mathematics or Art History courses)
- 30 credit hours must be at the 2000 level or higher
- 6 credit hours (cr. hrs.) in each of 5 subject fields (e.g., 6 cr. hrs. Psychology, 6 cr. hrs. Economics, 6 cr. hrs. Computer Science, 6 cr. hrs. French, 6 cr. hrs. Women's and Gender Studies)

#### Requirement 10: Residency Requirements

- Degree: 48 credit hours or the final 30 credit hours must be taken at the University of Manitoba
- Major(s): 18 credit hours at the University of Manitoba

#### Requirement 11: Graduating Grade Point Average (GPA)

- Minimum average of "C" on 90 credit hours of passed coursework offered for degree credit

### Advanced Degree Program (120 Credit Hours)

#### Requirement 1: Major(s) or Honours

- Single Advanced Major: minimum 48 credit hours (some departments require more)
- Double Advanced Major: minimum 42 credit hours
- Minimum average of "C" on all courses taken for purposes of satisfying the Major

#### Requirement 2: Minor

- minimum 18 credit hours; except when Major is Global Political Economy or for students in a Double Advanced Major Program

#### Requirement 3: Options

- Single Advanced Major: minimum 42 credit hours outside student's chosen Major and Minor
- Single Advanced Major: minimum 12 credit hours from the Major and/or Minor or other subjects
- Double Advanced Major: minimum 36 credit hours outside student's chosen Majors
- Within the above requirements, students must also satisfy the following requirements. Note: a course may satisfy more than one requirement

#### Requirement 4: Written English and Math

- Written English and Math Requirement (minimum 3 credit hours in each)

#### Requirement 5: Humanities Requirement

- 6 credit hours from subjects identified as Humanities

#### Requirement 6: Social Science Requirement

- 6 credit hours from subjects identified as Social Sciences

#### Requirement 7: Science Requirement

- 6 credit hours of coursework that satisfies the Science requirement

#### Requirement 8: Indigenous Content Requirement

- 3 credit hours of coursework that satisfies the Indigenous Content requirement

#### Requirement 9: General Requirements

- 81 credit hours of courses must be taken from courses taught by the Faculty of Arts (may include 36 credit hours of Mathematics or Art History courses)
- 42 credit hours must be at the 2000 level or higher
- 6 credit hours (cr. hrs.) in each of 5 subject fields (e.g., 6 cr. hrs. Psychology, 6 cr. hrs. Economics, 6 cr. hrs. Computer Science, 6 cr. hrs. French, 6 cr. hrs. Women's and Gender Studies)

#### Requirement 10: Residency Requirements

- Degree: 60 credit hours must be taken at the University of Manitoba
- Single Advanced Major:
  - 30 credit hours at the University of Manitoba on a Single Advanced Major requiring 48 to 57 credit hours; or
  - 36 credit hours at the University of Manitoba on a Single Advanced Major requiring more than 57 credit hours
- Double Advanced Major: 27 credit hours at the University of Manitoba on a Double Advanced Major requiring 42 credit hours

#### Requirement 11: Graduating Grade Point Average (GPA)

- Minimum "C" average on 120 credit hours of passed coursework offered for degree credit

### Honours Degree Program (120 Credit Hours)

#### Requirement 1: Major(s) or Honours

- Single Honours: varies by Honours subject field
- Double Honours: varies by Honours subject field(s)

#### Requirement 2: Minor

- Optional Minor

**Requirement 3: Options**

- Single Honours: ancillary options: minimum 24 to 36 credit hours
- Double Honours: ancillary options: minimum 6 credit hours
- Within the above 3 requirements, students must also satisfy the following requirements. Note: a course may satisfy more than one requirement.

**Requirement 4: Written English and Math**

- Written English and Math Requirement (minimum 3 credit hours in each)

**Requirement 5: Humanities Requirement**

- 6 credit hours from subjects identified as Humanities

**Requirement 6: Social Science Requirement**

- 6 credit hours from subjects identified as Social Sciences

**Requirement 7: Science Requirement**

- 6 credit hours of coursework that satisfies the Science requirement

**Requirement 8: Indigenous Content Requirement**

- 3 credit hours of coursework that satisfies the Indigenous Content requirement

**Requirement 9: General Requirements**

- 6 credit hours (cr. hrs.) in each of 5 subject fields (e.g., 6 cr. hrs. Psychology, 6 cr. hrs. Economics, 6 cr. hrs. Computer Science, 6 cr. hrs. French, 6 cr. hrs. Women's and Gender Studies)

**Requirement 10: Residency Requirements**

- Degree: 60 credit hours must be taken at the University of Manitoba
- Honours subject(s)
  - 33 credit hours at the University of Manitoba on single Honours requiring 54 to 69 credit hours; or
  - 39 credit hours at the University of Manitoba on single Honours requiring more than 69 credit hours; or
  - 24 credit hours at the University of Manitoba on Double or Joint Honours requiring 42 to 45 credit hours; or
  - 21 credit hours at the University of Manitoba on Double or Joint Honours requiring less than 42 credit hours; or
  - 33 credit hours at the University of Manitoba on Double or Joint Honours requiring more than 45 credit hours

**Requirement 11: Graduating Grade Point Average (GPA)**

- Minimum 3.00 degree grade point average on total passed credit hours offered for degree credit

**Basic Faculty Regulations for the Faculty of Arts Micro Diploma Programs**

Specific course requirements for the different Micro Diplomas can be found in each section of the calendar of the Unit offering the Micro Diploma. In addition to the course requirements listed in the calendar, the following basic faculty regulations apply to all Micro Diploma programs:

1. Minimum Credit Hours: Faculty of Arts Micro Diplomas consist of 9-18 credit hours at the undergraduate level, which may include other types of instructional or learning opportunities such as professional development or work-integrated learning experiences.
2. Time to completion: Students have four years after declaring their intent to complete a Micro Diploma to complete the Micro Diploma program.

3. Minimum Credit Hour Load: There are no minimum term credit hour load requirements for students in the Micro Diploma programs.

4. Minimum Grades Required: In order to graduate, students must obtain a minimum C average on all courses required in the Micro Diploma program with no grade lower than a D.

5. Residency Requirements: All courses required in any Faculty of Arts Micro Diploma program must be taught by the University of Manitoba. Students cannot transfer external credit for use toward a Faculty of Arts Micro Diploma.

6. Credit Transfer to Degree Programs: Degree level courses completed as part of a Micro Diploma can be used toward the completion of any of the Bachelor of Arts degree programs. Likewise, courses completed as part of the Bachelor of Arts Degree programs can also be used toward the completion of a Faculty of Arts Micro Diploma.

7. Students are responsible for meeting all course prerequisites of courses required in the Micro Diploma programs and for following all application and registration deadlines

**Requirements for Dual Credit High School Students**

Students admitted as dual credit high school students will be required to demonstrate their competencies in a course by challenging the university final exam.

Challenge exams will be scheduled by the relevant Department or Program and may be invigilated either on the University of Manitoba campus or at the student's high school. The University of Manitoba faculty member who is responsible for the delivery of the course will determine the structure and duration of the exam.

High schools will be responsible for delivering the appropriate content to ensure students are prepared for the examinations. If they are willing to do so, a University of Manitoba faculty member will work with each high school to ensure that high school instructors are provided with the course content equivalent to the content of the corresponding courses offered at the University of Manitoba. Such support includes supplying course outlines, textbook information, and where appropriate, sample midterms and final examinations. These arrangements must be approved by the Department Head/Program Director within the unit that is responsible for these course offerings at the University of Manitoba.

Students admitted will be subject to the same regulations concerning voluntary withdrawals and appeal procedures as all other students admitted to the Faculty of Arts. Limited access restrictions will apply to university courses from which students have voluntarily withdrawn while enrolled as a Dual Credit High School student.

In addition to the university requirements listed above, all dual credit high school courses must adhere to requirements outlined in the provincial dual credit policy. Contact the Faculty of Arts Student Services office for information on available courses and for information regarding which high schools may offer dual credit for their students as an option.

**Requirements for Casual Students**

Students admitted under the Casual Student category will be subject to the same regulations concerning voluntary withdrawals and appeal procedures as all other students admitted to the Faculty of Arts. Limited access restrictions will apply to university courses from which students have voluntarily withdrawn while enrolled as casual students.

## Additional Faculty Regulations and Policies Applicable to All Degree Programs in the Faculty of Arts

### Five-subject Field Requirement and Humanities / Social Science / Indigenous Content / Science Requirement

#### Recognized Five Subject Fields

Faculties and Schools offer a number of courses covering a variety of subjects. To satisfy the subject field requirement for any B.A. Degree (with the exception of the B.A. Integrated Studies) a student must complete 6 credit hours in each of 5 different course subjects. For example: 6 credit hours in Psychology, plus 6 credit hours in German, plus 6 credit hours in Mathematics, plus 6 credit hours in Music, plus 6 credit hours in Biological Sciences. Students in the B.A. Integrated Studies Degree Program must complete 3 credit hours in each of 5 different course subjects.

Each course subject in the Faculty of Arts has been further categorized as either a Humanities or Social Science. All courses offered by the Faculty of Science and select courses from other faculties will satisfy the Bachelor of Arts Science requirement. Therefore a course may satisfy both the subject field requirement as well as the requirement for the Humanities/Social Science/Science.

Listed below are the categories of Humanities, Social Sciences, Sciences and the course subjects that belong to each category.

#### Humanities

- Course subjects taught by the Faculty of Arts that can be used towards the **Humanities** requirement: Arabic, Asian Studies, Canadian Studies, Catholic Studies, Classical Studies, English (excluding ENGL 0930, ENGL 0940, ENGL 2000, ENGL 2001), Film Studies, French, German, Greek, Hebrew, History, Hungarian, Icelandic, Italian, Judaic Civilization, Latin, Indigenous Languages, Indigenous Studies, Philosophy, Polish, Portuguese, Religion, Russian, Spanish, Theatre, Ukrainian, Ukrainian Canadian Heritage Studies, and Yiddish. In addition the following courses may be used: American Sign Language ASLL 1000; Global Political Economy GPE 3700; Women's and Gender Studies WOMN 1500, WOMN 2530, WOMN 2600, WOMN 2620, WOMN 2630, WOMN 3110, WOMN 3120 and WOMN 3620.
- Course subjects offered by other units which can be used towards the Humanities requirement: Art History (i.e. all courses listed with course prefix FAAH). (For details on Art History courses (p. 442)).

#### Social Sciences

- Course subjects taught by the Faculty of Arts that can be used towards the Social Science requirement: Anthropology, Economics, Global Political Economy courses GPE 1700, GPE 2700, GPE 4700, Labour Studies, Linguistics, Political Studies, Psychology, and Sociology. In addition the following courses may be used: Women's and Gender Studies WOMN 1600, WOMN 2500, WOMN 2560, WOMN 2610, WOMN 2640, WOMN 2650, WOMN 3100, WOMN 3130, WOMN 3520, WOMN 3550, WOMN 3560 and Others ARTS 1160.

#### Indigenous Content Requirement

- Students may complete any of the courses listed below in order to satisfy the Indigenous Content Requirement:

Course	Title	Hours
AGRI 2300	Indigenous Issues in Food Systems	3
INDG 1200	Indigenous Peoples in Canada	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
INDG 2012	Indigenous History in Canada	6

INDG 2020	The Métis in Canada	3
INDG 2080	Inuit Society and Culture	3
HIST 2010	Indigenous History in Canada (C)	6
HIST 2020	The Métis in Canada (C)	3
HIST 4120	History of Aboriginal Rights (C)	6
POLS 2802	Introduction to Indigenous Politics	3
POLS 3870	Politics of Indigenous-Settler Relations	3
THTR 2200	Canadian Indigenous Theatre	3
SOC 3762	Law, Justice, and Indigenous Peoples	3
WOMN 2630	Indigenous Feminisms	3

#### Sciences

- Students may complete any combination of the courses listed below adding up to six credit hours to satisfy the Bachelor of Arts Science requirement.

#### Faculty of Science

Any course offered by the Faculty of Science with the exception of the former BIOL 1110

#### Faculty of Agricultural and Food Sciences

Course	Title	Hours
AGRI 1600	Introduction to Agrifood Systems	3
ENTM 1000	World of Bugs	3
ENTM 2050	Introductory Entomology	3
PLNT 1000	Urban Agriculture	3
PLNT 2500	Crop Production	3
SOIL 3060	Introduction to Agrometeorology	3
SOIL 3520	Pesticides: Environment, Economics and Ethics	3
SOIL 3600	Soils and Landscapes in Our Environment	3

#### School of Art

Course	Title	Hours
FA 1020	Mathematics in Art	3

#### Clayton H. Riddell Faculty of Environment, Earth, and Resources

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1290	Introduction to Physical Geography	3
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2272	Natural Hazards (PS)	3
GEOG 2520	Geography of Natural Resources (HS)	3
GEOG 2540	Weather and Climate (PS)	3
GEOG 2541	Météorologie et climatologie (PS)	3
GEOG 2550	Geomorphology (PS)	3
GEOG 2700	Introduction to Arctic System Science	3
GEOG 3390	Introduction to Climate Change and Its Causes (PS)	3
GEOL 1340	The Dynamic Earth	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
GEOL 1410	Natural Disasters and Global Change	3
GEOL 1420	Exploring the Planets	3
GEOL 2350	Canada Rocks: The Geology of Canada	3
GEOL 2390	Environmental Geology	3
GEOL 2440	Structural Geology 1	3

GEOL 2500	Introduction to Mineralogy	3
GEOL 2570	Energy and Mineral Resources	3
GEOL 3310	Paleontology	3

### Price Faculty of Engineering

Course	Title	Hours
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3

For course titles and descriptions see the relevant faculty entries in this *Calendar*.

### Major, Minor (Concentration) or Honours Programs

1. The Faculty of Arts offers various Majors, Minors (Concentrations) and Honours programs. Here is a listing of the programs (p. 206) and also refer to the respective unit pages.
2. Major and Minor (Concentration) programs offered by other Faculties or Schools are listed here (p. 442). These include a General Major, Advanced Major and Minor (Concentration) offered by the Department of Mathematics, a Minor in Business offered by the Faculty of Management/I.H. Asper School of Business, and a General Major and Minor (Concentration) in Art History offered by the School of Art.

An Arts student may declare a Minor (Concentration) (dependent on the student's program) offered by any Faculty and School providing the Minor (Concentration) program consists of a minimum of 18 credit hours. For details on those Minor (Concentration) programs please refer to the relevant Faculty/ School's chapter in this *Calendar*.

### Courses Acceptable for Credit in the Faculty of Arts

In addition to all courses offered by the Faculty of Arts there are two other categories of courses acceptable for credit in the Faculty of Arts:

#### Courses Offered by Other Faculties or Schools at the University of Manitoba

Effective September 2007, all degree credit courses offered by other Faculties or Schools at the University of Manitoba are acceptable for credit in Arts (**excludes Pass/Fail courses**).

If a student was registered in another faculty or school within the University of Manitoba prior to registering in the Faculty of Arts, all courses in which the student received a final grade will be treated in the same way as they would have been had they been taken by a student already registered in the Faculty of Arts. That is, all of these courses will count in determining eligibility for admission to Arts in accordance with rules defined in the sections on Direct Entry from High School, Transit from University 1, and Maximum Number of "F" Grades Permitted on Courses Acceptable for Credit in the Arts and these rules will all be taken into account when determining the student's grade point averages in accordance with rules for Repeating a Course and Maximum Number of "F" Grades Permitted on Courses Acceptable for Credit in the Arts. In addition, they will all count towards the minimum number of credit hours required for graduating, provided the student received a passing grade in each of them, and the courses did not conflict with some other graduation or continuing regulation (such as the Residency Requirement).

#### Courses Offered at Other Universities and Colleges

Effective September 2007, all courses offered at other universities and colleges which are evaluated as equivalent to University of Manitoba

courses (**excludes Pass/Fail courses**) will be used when determining eligibility for admission and transfer credit.

There are two groups of courses that are taken at other universities or colleges and which can be used for credit in the Faculty of Arts at the University of Manitoba, namely: a) those taken by students who are already registered in the Faculty of Arts at the University of Manitoba, and b) those taken by students prior to transferring to the Faculty of Arts at the University of Manitoba.

1. Students who are already registered in the Faculty of Arts at the University of Manitoba, and who wish to take courses at another university or college to count towards their University of Manitoba degree are required to obtain a Letter of Permission from the Registrar's Office prior to registering at that other institution; see General Academic Regulations (p. 118). The Letter of Permission will not be approved for a student who is in academic jeopardy or on academic suspension. As of September 1999 grades earned in courses at other universities are taken into account in the cumulative hours when determining the Grade Point Averages at the University of Manitoba. Grades earned at other universities will not be used in determining eligibility for awards.
2. All completed courses that are deemed acceptable for credit in any degree program at the University of Manitoba (**excludes Pass/Fail courses**) which were taken by a student registered at another university or college prior to transferring to the Faculty of Arts, will be used when determining eligibility for admission and transfer credit. That is, all of these courses will count in determining admissibility in accordance with, Direct Entry from High School, Transit from University 1, and Maximum Number of "F" Grades Permitted on Courses Acceptable for Credit in Arts.

As of September 1999 the applicable courses (credits and attempts) in both a) and b) are included on the University of Manitoba record, the external courses are counted as attempts and external grades are taken into account when determining the University of Manitoba grade point average as well as count towards the maximum number of "F" grades permitted in an Arts degree. Grades earned at other universities will not be used in determining eligibility for awards. There is no limit on attempts in any degree program.

Courses completed at institutions external to the University of Manitoba taken more than 10 years prior to the point of admission will not be considered for transfer credit, except in the case of students entering the B.A.I.S. program.

Students who wish to request a review or reassessment of transfer credit must do so within eight months of the initial determination of transfer of credit to the University of Manitoba.

#### Residency Requirement

Each of the four undergraduate degree programs has a residency requirement which requires that a minimum number of credit hours must be taken at the University of Manitoba itself in order to qualify for the degree. Students admitted to the Faculty of Arts B.A. General, Advanced and Honours Degree Programs will also be required to satisfy a residency requirement on the Major(s), Advanced Major(s) or Honours subject(s) in addition to the residency requirement on the degree. Similarly students admitted to the B.A. Integrated Studies Degree Program will be required to satisfy a residency requirement on the Concentration in addition to a residency requirement on the degree.

### B.A. General Degree

1. Degree: There are two ways in which the Residency Requirement for the B.A. General Degree may be satisfied: either by successfully completing at the University of Manitoba no fewer than 48 credit hours of the required minimum 90 credit hours (these 48 credit hours may be taken at various points in the student's career); or by successfully completing at the University of Manitoba itself no fewer than the last 30 credit hours of the required minimum 90 credit hours.
2. Major: A minimum of 18 credit hours of the 30 credit hours required for the Major must be successfully completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.

### B.A. Advanced Degree

1. Degree: To receive the B.A. Advanced Degree, the student must successfully complete at least 60 credit hours of the required minimum 120 credit hours at the University of Manitoba.
2. Single and Double Advanced Majors: Students must successfully complete at the University of Manitoba or through an approved University of Manitoba exchange program the hours of coursework in their Major program as noted below:
  - In a Single Advanced Major requiring 48 to 57 credit hours, at least 30 credit hours must be completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.
  - In a Single Advanced Major requiring more than 57 credit hours, at least 36 credit hours must be completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.
  - In a Double Advanced Major requiring 42 credit hours, at least 27 credit hours must be completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.

### B.A. Honours Degree

1. Degree: To receive the B.A. Honours Degree, the student must successfully complete at least 60 credit hours of the required 120 credit hours at the University of Manitoba.
2. Honours Subject(s): Students must successfully complete at the University of Manitoba or through an approved University of Manitoba exchange program the hours of coursework in their Honours subject(s) as noted below:
  - In a single Honours subject requiring 54 to 69 credit hours, at least 33 credit hours must be completed in the Honours subject.
  - In a single Honours subject requiring more than 69 credit hours, at least 39 credit hours must be completed in the Honours subject.
  - In a double or joint Honours subject requiring 42 to 45 credit hours in one Honours subject, at least 24 credit hours must be completed in that Honours subject.
  - In a double or joint Honours subject requiring less than 42 credit hours in one Honours subject, at least 21 credit hours must be completed in that Honours subject.
  - In a double or joint Honours subject requiring more than 45 credit hours in one Honours subject, at least 33 credit hours must be completed in that Honours subject.
3. Once admitted to an Honours program, students are expected to take all their courses at the University of Manitoba. For information

on exceptions to this requirement, the student should consult the Faculty of Arts General Office.

### B.A. Integrated Studies Degree

1. Degree: To receive the B.A. Integrated Studies Degree, the student must successfully complete at the University of Manitoba no fewer than 36 credit hours of the required minimum 90 credit hours (these 36 credit hours may be taken at various points in the student's career).
2. Concentration(s): A minimum of 9 credit hours of the 18 credit hours required for the Concentration must be successfully completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.

### Residency Requirement Université de Saint-Boniface

In order to satisfy the University of Manitoba, Faculty of Arts residency requirement, students who transfer from Université de Saint-Boniface must complete the following minimum hours at the Fort Garry Campus.

1. In order to receive the B.A. (General), B.A. (Advanced), or B.A. Honours Degree, the student must successfully complete at least 30 credit hours at the Fort Garry campus.

### Year-of-Study Equivalents

A student's progress towards a degree is measured in terms of credit hours passed rather than years of study completed. The following table may be used to determine the year equivalent.

Year Equivalent	Credit Hours Passed (General/Integrated Studies Degree)	Credit Hours Passed (Advanced/Honours Degree)
1	fewer than 24 credit hours	fewer than 24 credit hours
2	24 credit hours to fewer than 54 credit hours	24 credit hours to fewer than 54 credit hours
3	54 credit hours or more	54 credit hours to less than 84 credit hours
4	not applicable	84 credit hours or more

### Maximum Number of Courses During a Term

Normally a student may attempt a maximum of 15 credit hours during a Fall or Winter term or a maximum of 18 credit hours during the Summer Term. If a student has taken the maximum credit hours in the previous term and has obtained a degree grade point average of 2.75 and is in good standing, they may apply at the Faculty of Arts General Office to be allowed to take 3 additional credit hours per term.

### Prerequisite, Corequisite, and Course Availability

**Prerequisite**  
Minimum grades of "C" are required in all courses listed as prerequisites, except as otherwise noted in the course descriptions published in each department and program section of this chapter. If a course is a prerequisite for a second course, the prerequisite must be met in order to continue in the second course.

Some course descriptions will indicate that a specific course is a pre- or corequisite for the course in which you wish to register. If you have not previously taken the specific course, you may register for it in the same term.

### Corequisite

Where a course identifies another course as a corequisite, both courses must be taken at the same time.

### Course Availability

Not all courses listed in this *Calendar* are offered every year. The course(s) being offered for the current terms are available for review by accessing the Class Schedule in Aurora. ([https://aurora.umanitoba.ca/banprod/bwckctlg.p\\_disp\\_dyn\\_ctlg/](https://aurora.umanitoba.ca/banprod/bwckctlg.p_disp_dyn_ctlg/))

### Challenge for Credit

Some departments in the Faculty of Arts offer courses by means of challenge for credit. Since the courses offered in this manner may vary from year to year, students interested in this method of attaining credit should consult the Challenge for Credit section in the Faculty of Arts Registration Information located on the Faculty of Arts website (<https://umanitoba.ca/faculties/arts/>). The Academic Schedule (p. 28) in this *Calendar* contains the relevant registration deadline dates appropriate to challenge for credit.

### Repeating a Course

**Limited Access (see University Policy and Procedures- Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>) will not affect registration for the 2022-2023 (including Summer Term 2023). Effective 2018 Winter Term - Limited Access Policy in Effect**

Limited Access is a registration rule that allows students who have never before completed or voluntarily withdrawn from a course (or its equivalent) the opportunity to register for the course before students who are repeating or have previously withdrawn from the course in question.

If a student has previously taken a course and received a final grade, or voluntarily withdrawn from the course (VW)<sup>1</sup>, any future attempt to take that course or its equivalent is considered a repeated course.

Effective Winter 2018, Limited Access will prevent a student from registering or waitlisting for a course (or equivalent) being repeated until the "Limited Access Term Expiry Date" has passed.

Limited Access applies for three consecutive terms following the term that the course in question was last completed or voluntarily withdrawn (VW).

During these three terms of Limited Access, a student may register to repeat a course, without permission, only when the Limited Access Term Expiry Date has passed.

Once the three terms of Limited Access has expired, any student wishing to repeat a course will need to request permission to do so from the Faculty of Arts General Office.

Students who wish to repeat a course for which they have obtained a grade of "C" or better are encouraged to discuss their choice to do so with an Arts Academic Advisor prior to registration.

- All completed courses will appear on the student's transcript and will be used to calculate the student's attempted hours.
- Repeating a course will not remove the original course or grade from the transcript.
- All courses with "F" grades that are repeated count towards the limit of "F" grades permitted in an Arts (p. ) degree.

<sup>1</sup> A previous VW is only considered a repeat if you withdrew in Winter 2017 or later.

### Statute of Limitations

Students who have not been registered at the University of Manitoba (or any other post-secondary institution) for a period of five years or longer immediately preceding an admission to Arts may submit a written

appeal to the General Office to be allowed to "start afresh" a Faculty of Arts degree. If the appeal is granted, all courses listed on the University of Manitoba record will remain but all previous work will not count/ apply towards satisfying degree requirements nor affect the degree GPA calculation. The following notation will appear under the term of readmission:

"Having discontinued attendance at post-secondary institutions for a period of five years or more, this student has been permitted to start afresh on recommendation of the Dean. All previous credits have been forfeited."

### Maximum Number of F Grades Permitted on Courses Acceptable for Credit in Arts

Each student in the Faculty of Arts will be placed on academic suspension for one year despite evidence of improved performance if they have more than 36 credit hours of "F" grades.

Following a one year suspension, the student may return upon application to the Faculty of Arts General Office by selecting one of the following irreversible options:

1. to continue with no possibility of further "F" grades. Any further "F" grades will result in academic suspension for two years. (Following the two year suspension, the student may apply to the Faculty of Arts General Office to return to start afresh.)
- Or
2. start afresh, with their previous work not counting towards satisfying degree requirements.

(In either case this does not mean that the previous coursework will be removed from the student history or transcript.)

### Dean's Honour List and Graduating with Distinction or First Class Honours

#### Dean's Honour List

To qualify for this list a student must be registered in one of the four degree programs offered by the Faculty of Arts and complete at least 12 credit hours offered by the University of Manitoba during a term and attain a minimum term grade point average of 3.75. The notation: "Dean's Honour List", will be included on the student's transcript specific to that term.

#### Degree with Distinction (Bachelor of Arts Integrated Studies and 3-Year General Degree)

To obtain a Bachelor of Arts General or a Bachelor of Arts Integrated Studies "Degree with Distinction" a student must achieve a final minimum Degree Grade Point average of 3.80, and must complete a minimum of 60 credit hours at the University of Manitoba. The term "Degree with Distinction" will appear on the student's parchment and the student's transcript of marks.

#### Degree with Distinction (Bachelor of Arts Advanced Degree)

To obtain a Bachelor of Arts Advanced "Degree with Distinction" a student must achieve a final minimum Degree Grade Point average of 3.80, and must complete a minimum of 90 credit hours at the University of Manitoba. The term "Degree with Distinction" will appear on the student's parchment and the student's transcript of marks.

#### First Class Honours (Honours Degree Only)

To obtain a Bachelor of Arts Honours Degree with "First Class Honours", a student must achieve a final minimum Degree Grade Point average of 3.80, and must complete a minimum of 90 credit hours at the University

of Manitoba. The term "First Class Honours" will appear on the student's parchment and the student's transcript of marks.

### University Gold Medal and Program Medals Gold Medal

The Faculty of Arts will award the University Gold Medal to the student graduating with an Arts degree who:

1. has the highest grade point average of all graduating students on all courses creditable in Arts attempted at the University of Manitoba over the last two Fall/Winter terms prior to graduation (with each Fall/Winter consisting of a minimum 24 credit hours completed at the University of Manitoba) including any courses taken in the Summer Session between the last two Fall/Winter terms and
2. has a minimum grade point average of 3.85 which is determined on the basis of all courses creditable in Arts attempted in completing the degree, including courses approved on transfer from other faculties/schools at the University of Manitoba.

Students who have up to 30 hours of external transfer credit (including failed courses) would be eligible providing they attain the minimum grade point average of 3.85 on all courses completed at the University of Manitoba which are acceptable for credit in Arts.

The Gold Medal winner is ineligible for Faculty of Arts program medals.

For specific details on the tie-breaking mechanism, contact the Faculty of Arts General Office.

### Program Medals

The Faculty of Arts will award a Program Medal to the student graduating in each of the General, Integrated Studies, Advanced and Honours Degree programs who:

1. has the highest grade point average of all graduating students on all courses creditable in Arts attempted at the University of Manitoba over the last two Fall/Winter terms prior to graduation (with each session consisting of a minimum of 24 credit hours completed at the University of Manitoba) including any courses taken in the Summer Session between the last two Fall/Winter terms and
2. has a minimum grade point average of 3.75 which is determined on the basis of all courses creditable in Arts attempted in completing the degree, including courses approved on transfer from other faculties/schools at the University of Manitoba.

Students who have up to 30 hours of external transfer credit (including failed courses) are eligible providing they attain the minimum grade point average of 3.75 on courses completed at the University of Manitoba which are acceptable for credit in Arts.

For specific details on the tie-breaking mechanism, contact the Faculty of Arts General Office.

### Evaluation of Undergraduate Student Coursework

A copy of the Faculty of Arts Regulations for the *Academic Evaluation of Undergraduate Student Coursework* is available to students for perusal in the Faculty of Arts General Office or website. This document includes regulations concerning student evaluation, final examinations and/or term tests, final grades, etc. It should in particular be noted that there are no Supplemental Examinations in the Faculty of Arts. For information on Incomplete Coursework, Deferred Examinations (p. 124), Debarment, Academic Misconduct (p. 122), (p. 84) etc., please refer to the General Academic Regulations (p. 118).

### Seeking a Bachelor of arts as a Second Degree

Once a Bachelor of Arts degree has been awarded by the University of Manitoba Senate, it cannot be revoked or "turned in" towards another degree.

Students who have completed an undergraduate degree may apply and be admitted to the Faculty of Arts seeking a second undergraduate degree. Students who hold a first degree from the Faculty of Arts may not apply for the B.A. Integrated Studies Degree Program as a second degree.

Students who have graduated with a first undergraduate degree from the University of Manitoba will be allowed to transfer up to 60 credit hours of coursework from their first degree toward a second degree program in the Faculty of Arts. Courses taken in a qualifying program will be considered part of the first degree. Courses extra to the first degree, excluding courses taken in a qualifying program or another awarded degree, diploma or certificate, may be transferred in addition to the 60 credit hours.

Students with first degrees awarded by external institutions will be eligible for up to 60 credit hours of transfer credit providing the degree was awarded and the courses were taken within the 10 year period prior to admission and registration in the Faculty of Arts .

Once admitted students must satisfy all relevant undergraduate degree requirements except for the Written English and Mathematics requirements.

Students may not be admitted to the Faculty of Arts or complete a Bachelor of Arts Degree while concurrently pursuing a degree in another Faculty or School.

No transfer credit will be awarded to students seeking a third, fourth, etc., degree.

Students cannot obtain a second degree in the same discipline at the same or lower level as any of their previously awarded degree(s).

### Application to Graduate with a Bachelor of Arts Degree

In order to officially receive a degree in any of the four programs leading to a B.A., students must declare their intention to graduate by the relevant deadline date listed below. This process applies to students in each of the following three categories.

*Category 1:* Those students currently registered in the Faculty of Arts in either the B.A. General Degree, B.A. Integrated Studies Degree or the B.A. Advanced Degree Program must declare their intention to graduate using Aurora Student.

Those students currently registered in the Faculty of Arts in the B.A. Honours Degree program must declare their intention to graduate at the point of registration for their last set of courses when they complete the Registration Worksheet.

*Category 2:* Those students currently registered in the Faculty of Arts in either the B.A. Advanced or a B.A. Honours Degree program who decide to revert to the B.A. General Degree Program in order to graduate, must submit a request in writing to graduate to the General Office, Faculty of Arts. For graduation in May, the request must be received by April 30. For graduation in October, the request must be received by September 30. For graduation in February, the request must be received by January 30.

*Category 3:* Those students previously admitted to and registered in one of the respective degree programs in the Faculty of Arts and who have completed all of the requirements for the degree while registered in the



Faculty of Arts, but who are currently registered in another Faculty or School at the University of Manitoba (excluding Extended Education) may submit a request in writing to graduate to the Faculty of Arts General Office.

#### Deadline Dates to declare expected Graduation Date by Aurora Student

- May Graduation: end of registration revision period for Winter Term
- October Graduation: August 1
- February Graduation: end of registration revision period for Fall Term

## Interfaculty Option in Aging

**Program Coordinator:** Judith Chipperfield

**Program Office:** P435G Duff Roblin Bldg.

**Telephone:** 204-474-6790

**E-mail:** Judith.Chipperfield@umanitoba.ca

An Interfaculty Option in Aging is offered by the following faculties and colleges: Agricultural and Food Sciences, Arts, Kinesiology and Recreation Management, Medicine, Nursing, and Social Work. To complete the Concentration, Arts students will need to complete each of the following:

Course	Title	Hours
One of the following:		3
FMLY 2650	The Social Aspects of Aging	
or		
REC 2650	The Social Aspects of Aging	
or		
SWRK 2650	The Social Aspects of Aging	
NURS 2610	Health and Physical Aspects of Aging	3
or KIN 2610	Health and Physical Aspects of Aging	
12 credit hours from the list of approved electives		12
<b>Total Hours</b>		<b>18</b>

### Approved Electives

Course	Title	Hours
<b>English, Theatre, Film &amp; Media</b>		
FILM 3420	Film Theory	3
<b>Psychology</b>		
PSYC 2360	Brain and Behaviour	3
PSYC 2490	Abnormal Psychology	3
PSYC 3070	Adult Development	3
PSYC 3350	Behavioural Neuroscience	3
PSYC 3490	Individual Differences	3
PSYC 3610	Memory	3
PSYC 4420	Neuroimaging: Imaging Thoughts	3
PSYC 4430	Vision: Perception and Action	3
PSYC 4566	Psychology of Health and Aging	3
<b>Religion</b>		
RLGN 1410	Death and Concepts of the Future	3
<b>Sociology and Criminology</b>		
SOC 2310	Selected Social Problems (acceptable for credit only when topic is "Canadian Social Issues")	3
SOC 2490	Sociology of Health and Illness	3

SOC 2620	The Sociology of Aging	3
SOC 3540	The Sociology of Health Care Systems	3

Upon completion of these requirements, the Option in Aging will be recorded as a concentration on the student's official transcript. For information concerning the option, interested students are directed to faculty general offices.

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilius

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

### Academic Regulations

#### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre

for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

## Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

#### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

#### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports

are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

## Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## Anthropology

**Head:** Derek Johnson

**Campus Address/General Office:** 432 Fletcher Argue Building

**Telephone:** 204 474 9361

**Email Address:** um-anthro@cc.umanitoba.ca

**Website:** [umanitoba.ca/anthropology/](http://umanitoba.ca/anthropology/) (<https://umanitoba.ca/anthropology/>)

## Program Information

Anthropology is a science that examines human issues from both cultural and biological perspectives. The most fundamental concern of this discipline is the survival of humanity and the conditions of continuity and change for all human life. The department offers courses in socio-

cultural anthropology or ethnology, archaeology, language and culture, and biological or physical anthropology. While academic staff of the department have research interests that range from northern climates to the tropics and from Asia to the Americas, the department is also involved in research that sheds light on Manitoba and its people.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both ANTH 1210 and ANTH 1220 (or ANTH 1520).

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both ANTH 1210 and ANTH 1220 (or ANTH 1520).

### Honours Program

For entry to the Honours program, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Introductory Courses

The general introductory courses (ANTH 1210, and ANTH 1220 or ANTH 1520) present the major ideas and findings of Anthropology. It is equally appropriate for those planning to take further courses in this field and for students from other departments or faculties.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Anthropology, B.A. Double Advanced Major (p. 229)	4	120	
Anthropology, B.A. Double Honours (p. 227)	4	120	
Anthropology, B.A. General (p. 231)	3	90	
Anthropology, B.A. Single Advanced (p. 228)	4	120	
Anthropology, B.A. Single Honours (p. 226)	4	120	
Anthropology Minor (Concentration) (p. 232)		18	

## Anthropology, B.A. Single Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220 or ANTH 1520	Cultural Anthropology or Critical Cultural Anthropology	3
24 credit hours of ancillary options <sup>4</sup>		24
<b>Hours</b>		<b>30</b>

<b>Year 2</b>		
ANTH 2000	Culture, Society, and Power	3
ANTH 2100	Introduction to Archaeology	3
ANTH 2860	Evolution and Human Diversity	3
ANTH 2020 or ANTH 2530	Relatedness in a Globalizing World or Anthropology of Political Systems	3
6 credit hours from ANTH courses at the 2000 level and above <sup>2,3</sup>		6
6 credit hours of ancillary options <sup>4</sup>		6
6 credit hours of free options <sup>5</sup>		6
<b>Hours</b>		<b>30</b>

**Year 3**

ANTH 3470	History of Anthropology	3
3 credit hours from one of the following:		3
ANTH 2820	Human Osteology	
ANTH 2890	Human Population Biology	
ANTH 3720	Demography of Past Populations	
ANTH 3730	Forensic Anthropology	
ANTH 3930	Ethnographic Research Methods	
ANTH 3950	Archaeological Laboratory Methods	
ANTH 3980	Botanical Analysis in Archaeology	
ANTH 3990	Faunal Analysis in Archaeology	
6 credit hours from ANTH courses at the 2000 level and above <sup>2,3</sup>		6
9 credit hours from ANTH courses at the 3000 level and above <sup>1</sup>		9
3 credit hours of ancillary options <sup>4</sup>		3
6 credit hours of free options <sup>5</sup>		6
<b>Hours</b>		<b>30</b>

**Year 4**

ANTH 4850	Advanced Seminar in Anthropological Theory	3
3 credit hours from ANTH courses at the 2000 level and above <sup>2,3</sup>		3
9 credit hours from ANTH courses at the 4000 level <sup>1</sup>		9
3 credit hours of ancillary options <sup>4</sup>		3
12 credit hours of free options <sup>5</sup>		12
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> No more than 6 credit hours may be taken from ANTH 4830 or ANTH 4840.
- <sup>2</sup> ANTH 2370 is recommended. Students may not use ANTH 2430 toward the completion of the Anthropology course requirements.
- <sup>3</sup> Courses INDG 2070 and INDG 2080 offered by the Department of Indigenous Studies may be used to satisfy this requirement in the General Major, Single Advanced Major, Double Advanced Major, Single Honours and Minor programs.
- <sup>4</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Anthropology courses). Students considering graduate studies should include a quantitative methods course among their ancillary options (e.g., Sociology SOC 2294, Statistics STAT 1000 and STAT 2000).
- <sup>5</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Anthropology courses). Students considering graduate studies in Anthropology are encouraged to take additional courses in Anthropology beyond their 42 credit hour minimum, particularly courses at the 3000 and 4000 level.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

- The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
- In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
- Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
- Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

**Anthropology, B.A. Double Honours Degree Requirements**

Course	Title	Hours
<b>Year 1</b>		
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220 or ANTH 1520	Cultural Anthropology or Critical Cultural Anthropology	3
6 credit hours from second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>1</sup>		6
12 credit hours of free options <sup>2</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ANTH 2000	Culture, Society, and Power	3
ANTH 2100	Introduction to Archaeology	3
ANTH 2860	Evolution and Human Diversity	3
ANTH 2020 or ANTH 2530	Relatedness in a Globalizing World or Anthropology of Political Systems	3
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>2</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
ANTH 3470	History of Anthropology	3
3 credit hours from one of the following:		3
ANTH 2820	Human Osteology	

ANTH 2890	Human Population Biology	
ANTH 3720	Demography of Past Populations	
ANTH 3730	Forensic Anthropology	
ANTH 3930	Ethnographic Research Methods	
ANTH 3950	Archaeological Laboratory Methods	
ANTH 3980	Botanical Analysis in Archaeology	
ANTH 3990	Faunal Analysis in Archaeology	
6 credit hours from ANTH courses at the 3000 level and above <sup>3</sup>		6
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>2</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
ANTH 4850	Advanced Seminar in Anthropological Theory	3
3 credit hours from ANTH courses at the 3000 level and above <sup>3</sup>		3
6 credit hours from ANTH courses at the 4000 level <sup>3</sup>		6
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>2</sup>		6
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Anthropology courses). Students considering graduate studies should include a quantitative methods course among their ancillary options (e.g., Sociology SOC 2294, Statistics STAT 1000 and STAT 2000).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Anthropology courses). Students considering graduate studies in Anthropology are encouraged to take additional courses in Anthropology beyond their 42 credit hour minimum, particularly courses at the 3000 and 4000 level.

<sup>3</sup> No more than 6 credit hours may be taken from ANTH 4830 or ANTH 4840.

**Note:**

- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217)

requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Anthropology, B.A. Single Advanced Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220 or ANTH 1520	Cultural Anthropology or Critical Cultural Anthropology	3
6 credit hours from your Minor area of Study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
ANTH 2000	Culture, Society, and Power	3
ANTH 2100	Introduction to Archaeology	3
ANTH 2860	Evolution and Human Diversity	3
ANTH 3470	History of Anthropology	3
ANTH 4850	Advanced Seminar in Anthropological Theory	3
ANTH 2020 or ANTH 2530	Relatedness in a Globalizing World or Anthropology of Political Systems	3
Select one of the following:		3
ANTH 2820	Human Osteology	
ANTH 2890	Human Population Biology	
ANTH 3720	Demography of Past Populations	
ANTH 3730	Forensic Anthropology	
ANTH 3930	Ethnographic Research Methods	
ANTH 3950	Archaeological Laboratory Methods	
ANTH 3980	Botanical Analysis in Archaeology	
ANTH 3990	Faunal Analysis in Archaeology	

18 credit hours from ANTH courses at the 2000 level and above (of these a minimum of 9 credit hours must be at the 3000 and/or 4000 level) <sup>1,2,3</sup>	18
3 credit hours from ANTH courses at the 4000 level <sup>1</sup>	3
12 credit hours from your Minor area of study as described in that unit's section of the calendar.	12
24 credit hours from outside your Major and Minor areas of study.	24
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> No more than 6 credit hours may be taken from ANTH 4830 or ANTH 4840.
- <sup>2</sup> ANTH 2370 is recommended. Students may not use ANTH 2430 toward the completion of the Anthropology course requirements.
- <sup>3</sup> Courses INDG 2070 and INDG 2080 offered by the Department of Indigenous Studies may be used to satisfy this requirement in the General Major, Single Advanced Major, Double Advanced Major, Single Honours and Minor programs.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219)

approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Anthropology, B.A. Double Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220 or ANTH 1520	Cultural Anthropology or Critical Cultural Anthropology	3
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6

18 credit hours from outside of the two Advanced Major subject fields	18
<b>Hours</b>	<b>30</b>
<b>Years 2-4</b>	
ANTH 2000 Culture, Society, and Power	3
ANTH 2100 Introduction to Archaeology	3
ANTH 2860 Evolution and Human Diversity	3
ANTH 3470 History of Anthropology	3
ANTH 4850 Advanced Seminar in Anthropological Theory	3
ANTH 2020 Relatedness in a Globalizing World or ANTH 2530 or Anthropology of Political Systems	3
3 credit hours from:	3
ANTH 2820 Human Osteology	
ANTH 2890 Human Population Biology	
ANTH 3720 Demography of Past Populations	
ANTH 3730 Forensic Anthropology	
ANTH 3930 Ethnographic Research Methods	
ANTH 3950 Archaeological Laboratory Methods	
ANTH 3980 Botanical Analysis in Archaeology	
ANTH 3990 Faunal Analysis in Archaeology	
3 credit hours from ANTH courses at the 4000 level <sup>1</sup>	3
12 credit hours from ANTH courses at the 2000 level and above (of these a minimum of 9 credit hours must be at the 3000 and/or 4000 level) <sup>1,2,3</sup>	12
36 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar	36
18 credit hours from outside of the two Advanced Major subject fields	18
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> No more than 6 credit hours may be taken from ANTH 4830 or ANTH 4840.

<sup>2</sup> ANTH 2370 is recommended. Students may not use ANTH 2430 toward the completion of the Anthropology course requirements.

<sup>3</sup> Courses INDG 2070 and INDG 2080 offered by the Department of Indigenous Studies may be used to satisfy this requirement in the General Major, Single Advanced Major, Double Advanced Major, Single Honours and Minor programs.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.

8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Anthropology, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220 or ANTH 1520	Cultural Anthropology or Critical Cultural Anthropology	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
ANTH 2000	Culture, Society, and Power	3
ANTH 2100	Introduction to Archaeology	3
ANTH 2860	Evolution and Human Diversity	3
ANTH 2020 or ANTH 2530	Relatedness in a Globalizing World or Anthropology of Political Systems	3
12 credit hours from ANTH courses at the 2000 level and above (of these a minimum of 6 credit hours must be at the 3000 and/or 4000 level) <sup>1,2,3</sup>		12
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> No more than 6 credit hours may be taken from ANTH 4830 or ANTH 4840.

<sup>2</sup> ANTH 2370 is recommended. Students may not use ANTH 2430 toward the completion of the Anthropology course requirements.

<sup>3</sup> Courses INDG 2070 and INDG 2080 offered by the Department of Indigenous Studies may be used to satisfy this requirement in the General Major, Single Advanced Major, Double Advanced Major, Single Honours and Minor programs.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
- The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**
2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
  3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
  4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.



9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Anthropology Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220 or ANTH 1520	Cultural Anthropology or Critical Cultural Anthropology	3
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours from courses at the 2000 level and above <sup>1,2,3</sup>		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

- <sup>1</sup> ANTH 2000 is recommended for students taking a Minor because the course is fundamental to many subsequent Anthropology courses.
- <sup>2</sup> ANTH 2370 is recommended. Students may not use ANTH 2430 toward the completion of the Anthropology course requirements.
- <sup>3</sup> Courses INDG 2070 and INDG 2080 offered by the Department of Indigenous Studies may be used to satisfy this requirement in the General Major, Single Advanced Major, Double Advanced Major, Single Honours and Minor programs.

## Asian Studies

Director: (Acting Director) Rob Hoppa  
 Campus Address/General Office: 3rd Floor Fletcher Argue Bldg.  
 Telephone: 204 474-6626  
 Email Address: [Asian\\_studies@umanitoba.ca](mailto:Asian_studies@umanitoba.ca)  
 Website: [umanitoba.ca/Asian\\_studies/](http://umanitoba.ca/asian_studies/) ([http://umanitoba.ca/asian\\_studies/](http://umanitoba.ca/asian_studies/))

### Program Information

Asia is home to approximately 60 percent of the world's population. Asian nations have emerged as major economic powers while their populations are asserting their own cultural and historical identities. With this comes an expectation that Western nations will take an interest not only in the economic potential of the continent but also in its rich cultural heritage.

The Asian Studies Centre was established in 1990 to stimulate and organize teaching and research on Asia. Faculty attached to the centre offer instruction in the languages and culture of China, India and Japan. As well, specialists in other departments offer Asia-related courses that can be used for a Major or Minor in Asian Studies.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both ASIA 1420 (HIST 1420) and ASIA 1430 (HIST 1430).

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both ASIA 1420 (HIST 1420) and ASIA 1430 (HIST 1430)

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Asian Studies, B.A. General (p. 232)	3	90	
Asian Studies, Minor (Concentration) (p. 234)		18	

## Asian Studies, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ASIA/HIST 1420	Asian Civilizations to 1500 (B)	3
ASIA/HIST 1430	Asian Civilization from 1500 (B)	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6

18 credit hours from outside of your Major and Minor areas of study	18
<b>Hours</b>	<b>30</b>
<b>Year 2</b>	
6 credit hours in one of the ASIA language courses numbered at the 1000 level from List A	6
6 credit hours from:	6
ASIA 2080	South Asian Civilization
ASIA 2620	Japanese Civilization
ASIA 2630	Chinese Civilization
6 credit hours in courses numbered at the 2000 level from List A	6

6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
6 credit hours from outside of your Major and Minor areas of study	6
<b>Hours</b>	<b>30</b>
<b>Year 3</b>	
6 credit hours from courses in List A numbered at the 3000 level and above <sup>1</sup>	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
6 credit hours from outside of your Major and Minor areas of study	6
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>90</b>

<sup>1</sup> Students may substitute up to 6 credit hours in Asian language courses numbered at the 2000 level.

Students who wish to concentrate heavily on languages may take an Asian language course numbered at the 1000 level in Year 1. Students with matriculation in an Asian language may do an Asian language course numbered at the 2000 level in Year 2 and are encouraged to take a language course numbered at the 3000 level language in Year 3.

## List A: Courses Acceptable for Asian Studies Credit

### Faculty of Arts

Course	Title	Hours
<b>Anthropology</b>		
ANTH 2450	Ethnology of China	3
<b>Asian Studies Asian Languages</b>		
ASIA 1750	Introduction to Korean	6
ASIA 1760	Introduction to Chinese (Mandarin)	6
ASIA 1770	Introduction to Japanese	6
ASIA 1780	Basic Sanskrit	6
ASIA 1790	Basic Hindi-Urdu	6
ASIA 2750	Intermediate Korean	6
ASIA 2760	Intermediate Chinese (Mandarin)	6
ASIA 2770	Intermediate Japanese	6
ASIA 2780	Intermediate Sanskrit	6
ASIA 3750	Advanced Korean	6
ASIA 3760	Advanced Chinese (Mandarin)	6
ASIA 3770	Advanced Japanese	6
ASIA 3780	Advanced Reading in Japanese	3
ASIA 3792	Linguistic Analysis of Japanese	3
<b>Asian Studies Other Asian Courses</b>		
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
ASIA 2080	South Asian Civilization	3
ASIA 2570	History, Culture, and Society in Chinese Film	3
ASIA 2580	Women in Chinese Film	3
ASIA 2600	Japanese Film	3

ASIA 2610	Modern Chinese Literature in Translation	3
ASIA 2620	Japanese Civilization	3
ASIA 2630	Chinese Civilization	3
ASIA 2650	Premodern Chinese Literature in Translation	3
ASIA 2662	Chinese Diaspora Literature	3
ASIA 2670	Modern Japanese Literature in Translation	3
ASIA 3480	Selected Topics in Asian Studies 1	3
ASIA 3490	Selected Topics in Asian Studies 2	3
ASIA 3520	The Japanese Theatre	3
ASIA 3560	Themes and Genres in Asian Literature	3
ASIA 3600	Japanese Popular Culture	3

### English, Theatre, Film & Media

FILM 2380	The International Cinema 1 (when the topic relates to Asian Studies)	3
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### History

HIST 1420	Asian Civilizations to 1500 (B)	3
HIST 1430	Asian Civilizations from 1500 (B)	3
HIST 2654	History of the People's Republic of China, 1949-Present (B)	3
HIST 3090	Studies in Asian History (B)	3
HIST 3580	Topics in Recent World History (M) (when the topic relates to Asian Studies)	3
HIST 4070	Issues in Modern Asian History 1: Selected Topics (B)	3

### Religion

RLGN 1322	Introduction to Eastern Religions	3
RLGN 2010	Introduction to Hinduism	3
RLGN 2020	Introduction to Buddhism	3
RLGN 2570	Indian Religious Art and Architecture	3
RLGN 2700	Religions of China and Japan	6
RLGN 3150	Buddhism in East Asia	3
RLGN 3160	Tibetan Religious Traditions	3
RLGN 3210	Indian Philosophy	3
RLGN 3220	Indian Religion and Society	3
RLGN 3260	Indian Buddhism	3
RLGN 3266	Readings in Buddhist Texts	3
RLGN 3270	Guru and Disciple	3
RLGN 3750	Topics in Indian Religious Art and Architecture	3
RLGN 4060	The Yoga Tradition	3
RLGN 4100	Advanced Studies in Buddhism	3
RLGN 4190	Advanced Studies in Hinduism	3

### School of Art

Course	Title	Hours
FAAH 1100	Survey of Asian Art	3
FAAH 3230	Chinese Art and Architecture	3
FAAH 3240	Japanese Art and Architecture	3
FAAH 3590	Islamic Art and Architecture	3

While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

**Ten Faculty Requirements for Graduating with a B.A. General Degree**

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.

9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Asian Studies, Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
ASIA/HIST 1420	Asian Civilizations to 1500 (B)	3
ASIA/HIST 1430	Asian Civilization from 1500 (B)	3
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
12 credit hours chosen from List A		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

### List A: Courses Acceptable for Asian Studies Credit

#### Faculty of Arts

Course	Title	Hours
<b>Anthropology</b>		
ANTH 2450	Ethnology of China	3
<b>Asian Studies Asian Languages</b>		
ASIA 1750	Introduction to Korean	6
ASIA 1760	Introduction to Chinese (Mandarin)	6
ASIA 1770	Introduction to Japanese	6
ASIA 1780	Basic Sanskrit	6
ASIA 1790	Basic Hindi-Urdu	6
ASIA 2750	Intermediate Korean	6
ASIA 2760	Intermediate Chinese (Mandarin)	6
ASIA 2770	Intermediate Japanese	6
ASIA 2780	Intermediate Sanskrit	6
ASIA 3750	Advanced Korean	6
ASIA 3760	Advanced Chinese (Mandarin)	6
ASIA 3770	Advanced Japanese	6
ASIA 3780	Advanced Reading in Japanese	3
ASIA 3792	Linguistic Analysis of Japanese	3
<b>Asian Studies Other Asian Courses</b>		
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
ASIA 2080	South Asian Civilization	3
ASIA 2570	History, Culture, and Society in Chinese Film	3
ASIA 2580	Women in Chinese Film	3
ASIA 2600	Japanese Film	3
ASIA 2610	Modern Chinese Literature in Translation	3
ASIA 2620	Japanese Civilization	3
ASIA 2630	Chinese Civilization	3
ASIA 2650	Premodern Chinese Literature in Translation	3
ASIA 2662	Chinese Diaspora Literature	3
ASIA 2670	Modern Japanese Literature in Translation	3
ASIA 3480	Selected Topics in Asian Studies 1	3
ASIA 3490	Selected Topics in Asian Studies 2	3

ASIA 3520	The Japanese Theatre	3
ASIA 3560	Themes and Genres in Asian Literature	3
ASIA 3600	Japanese Popular Culture	3

#### English, Theatre, Film & Media

FILM 2380	The International Cinema 1 (when the topic relates to Asian Studies)	3
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#### History

HIST 1420	Asian Civilizations to 1500 (B)	3
HIST 1430	Asian Civilizations from 1500 (B)	3
HIST 2654	History of the People's Republic of China, 1949-Present (B)	3
HIST 3090	Studies in Asian History (B)	3
HIST 3580	Topics in Recent World History (M) (when the topic relates to Asian Studies)	3
HIST 4070	Issues in Modern Asian History 1: Selected Topics (B)	3

#### Religion

RLGN 1322	Introduction to Eastern Religions	3
RLGN 2010	Introduction to Hinduism	3
RLGN 2020	Introduction to Buddhism	3
RLGN 2570	Indian Religious Art and Architecture	3
RLGN 2700	Religions of China and Japan	6
RLGN 3150	Buddhism in East Asia	3
RLGN 3160	Tibetan Religious Traditions	3
RLGN 3210	Indian Philosophy	3
RLGN 3220	Indian Religion and Society	3
RLGN 3260	Indian Buddhism	3
RLGN 3266	Readings in Buddhist Texts	3
RLGN 3270	Guru and Disciple	3
RLGN 3750	Topics in Indian Religious Art and Architecture	3
RLGN 4060	The Yoga Tradition	3
RLGN 4100	Advanced Studies in Buddhism	3
RLGN 4190	Advanced Studies in Hinduism	3

#### School of Art

Course	Title	Hours
FAAH 1100	Survey of Asian Art	3
FAAH 3230	Chinese Art and Architecture	3
FAAH 3240	Japanese Art and Architecture	3
FAAH 3590	Islamic Art and Architecture	3

## Bachelor of Arts Integrated Studies

**Program Coordinator:** Heidi Marx, Associate Dean (Undergraduate Studies)

**Program Office:** 3rd Floor Fletcher Argue

**Telephone:** 204 474 9100

**E-mail:** arts\_inquiry@umanitoba.ca

**Website:** [umanitoba.ca/explore/programs-of-study/bachelor-arts-integrated-studies-bais](https://umanitoba.ca/explore/programs-of-study/bachelor-arts-integrated-studies-bais) (<https://umanitoba.ca/explore/programs-of-study/bachelor-arts-integrated-studies-bais/>)

### GENERAL PURPOSE

The Bachelor of Arts Integrated Studies is a 90 credit hour degree program geared to serve working adults who have completed some post secondary education. The degree requires areas of Concentration rather than the traditional Major/Minor requirement, providing a more flexible path for degree completion but also ensuring academic rigor (e.g., appropriate writing and quantitative skills, breadth requirements, and an appropriate percentage of upper level courses).

## Admission Requirements and Basic Faculty Regulations for the B.A. Integrated Studies (B.A.I.S.) Degree Program

### Admission Requirements for the B.A.I.S. Degree Program

Students must complete one of the following:

1. Successful completion of a minimum of 24 credit hours of university level coursework at the University of Manitoba or elsewhere and includes: University of Manitoba certificate or diploma programs and/or diploma programs completed at another accredited post-secondary institution. A minimum "C" average is required where university courses are used as the basis of admission. Students who have not achieved a minimum "C" average may be eligible for special consideration. A minimum C+ average is required on a University of Manitoba certificate or diploma program.
2. Be eligible for admission as a "mature" student.

Students who have exceeded 36 credit hours of "F" grades are not admissible until a period of suspension has been served. Students may contact the Faculty of Arts for further information and advice.

**Applicants must also submit the following with their application for admission:**

1. Supplementary Application form
2. A resumé providing evidence of normally three (3) years of full-time workplace experience (i.e., ≥ 30 hours/week) preferably with the same employer. [Applicants who do not strictly fall into this definition of workplace experience may request special consideration from the B.A. Integrated Studies Admissions Committee.]

Students who hold a first undergraduate degree in the Faculty of Arts may not apply for the B.A. Integrated Studies Degree Program.

For detailed admission information, including required averages for admission and application deadline dates, please refer to the Faculty of Arts Applicant Information Brochure. (<https://umanitoba.ca/sites/explore/files/2021-01/arts-is-bulletin.pdf>)

### General Structure of the B.A.I.S. Degree Program

The Bachelor of Arts Integrated Studies Program is composed of 90 credit hours divided into three components: Foundation Courses (21 credit hours), Area of Concentration (18 credit hours) and options (51 credit hours).

#### Foundation Courses

Course	Title	Hours
ARTS 1110	Introduction to University	3
EDUA 1560	Adult Learning and Development	3
SWRK 2080	Interpersonal Communication Skills	3
or ENGL 0930	English Composition	
Select a 3 credit hour course that satisfies the mathematics requirement <sup>1</sup>		3
ARTS 1160	Leadership: An Interdisciplinary Approach	3
Select 6 credit hours of introductory courses from the Departments of Psychology or Sociology or Anthropology or Political Studies <sup>2</sup>		6
<b>Total Hours</b>		<b>21</b>

<sup>1</sup> See List of Approved-Written-English (p. ) and Mathematics courses found under the General Academic Regulations in the Undergraduate Calendar.

<sup>2</sup> Students who wish to take courses beyond the 1000 level in these departments should consult the course descriptions to ensure the necessary prerequisites are satisfied.

Students may not substitute another course for a Foundation course.

#### Area of Concentration

Each student must complete the course requirements of at least one Concentration. For purposes of this degree program all Minor programs offered by the Faculty of Arts will be referred to as Concentrations. All Concentrations consist of 18 credit hours of required or specified courses. There are some Concentrations that are not offered as Minors. For a listing of the Minors and Concentrations offered by the respective departments in the Faculty of Arts, please refer to the Program List (p. 206) and the departmental entries. For entry into most Concentrations, the faculty requirement is that the student must have a grade of "C" or better in the prerequisite course(s).

A student in the B.A. Integrated Studies Degree Program may also fulfill the requirements of a Concentration by completing the specified requirements of Minor programs offered by other Faculties and Schools providing the Minor consists of a minimum of 18 credit hours. A Minor program offered by other Faculties/Schools will be referred to as a Concentration for purposes of the B.A. Integrated Studies Degree Program. For details on such Concentration (Minor) programs please refer to the relevant Faculty/School's chapter in the Academic Calendar.

A Concentration may be declared once the prerequisite has been satisfied. A course that satisfies the Foundation requirement of the program cannot also be used towards a Concentration. An alternate course/credit hours within the Concentration field must be completed. For example, if PSYC 1200 is taken to satisfy the Foundation requirement, and the student has chosen to complete a Psychology Concentration, then PSYC 1200 will not form part of the 18 credit hours required for the Concentration. The student will complete an additional 6 credit hours of other Psychology courses in lieu of PSYC 1200.

Students who wish to take additional courses from a second Concentration may do so within their elective component. Students

who complete the requirements of a second Concentration may submit a written request to the Dean's Office to have a second Concentration recorded on their transcript.

#### Options

Students must complete 51 credit hours of options outside the Foundation courses and those courses used to satisfy an area of Concentration.

### Requirements for continuing in the B.A.I.S. Degree Program

1. By the time students complete 60 credit hours, they must normally have three credit hours in each of five different subject fields.
2. Students must by the time they have completed 60 credit hours have successfully completed or be registered for at least three credit hours in a course with significant content in written English and at least three credit hours in a course in mathematics. (See General Academic Regulations (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/residence-written-english-mathematics-requirements/>) - Written English and Mathematic requirements)
3. Students must meet the minimum performance level (p. 211).

### Eight Faculty Requirements for Graduating with a B.A.I.S. Degree

1. A student must successfully complete a minimum of 90 credit hours of coursework acceptable for credit in the Faculty of Arts with a "C" or better average on the courses used to satisfy the requirements of the B.A.I.S.

#### The minimum 90 credit hours of passed coursework must include the remaining seven faculty requirements:

2. At least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields (p. 211) designated Social Science, at least six credit hours from the list of courses that satisfy the Science requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content requirement.
3. At least three credit hours completed in each of five different subject fields. In addition, a subject field may also satisfy other B.A.I.S. requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Concentration: 18 credit hours which constitute a Concentration in one of the subject fields approved by the Faculty of Arts or by other Faculties and Schools. A Concentration may be declared once the prerequisite has been satisfied. A student who has 18 credit hours in more than one subject field can declare only one of them as a Concentration. No course can be used to satisfy both a Foundation requirement and the Concentration requirement. A student who has completed the requirements for a second Concentration may apply at the Faculty of Arts General Office to have the second Concentration recorded on their transcript.
5. At least 51 credit hours of options which are taken and successfully completed in subject fields outside the Foundation and Concentration courses.
6. At least 30 credit hours that have been taught by the Faculty of Arts (may include up to 12 credit hours from the Department of Mathematics or Art History courses considered as Humanities) or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.

7. At least 15 credit hours numbered at or above the 2000 level plus 6 credit hours at or above the 3000 level.
8. Residency Requirement: A student in the B.A. Integrated Studies degree program must complete University of Manitoba residency requirements.

## Additional Faculty Regulation and Policies

Students in the B.A. Integrated Studies Degree Program are subject to the regulations and policies found under Faculty Regulations (p. 211) and Courses and Programs Offered by Other Faculties and Schools. (p. 442)

## Concentrations

- Agronomy Minor (p. 186)
- Animal Systems Minor (p. 187)
- Anthropology Minor (p. 232)
- Art History Minor (p. 442)
- Asian Studies Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/asian-studies/asian-studies-minor/>)
- Biological Sciences Minor (p. 840)
- Canadian Studies Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/canadian-studies/canadian-studies-minor/>)
- Catholic Studies Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/catholic-studies/catholic-studies-minor/>)
- Central and Eastern European Studies Minor (p. 261)
- Chemistry Minor (p. 854)
- Classical Studies Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/classics/classical-studies-minor/>)
- Computer Science Minor (<https://catalog.umanitoba.ca/undergraduate-studies/science/computer-science/computer-science-minor/>)
- Economics Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/economics/economics-minor/>)
- English Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/english-theatre-film-media/english-minor/>)
- Entomology Minor (p. 187)
- Environmental Science Minor (p. 534)
- Environmental Studies Minor (p. 550)
- Earth Sciences Minor (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/earth-sciences/earth-sciences-minor/>)
- Family Social Sciences Minor (<https://umanitoba-ca-curr.courseleaf.com/undergraduate-studies/health-sciences/medicine/community-health-sciences-family-social-sciences/fss-minor/>)
- Film Studies Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/english-theatre-film-media/film-studies-minor/>)
- Food Science Minor (p. 187)
- Français - offered through Université de Saint-Boniface
- French Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/french-spanish-italian/french-minor/>)
- Geography Minor (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/environment-geography/geography-ba-minor/>)
- German Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/german-slavic-studies/german-minor/>)
- Greek Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/classics/greek-minor/>)
- History Minor (p. 353)
- Human Nutrition and Metabolism Minor (p. 187)
- Icelandic Minor (p. 356)
- Indigenous Languages Minor (p. 363)
- Indigenous Studies Minor (p. 364)
- Italian Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/french-spanish-italian/italian-minor/>)
- Judaic Studies Minor (p. 366)
- Labour Studies Minor (p. 374)
- Latin Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/classics/latin-minor/>)
- Latin American Studies Minor (p. 375)
- Linguistics Minor (p. 384)
- Management Minor (p. 446)
- Mathematics Minor (p. 904)
- Medieval and Early Modern Studies Minor (p. 389)
- Microbiology Minor (p. 919)
- Music Minor (p. 797)
- Option in Aging Minor (p. 224)
- Philosophy Minor (p. 397)
- Physical Geography Minor (p. 571)
- Physics and Astronomy Minor (p. 928)
- Plant Biotechnology Minor (p. 187)
- Polish Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/german-slavic-studies/polish-minor/>)
- Political Studies Minor (p. 405)
- Psychology Minor (p. 412)
- Recreation Studies Minor (p. 684)
- Religion Minor (p. 420)
- Russian Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/german-slavic-studies/russian-minor/>)
- Sociology Minor (p. 425)
- Soil Science Minor (p. 188)
- Spanish Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/french-spanish-italian/spanish-minor/>)
- Statistics Minor (p. 939)
- Textile Sciences Minor
- The Changing Workplace Minor
- Theatre Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/english-theatre-film-media/theatre-minor/>)
- Ukrainian Minor (<https://catalog.umanitoba.ca/undergraduate-studies/arts/german-slavic-studies/ukrainian-minor/>)
- Ukrainian Canadian Heritage St Minor (p. 432)
- Women's and Gender Studies Minor (p. 441)

## Changing Workplace, The

**Program Coordinator:** Arts General Office  
**Program Office:** 3rd Floor Fletcher Argue  
**Telephone:** 204 474 9100  
**E-mail:** [arts\\_inquiry@umanitoba.ca](mailto:arts_inquiry@umanitoba.ca)

The Changing Workplace is a Concentration only available to students in the B.A. Integrated Studies degree program. This program is not available as a Minor program.

The Changing Workplace is an interdisciplinary concentration and has been developed in response to information received from employees and midcareer working adults interested in pursuing a degree. Successful completion of this concentration provides learners with an understanding of the workplace in its current context and its changing nature.

## Concentration Program

For entry to the Concentration, the prerequisite is a minimum grade of "C" or better in the first 6 credit hours of courses required for the Concentration. The Concentration in The Changing Workplace will consist of 18 credit hours from the following list of courses. Students must meet the departmental prerequisites for entry into any course in this list. No course can be used to satisfy more than one Concentration.

## Degree Requirements Concentration Program

For entry to the Concentration, the prerequisite is a minimum grade of "C" or better in the first 6 credit hours of courses required for the Concentration. The Concentration in The Changing Workplace will consist of 18 credit hours from the following list of courses. Students must meet the departmental prerequisites for entry into any course in this list. No course can be used to satisfy more than one Concentration.

### Faculty of Arts

Course	Title	Hours
<b>Anthropology</b>		
ANTH 2500	Culture, Environment, and Technology	3
<b>Economics</b>		
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
<b>Labour Studies</b>		
LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3
LABR 2100	The Political Economy of Labour	3
LABR 3060	Workplace Health and Safety	3
<b>Philosophy</b>		
PHIL 2830	Business Ethics	3
<b>Sociology</b>		
SOC 2390	Social Organization	3

NOTE: Specific course sections of ECON 2610 may satisfy the concentration requirement. Students should contact the Department of Economics for information.

For course descriptions, see departmental listings.

## Canadian Studies

**Program Coordinator:** Royce Koop

**Program Office:** 531 Fletcher Argue Bldg.

**Telephone:** 204 474 8949

**E-mail:** Royce.Koop@umanitoba.ca

**Website:** [umanitoba.ca/canadian\\_studies/](http://umanitoba.ca/canadian_studies/) ([http://umanitoba.ca/canadian\\_studies/](http://umanitoba.ca/canadian_studies/))

## Program Information

This is an interdisciplinary program that offers a comprehensive and focused approach to the study of Canada. Students will examine Canadian politics, economics, society and culture within a national and international context. A knowledge of French is an asset but it is not required.

The "List of Approved Courses in Canadian Studies" below identifies courses that may be used toward partial fulfillment of the requirements for Canadian Studies. These courses are also identified on Aurora Student with the course attribute of "Canadian Studies Requirement."

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Program.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours from the list of approved courses in Canadian Studies.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in a six credit hours from the list of approved courses in Canadian Studies.

### Honours Program

For entry to the Honours program, see: Basic Faculty Regulation (p. 211)s for the B.A. General, Advanced and Honours Degree Programs.

A reading knowledge of French, while not required, is recommended. Students should note that, for certain specific Honours courses in the Canadian field, a reading knowledge of French is, in fact, a prerequisite.

Each of the participating departments is represented by at least one member on the Canadian Studies Program Committee. The initial academic advisor for the program is the committee as a whole or any one of its members. Students who are interested in Canadian Studies may obtain further information from the Canadian Studies Program Coordinator. Students should consult the appropriate department upon entering the program regarding prerequisites for specific courses.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Canadian Studies, B.A. Double Honours (p. 241)	4	120	

Canadian Studies, B.A. General (p. 244)	3	90
Canadian Studies, B.A. Single Honours (p. 239)	4	120
Canadian Studies, Minor (Concentration) (p. 247)		18

## Canadian Studies, B.A. Single Honours

### Degree Requirements

Course	Title	Hours
<b>Years 1-4</b>		
6 credit hours in courses numbered at the 1000 or 2000 level from the list of approved courses in Canadian Studies		6
54 credit hours from the list of approved courses in Canadian Studies. Within these 54 credit hours, students must satisfy the following requirements:		54
A Minimum of 24 credit hours in courses numbered at the 4000 level from the list of approved courses in Canadian Studies		
A minimum of 6 credit hours are required in each of three subject fields		
Between 12 and 24 credit hours must be taken in one of the three subject fields		
24 credit hours of ancillary options <sup>1</sup>		24
36 credit hours of free options <sup>2</sup>		36
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>120</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Canadian Studies courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Canadian Studies courses).

### List of Approved Courses in Canadian Studies

Courses designated (USB) are offered in French at Université de Saint-Boniface.

#### Faculty of Arts

Course	Title	Hours
<b>Canadian Studies</b>		
CDN 1000	Introduction to Canada	3
CDN 3730	Canadian Identity: An Interdisciplinary Approach	3
CDN 4410	Seminar in Canadian Studies	6
<b>Anthropology</b>		
ANTH 2040	Native North America: A Sociocultural Survey	3
ANTH 2041	Les Amérindiens de l'Amérique du Nord : une étude socioculturelle (USB)	3
ANTH 2640	Manitoba Prehistory	3
ANTH 3461	Ethnologie des Amérindiens de l'Amérique du Nord (USB)	3

ANTH 3500	Peoples of the Arctic	3
ANTH 3501	Peuples de l'Arctique (USB)	3
ANTH 3550	Canadian Subcultures	3
ANTH 3551	Sous-cultures canadiennes (USB)	3
ANTH 3910	Archaeological Field Training	6

#### Economics

ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1211	Introduction aux politiques et aux problèmes économiques canadiens (USB)	3
ECON 2310	Canadian Economic Problems	6
ECON 2311	Problèmes économiques du Canada (USB)	6
ECON 2350	Community Economic Development	3
ECON 2362	Economics of Gender	3
ECON 3301	Histoire économique du Canada (USB)	6
ECON 3690	Economic Issues of Health Policy	3
ECON 3720	Urban and Regional Economics and Policies	3

#### English, Theatre, Film & Media

ENGL 2270	Canadian Literature	6
ENGL 3270	Studies in Canadian Literature	3
ENGL 3271	Studies in Canadian Literature	3
FILM 2430	The Canadian Film	3

#### Français (USB)

FRAN 2313	La littérature du Canada français et du Québec, des origines à 1945 (USB)	3
FRAN 2323	La littérature du Canada français et du Québec, de 1945 à nos jours (USB)	3
FRAN 2333	Héritage folklorique et tradition orale au Canada français (USB)	3
FRAN 2343	Les influences de la littérature orale au Québec et au Canada français (USB)	3
FRAN 3313	La littérature québécoise avant la Révolution tranquille (1945-1960) (USB)	3
FRAN 3343	Théories postcoloniales (USB)	3
FRAN 2881	Civilisation canadienne-française (USB)	3
FRAN 3531	Le théâtre québécois (USB)	3
FRAN 3541	Le théâtre de l'Ouest (USB)	3
FRAN 3851	Littérature de l'Ouest : poésie, nouvelles (USB)	3
FRAN 3861	Littérature de l'Ouest : roman (USB)	3

#### French, Spanish and Italian

FREN 2700	Poésie et théâtre canadiens-français (B)	3
FREN 3140	Roman canadien-français (B)	3
FREN 3850	Civilisation canadienne-française (A, B, C)	3

#### History

HIST 1390	History of Colonial Canada: 1500-1885 (C)	3
HIST 1400	History of the Canadian Nation since 1867 (C)	3
HIST 1401	Histoire du Canada, des origines à 1800 (C) (USB)	3



HIST 1403	Histoire du Canada, de 1800 à aujourd'hui (C) (USB)	3	INDG 2040	The Dakota, Lakota, and Nakota Nations	3
HIST 1440	History of Canada (C)	6	INDG 2060	Eastern Woodlands Encounters Columbus to Confederation	3
HIST/LABR 2200	Labour History: Canada and Beyond (C)	3	INDG 2070	Cree, Innu, and Dene Nations	3
HIST 2010	Indigenous History in Canada (C)	6	INDG 2080	Inuit Society and Culture	3
HIST 2020	The Métis in Canada (C)	3	INDG 2220	Indigenous Societies and the Political Process	3
HIST 2282	Inventing Canada (C)	3	INDG 2252	Intermediate Cree 1	3
HIST 2283	Histoire des francophones de l'Ouest canadien (C) (USB)	3	INDG 2254	Intermediate Cree 2	3
HIST 2286	Modern Canada (C)	3	INDG 2272	Intermediate Anishinaabemowin (Ojibwe) 1	3
HIST 2288	History of Social Movements in Canada (C)	3	INDG 2274	Intermediate Anishinaabemowin (Ojibwe) 2	3
HIST 3031	Histoire de la francophonie canadienne minoritaire (C) (USB)	3	INDG 2300	Cree Literature	3
HIST 3052	Canada since the 1960s (C)	3	INDG 2410	Indigenous Literature in Canada	3
HIST 3054	Canada and the United States (C)	3	INDG 2420	Inuit Literature in Translation	3
HIST 3097	Histoire du Manitoba (C) (USB)	3	INDG 2450	Images of the "Indian" in North American Society	3
HIST/LABR 3214	Canada's Left: Rebellion and Repression (C)	3	INDG 3000	Selected Topics	3
HIST 3250	Canada and the World, 1867 to the Present (C)	6	INDG 3240	Indigenous Medicine and Health	3
HIST 3272	The Métis Nation: The Modern Era	3	INDG 3270	The Métis Nation: The Modern Era	3
HIST 3442	Race, Colonialism, and Migration in Canadian History (C)	3	INDG 3280	Indigenous Peoples and the Canadian Justice System	3
HIST 3576	History of Women, Gender and Sexuality in Canada (C)	3	INDG 3300	Indigenous Language Planning and Development	3
HIST 3730	A History of Western Canada (C)	6	INDG 3310	Canadian Law and Indigenous Peoples	3
HIST 3780	Studies in Canadian History 1 (C)	3	INDG 3370	Political Development in the North	3
HIST 3910	The Ukrainians in Canada (C)	3	INDG 3380	Gender and Indigenous Societies	3
HIST 4060	Gender History in Canada (C)	6	INDG 4200	First Nations' Government	3
HIST 4280	Topics in the Cultural History of Canada (C)	6	INDG 4210	Seminar in Contemporary and Historical Métis Issues	3
HIST 4340	Introduction to Archival Science (G)	6	INDG 4220	Environment, Economy and Indigenous Peoples	3
HIST 4680	Social History of Health and Disease in Modern Canada (C)	6	INDG 4230	Traditional Knowledge and Indigenous Studies Research	3
HIST 4890	Canadian Social History (C)	6	INDG 4240	Arctic Lifestyles	3
<b>Icelandic</b>			INDG 4250	Indigenous Identities	3
ICEL 2230	Icelandic-Canadian Literature	3	INDG 4280	Missionaries, Colonialism, and Indigenous People	3
ICEL 4440	The Icelanders in Canada	3	<b>Political Studies</b>		
<b>Labour Studies</b>			POLS 1502	Introduction to Political Studies	3
LABR/HIST 2200	Labour History: Canada and Beyond (C)	3	POLS 1506	Survey of Political Studies	3
LABR/HIST 3214	Canada's Left: Rebellion and Repression (C)	3	POLS 2073	Introduction à la politique canadienne 1 : État et société (USB)	3
LABR 3510	Industrial Relations	6	POLS 2075	Introduction à la politique canadienne II : Institutions et politiques publiques (USB)	3
<b>Linguistics</b>			POLS 2702	Introduction to Canadian Politics	3
LING 1360	Languages of Canada	3	POLS 2802	Introduction to Indigenous Politics	3
<b>Indigenous Studies</b>			POLS 3100	Gender and Politics in Canada	3
INDG 1200	Indigenous Peoples in Canada	6	POLS 3171	La Charte canadienne des droits et libertés	3
INDG 1220	Indigenous Peoples in Canada, Part 1	3	POLS 3470	Canadian Public Management	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3	POLS 3512	Canadian Foreign and Defence Policy 1	3
INDG 1250	Introductory Cree 1	3	POLS 3514	Canadian Foreign and Defence Policy 2	3
INDG 1260	Introductory Cree 2	3	POLS 3563	Le Canada dans le système mondial (USB)	3
INDG 1270	Introductory Anishinaabemowin (Ojibwe) 1	3	POLS 3670	Canadian Political Parties	3
INDG 1280	Introductory Anishinaabemowin (Ojibwe) 2	3	POLS 3730	Canadian Constitutional Politics	3
INDG 1300	Selected Topics in Introductory Indigenous Language	3	POLS 3740	Provincial Politics	3
INDG 2012	Indigenous History in Canada	6	POLS 3750	City Politics	3
INDG 2020	The Métis in Canada	3	POLS 3860	Canadian Federalism	3
			POLS 3872	Indigenous Governance	3

POLS 3940	Canadian Public Policy	3
POLS 4070	Advanced Seminar: Canadian Government	3
POLS 4080	Advanced Seminar: Canadian Democracy	3
POLS 4140	Canadian Political Ideas	3
POLS 4190	Manitoba Politics and Government	3
POLS 4560	Canada and the Arctic	3
POLS 4630	Indigenous Political Movements and Activism	3
POLS 4640	Comparative Indigenous Politics	3

**Religion**

RLGN 2590	Religion and Social Issues	3
RLGN 2591	La religion et les problèmes sociaux (C) (USB)	3

**Slavic Studies**

UKRN 2410	Ukrainian Canadian Cultural Experience	3
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**Sociology and Criminology**

SOC 2320	Canadian Society and Culture	3
SOC 2321	La société canadienne et sa culture (USB)	3
SOC 2370	Ethnic Relations	3
SOC 2371	Rapports ethniques (USB)	3
SOC 2531	Sociologie du Manitoba (USB)	6
SOC 2610	Sociology of Criminal Justice and Corrections	3
SOC 2620	The Sociology of Aging	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3471	Sociologie politique (USB)	3
SOC 3700	Sociology of Law	3
SOC 3762	Law, Justice, and Indigenous Peoples	3

**Ukrainian Canadian Heritage Studies**

UCHS 3100	The Ukrainian Arts in Canada	3
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**School of Art**

Course	Title	Hours
<b>Fine Art / Art History</b>		
FAAH 3260	Canadian Art and Architecture to World War 2	3
FAAH 3270	Canadian Art Since World War 2	3
FAAH 3430	Inuit Art	3

**Clayton H. Riddell Faculty of Environment, Earth, and Resources**

Course	Title	Hours
<b>Geography</b>		
GEOG 2213	Géographies autochtones et relations interculturelles (USB)	3
GEOG 2570	Geography of Canada (A)	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
GEOG 3431	Géographie de Canada (A) (USB)	3
GEOG 3481	Particularités de la géographie du Canada (A) (USB)	3
GEOG 3831	L'espace francophone panaméricain (A, HS) (USB)	3
<b>Geological Sciences</b>		
GEOL 2350	Canada Rocks: The Geology of Canada	3

While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Canadian Studies, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in courses numbered at the 1000 or 2000 level from the list of approved courses in Canadian Studies		6
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>1</sup>		6
12 credit hours in free options <sup>2</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
12 credit hours from the list of approved courses in Canadian Studies		12
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>2</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
6 credit hours from the list of approved B.A. courses in Canadian Studies		6
6 credit hours in courses numbered at the 4000 level from the list of approved courses in Canadian Studies		6

12 credit hours in second Honours Field as described in that unit's section of the calendar	12
6 credit hours in free options <sup>2</sup>	6
<b>Hours</b>	<b>30</b>
<b>Year 4</b>	
12 credit hours in courses numbered at the 4000 level from the list of approved courses in Canadian Studies	12
12 credit hours in second Honours Field as described in that unit's section of the calendar	12
6 credit hours in free options <sup>2</sup>	6
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Canadian Studies courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Canadian Studies courses).

Note:

- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

## List of Approved Courses in Canadian Studies

Courses designated (USB) are offered in French at Université de Saint-Boniface.

### Faculty of Arts

Course	Title	Hours
<b>Canadian Studies</b>		
CDN 1000	Introduction to Canada	3
CDN 3730	Canadian Identity: An Interdisciplinary Approach	3
CDN 4410	Seminar in Canadian Studies	6
<b>Anthropology</b>		
ANTH 2040	Native North America: A Sociocultural Survey	3
ANTH 2041	Les Amérindiens de l'Amérique du Nord : une étude socioculturelle (USB)	3
ANTH 2640	Manitoba Prehistory	3
ANTH 3461	Ethnologie des Amérindiens de l'Amérique du Nord (USB)	3
ANTH 3500	Peoples of the Arctic	3
ANTH 3501	Peuples de l'Arctique (USB)	3
ANTH 3550	Canadian Subcultures	3
ANTH 3551	Sous-cultures canadiennes (USB)	3
ANTH 3910	Archaeological Field Training	6
<b>Economics</b>		
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1211	Introduction aux politiques et aux problèmes économiques canadiens (USB)	3
ECON 2310	Canadian Economic Problems	6
ECON 2311	Problèmes économiques du Canada (USB)	6

ECON 2350	Community Economic Development	3
ECON 2362	Economics of Gender	3
ECON 3301	Histoire économique du Canada (USB)	6
ECON 3690	Economic Issues of Health Policy	3
ECON 3720	Urban and Regional Economics and Policies	3
<b>English, Theatre, Film &amp; Media</b>		
ENGL 2270	Canadian Literature	6
ENGL 3270	Studies in Canadian Literature	3
ENGL 3271	Studies in Canadian Literature	3
FILM 2430	The Canadian Film	3
<b>Français (USB)</b>		
FRAN 2313	La littérature du Canada français et du Québec, des origines à 1945 (USB)	3
FRAN 2323	La littérature du Canada français et du Québec, de 1945 à nos jours (USB)	3
FRAN 2333	Héritage folklorique et tradition orale au Canada français (USB)	3
FRAN 2343	Les influences de la littérature orale au Québec et au Canada français (USB)	3
FRAN 2881	Civilisation canadienne-française (USB)	3
FRAN 3313	La littérature québécoise avant la Révolution tranquille (1945-1960) (USB)	3
FRAN 3343	Théories postcoloniales (USB)	3
FRAN 3531	Le théâtre québécois (USB)	3
FRAN 3541	Le théâtre de l'Ouest (USB)	3
FRAN 3851	Littérature de l'Ouest : poésie, nouvelles (USB)	3
FRAN 3861	Littérature de l'Ouest : roman (USB)	3
<b>French, Spanish and Italian</b>		
FREN 2700	Poésie et théâtre canadiens-français (B)	3
FREN 3140	Roman canadien-français (B)	3
FREN 3850	Civilisation canadienne-française (A, B, C)	3
<b>History</b>		
HIST 1390	History of Colonial Canada: 1500-1885 (C)	3
HIST 1400	History of the Canadian Nation since 1867 (C)	3
HIST 1401	Histoire du Canada, des origines à 1800 (C) (USB)	3
HIST 1403	Histoire du Canada, de 1800 à aujourd'hui (C) (USB)	3
HIST 1440	History of Canada (C)	6
HIST/LABR 2200	Labour History: Canada and Beyond (C)	3
HIST 2010	Indigenous History in Canada (C)	6
HIST 2020	The Métis in Canada (C)	3
HIST 2282	Inventing Canada (C)	3
HIST 2283	Histoire des francophones de l'Ouest canadien (C) (USB)	3
HIST 2286	Modern Canada (C)	3
HIST 2288	History of Social Movements in Canada (C)	3
HIST 3031	Histoire de la francophonie canadienne minoritaire (C) (USB)	3
HIST 3052	Canada since the 1960s (C)	3
HIST 3054	Canada and the United States (C)	3
HIST 3097	Histoire du Manitoba (C) (USB)	3
HIST/LABR 3214	Canada's Left: Rebellion and Repression (C)	3
HIST 3250	Canada and the World, 1867 to the Present (C)	6

HIST 3272	The Métis Nation: The Modern Era	3	INDG 3280	Indigenous Peoples and the Canadian Justice System	3
HIST 3442	Race, Colonialism, and Migration in Canadian History (C)	3	INDG 3300	Indigenous Language Planning and Development	3
HIST 3576	History of Women, Gender and Sexuality in Canada (C)	3	INDG 3310	Canadian Law and Indigenous Peoples	3
HIST 3730	A History of Western Canada (C)	6	INDG 3370	Political Development in the North	3
HIST 3780	Studies in Canadian History 1 (C)	3	INDG 3380	Gender and Indigenous Societies	3
HIST 3910	The Ukrainians in Canada (C)	3	INDG 4200	First Nations' Government	3
HIST 4060	Gender History in Canada (C)	6	INDG 4210	Seminar in Contemporary and Historical Métis Issues	3
HIST 4280	Topics in the Cultural History of Canada (C)	6	INDG 4220	Environment, Economy and Indigenous Peoples	3
HIST 4340	Introduction to Archival Science (G)	6	INDG 4230	Traditional Knowledge and Indigenous Studies Research	3
HIST 4680	Social History of Health and Disease in Modern Canada (C)	6	INDG 4240	Arctic Lifestyles	3
HIST 4890	Canadian Social History (C)	6	INDG 4250	Indigenous Identities	3
<b>Icelandic</b>			INDG 4280	Missionaries, Colonialism, and Indigenous People	3
ICEL 2230	Icelandic-Canadian Literature	3	<b>Political Studies</b>		
ICEL 4440	The Icelanders in Canada	3	POLS 1502	Introduction to Political Studies	3
<b>Labour Studies</b>			POLS 1506	Survey of Political Studies	3
LABR/HIST 2200	Labour History: Canada and Beyond (C)	3	POLS 2073	Introduction à la politique canadienne 1 : État et société (USB)	3
LABR/HIST 3214	Canada's Left: Rebellion and Repression (C)	3	POLS 2075	Introduction à la politique canadienne II : Institutions et politiques publiques (USB)	3
LABR 3510	Industrial Relations	6	POLS 2702	Introduction to Canadian Politics	3
<b>Linguistics</b>			POLS 2802	Introduction to Indigenous Politics	3
LING 1360	Languages of Canada	3	POLS 3100	Gender and Politics in Canada	3
<b>Indigenous Studies</b>			POLS 3171	La Charte canadienne des droits et libertés	3
INDG 1200	Indigenous Peoples in Canada	6	POLS 3470	Canadian Public Management	3
INDG 1220	Indigenous Peoples in Canada, Part 1	3	POLS 3512	Canadian Foreign and Defence Policy 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3	POLS 3514	Canadian Foreign and Defence Policy 2	3
INDG 1250	Introductory Cree 1	3	POLS 3563	Le Canada dans le système mondial (USB)	3
INDG 1260	Introductory Cree 2	3	POLS 3670	Canadian Political Parties	3
INDG 1270	Introductory Anishinaabemowin (Ojibwe) 1	3	POLS 3730	Canadian Constitutional Politics	3
INDG 1280	Introductory Anishinaabemowin (Ojibwe) 2	3	POLS 3740	Provincial Politics	3
INDG 1300	Selected Topics in Introductory Indigenous Language	3	POLS 3750	City Politics	3
INDG 2012	Indigenous History in Canada	6	POLS 3860	Canadian Federalism	3
INDG 2020	The Métis in Canada	3	POLS 3872	Indigenous Governance	3
INDG 2040	The Dakota, Lakota, and Nakota Nations	3	POLS 3940	Canadian Public Policy	3
INDG 2060	Eastern Woodlands Encounters Columbus to Confederation	3	POLS 4070	Advanced Seminar: Canadian Government	3
INDG 2070	Cree, Innu, and Dene Nations	3	POLS 4080	Advanced Seminar: Canadian Democracy	3
INDG 2080	Inuit Society and Culture	3	POLS 4140	Canadian Political Ideas	3
INDG 2220	Indigenous Societies and the Political Process	3	POLS 4190	Manitoba Politics and Government	3
INDG 2252	Intermediate Cree 1	3	POLS 4560	Canada and the Arctic	3
INDG 2254	Intermediate Cree 2	3	POLS 4630	Indigenous Political Movements and Activism	3
INDG 2272	Intermediate Anishinaabemowin (Ojibwe) 1	3	POLS 4640	Comparative Indigenous Politics	3
INDG 2274	Intermediate Anishinaabemowin (Ojibwe) 2	3	<b>Religion</b>		
INDG 2300	Cree Literature	3	RLGN 2590	Religion and Social Issues	3
INDG 2410	Indigenous Literature in Canada	3	RLGN 2591	La religion et les problèmes sociaux (C) (USB)	3
INDG 2420	Inuit Literature in Translation	3	<b>Slavic Studies</b>		
INDG 2450	Images of the "Indian" in North American Society	3	UKRN 2410	Ukrainian Canadian Cultural Experience	3
INDG 3000	Selected Topics	3	<b>Sociology and Criminology</b>		
INDG 3240	Indigenous Medicine and Health	3	SOC 2320	Canadian Society and Culture	3
INDG 3270	The Métis Nation: The Modern Era	3	SOC 2321	La société canadienne et sa culture (USB)	3
			SOC 2370	Ethnic Relations	3

SOC 2371	Rapports ethniques (USB)	3
SOC 2531	Sociologie du Manitoba (USB)	6
SOC 2610	Sociology of Criminal Justice and Corrections	3
SOC 2620	The Sociology of Aging	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3471	Sociologie politique (USB)	3
SOC 3700	Sociology of Law	3
SOC 3762	Law, Justice, and Indigenous Peoples	3
<b>Ukrainian Canadian Heritage Studies</b>		
UCHS 3100	The Ukrainian Arts in Canada	3

### School of Arts

Course	Title	Hours
<b>Fine Art / Art History</b>		
FAAH 3260	Canadian Art and Architecture to World War 2	3
FAAH 3270	Canadian Art Since World War 2	3
FAAH 3430	Inuit Art	3

### Clayton H. Riddell Faculty of Environment, Earth, and Resources

Course	Title	Hours
<b>Geography</b>		
GEOG 2213	Géographies autochtones et relations interculturelles (USB)	3
GEOG 2570	Geography of Canada (A)	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
GEOG 3431	Géographie de Canada (A) (USB)	3
GEOG 3481	Particularités de la géographie du Canada (A) (USB)	3
GEOG 3831	L'espace francophone panaméricain (A, HS)	3
<b>Geological Sciences</b>		
GEOL 2350	Canada Rocks: The Geology of Canada	3

While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.

3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Canadian Studies, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in courses numbered at the 1000 or 2000 level from the list of approved courses in Canadian Studies		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
18 credit hours from the list of approved courses in Canadian Studies		18
6 credit hours in courses numbered at the 3000 level or above from the list of approved courses in Canadian Studies		6
Within the 30 credit hours from the list of approved courses in Canadian Studies above: 1) 12 credit hours, but no more, must be taken in one subject field, and 2) a maximum of 12 credit hours in courses numbered at the 1000 level may be used toward the Major.		
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

### List of Approved Courses in Canadian Studies

Courses designated (USB) are offered in French at Université de Saint-Boniface.

#### Faculty of Arts

Course	Title	Hours
<b>Canadian Studies</b>		
CDN 1000	Introduction to Canada	3
CDN 3730	Canadian Identity: An Interdisciplinary Approach	3
CDN 4410	Seminar in Canadian Studies	6
<b>Anthropology</b>		
ANTH 2040	Native North America: A Sociocultural Survey	3

ANTH 2041	Les Amérindiens de l'Amérique du Nord : une étude socioculturelle (USB)	3	HIST 1440	History of Canada (C)	6
ANTH 2640	Manitoba Prehistory	3	HIST/LABR 2200	Labour History: Canada and Beyond (C)	3
ANTH 3461	Ethnologie des Amérindiens de l'Amérique du Nord (USB)	3	HIST 2010	Indigenous History in Canada (C)	6
ANTH 3500	Peoples of the Arctic	3	HIST 2020	The Métis in Canada (C)	3
ANTH 3501	Peuples de l'Arctique (USB)	3	HIST 2282	Inventing Canada (C)	3
ANTH 3550	Canadian Subcultures	3	HIST 2283	Histoire des francophones de l'Ouest canadien (C) (USB)	3
ANTH 3551	Sous-cultures canadiennes (USB)	3	HIST 2286	Modern Canada (C)	3
ANTH 3910	Archaeological Field Training	6	HIST 2288	History of Social Movements in Canada (C)	3
<b>Economics</b>			HIST 3031	Histoire de la francophonie canadienne minoritaire (C) (USB)	3
ECON 1210	Introduction to Canadian Economic Issues and Policies	3	HIST 3052	Canada since the 1960s (C)	3
ECON 1211	Introduction aux politiques et aux problèmes économiques canadiens (USB)	3	HIST 3054	Canada and the United States (C)	3
ECON 2310	Canadian Economic Problems	6	HIST 3097	Histoire du Manitoba (C)	3
ECON 2311	Problèmes économiques du Canada (USB)	6	HIST/LABR 3214	Canada's Left: Rebellion and Repression (C)	3
ECON 2350	Community Economic Development	3	HIST 3250	Canada and the World, 1867 to the Present (C)	6
ECON 2362	Economics of Gender	3	HIST 3272	The Métis Nation: The Modern Era	3
ECON 3301	Histoire économique du Canada (USB)	6	HIST 3442	Race, Colonialism, and Migration in Canadian History (C)	3
ECON 3690	Economic Issues of Health Policy	3	HIST 3576	History of Women, Gender and Sexuality in Canada (C)	3
ECON 3720	Urban and Regional Economics and Policies	3	HIST 3730	A History of Western Canada (C)	6
<b>English, Theatre, Film &amp; Media</b>			HIST 3780	Studies in Canadian History 1 (C)	3
ENGL 2270	Canadian Literature	6	HIST 3910	The Ukrainians in Canada (C)	3
ENGL 3270	Studies in Canadian Literature	3	HIST 4060	Gender History in Canada (C)	6
ENGL 3271	Studies in Canadian Literature (USB)	3	HIST 4280	Topics in the Cultural History of Canada (C)	6
FILM 2430	The Canadian Film	3	HIST 4340	Introduction to Archival Science (G)	6
<b>Français (USB)</b>			HIST 4680	Social History of Health and Disease in Modern Canada (C)	6
FRAN 2313	La littérature du Canada français et du Québec, des origines à 1945 (USB)	3	HIST 4890	Canadian Social History (C)	6
FRAN 2323	La littérature du Canada français et du Québec, de 1945 à nos jours (USB)	3	<b>Icelandic</b>		
FRAN 2333	Héritage folklorique et tradition orale au Canada français (USB)	3	ICEL 2230	Icelandic-Canadian Literature	3
FRAN 2343	Les influences de la littérature orale au Québec et au Canada français (USB)	3	ICEL 4440	The Icelanders in Canada	3
FRAN 2881	Civilisation canadienne-française (USB)	3	<b>Labour Studies</b>		
FRAN 3313	La littérature québécoise avant la Révolution tranquille (1945-1960) (USB)	3	LABR/HIST 2200	Labour History: Canada and Beyond (C)	3
FRAN 3343	Théories postcoloniales (USB)	3	LABR/HIST 3214	Canada's Left: Rebellion and Repression (C)	3
FRAN 3531	Le théâtre québécois (USB)	3	LABR 3510	Industrial Relations	6
FRAN 3541	Le théâtre de l'Ouest (USB)	3	<b>Linguistics</b>		
FRAN 3851	Littérature de l'Ouest : poésie, nouvelles (USB)	3	LING 1360	Languages of Canada	3
FRAN 3861	Littérature de l'Ouest : roman (USB)	3	<b>Indigenous Studies</b>		
<b>French, Spanish and Italian</b>			INDG 1200	Indigenous Peoples in Canada	6
FREN 2700	Poésie et théâtre canadiens-français (B)	3	INDG 1220	Indigenous Peoples in Canada, Part 1	3
FREN 3140	Roman canadien-français (B)	3	INDG 1240	Indigenous Peoples in Canada, Part 2	3
FREN 3850	Civilisation canadienne-française (A, B, C)	3	INDG 1250	Introductory Cree 1	3
<b>History</b>			INDG 1260	Introductory Cree 2	3
HIST 1390	History of Colonial Canada: 1500-1885 (C)	3	INDG 1270	Introductory Anishinaabemowin (Ojibwe) 1	3
HIST 1400	History of the Canadian Nation since 1867 (C)	3	INDG 1280	Introductory Anishinaabemowin (Ojibwe) 2	3
HIST 1401	Histoire du Canada, des origines à 1800 (C) (USB)	3	INDG 1300	Selected Topics in Introductory Indigenous Language	3
HIST 1403	Histoire du Canada, de 1800 à aujourd'hui (C) (USB)	3	INDG 2012	Indigenous History in Canada	6
			INDG 2020	The Métis in Canada	3
			INDG 2040	The Dakota, Lakota, and Nakota Nations	3

INDG 2060	Eastern Woodlands Encounters Columbus to Confederation	3	POLS 4070	Advanced Seminar: Canadian Government	3
INDG 2070	Cree, Innu, and Dene Nations	3	POLS 4080	Advanced Seminar: Canadian Democracy	3
INDG 2080	Inuit Society and Culture	3	POLS 4140	Canadian Political Ideas	3
INDG 2220	Indigenous Societies and the Political Process	3	POLS 4190	Manitoba Politics and Government	3
INDG 2252	Intermediate Cree 1	3	POLS 4560	Canada and the Arctic	3
INDG 2254	Intermediate Cree 2	3	POLS 4630	Indigenous Political Movements and Activism	3
INDG 2272	Intermediate Anishinaabemowin (Ojibwe) 1	3	POLS 4640	Comparative Indigenous Politics	3
INDG 2274	Intermediate Anishinaabemowin (Ojibwe) 2	3	<b>Religion</b>		
INDG 2300	Cree Literature	3	RLGN 2590	Religion and Social Issues	3
INDG 2410	Indigenous Literature in Canada	3	RLGN 2591	La religion et les problèmes sociaux (C) (USB)	3
INDG 2420	Inuit Literature in Translation	3	<b>Slavic Studies</b>		
INDG 2450	Images of the "Indian" in North American Society	3	UKRN 2410	Ukrainian Canadian Cultural Experience	3
INDG 3000	Selected Topics	3	<b>Sociology and Criminology</b>		
INDG 3240	Indigenous Medicine and Health	3	SOC 2320	Canadian Society and Culture	3
INDG 3270	The Métis Nation: The Modern Era	3	SOC 2321	La société canadienne et sa culture (USB)	3
INDG 3280	Indigenous Peoples and the Canadian Justice System	3	SOC 2370	Ethnic Relations	3
INDG 3300	Indigenous Language Planning and Development	3	SOC 2371	Rapports ethniques (USB)	3
INDG 3310	Canadian Law and Indigenous Peoples	3	SOC 2531	Sociologie du Manitoba (USB)	6
INDG 3370	Political Development in the North	3	SOC 2610	Sociology of Criminal Justice and Corrections	3
INDG 3380	Gender and Indigenous Societies	3	SOC 2620	The Sociology of Aging	3
INDG 4200	First Nations' Government	3	SOC 3380	Power, Politics and the Welfare State	3
INDG 4210	Seminar in Contemporary and Historical Métis Issues	3	SOC 3471	Sociologie politique (USB)	3
INDG 4220	Environment, Economy and Indigenous Peoples	3	SOC 3700	Sociology of Law	3
INDG 4230	Traditional Knowledge and Indigenous Studies Research	3	SOC 3762	Law, Justice, and Indigenous Peoples	3
INDG 4240	Arctic Lifestyles	3	<b>Ukrainian Canadian Heritage Studies</b>		
INDG 4250	Indigenous Identities	3	UCHS 3100	The Ukrainian Arts in Canada	3
INDG 4280	Missionaries, Colonialism, and Indigenous People	3	<b>School of Arts</b>		
<b>Political Studies</b>			<b>Course</b>	<b>Title</b>	<b>Hours</b>
POLS 1502	Introduction to Political Studies	3	<b>Fine Art / Art History</b>		
POLS 1506	Survey of Political Studies	3	FAAH 3260	Canadian Art and Architecture to World War 2	3
POLS 2073	Introduction à la politique canadienne 1 : État et société (USB)	3	FAAH 3270	Canadian Art Since World War 2	3
POLS 2075	Introduction à la politique canadienne II : Institutions et politiques publiques (USB)	3	FAAH 3430	Inuit Art	3
POLS 2702	Introduction to Canadian Politics	3	<b>Clayton H. Riddell Faculty of Environment, Earth, and Resources</b>		
POLS 2802	Introduction to Indigenous Politics	3	<b>Course</b>	<b>Title</b>	<b>Hours</b>
POLS 3100	Gender and Politics in Canada	3	<b>Geography</b>		
POLS 3171	La Charte canadienne des droits et libertés	3	GEOG 2213	Géographies autochtones et relations interculturelles (USB)	3
POLS 3470	Canadian Public Management	3	GEOG 2570	Geography of Canada (A)	3
POLS 3512	Canadian Foreign and Defence Policy 1	3	GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
POLS 3514	Canadian Foreign and Defence Policy 2	3	GEOG 3431	Géographie de Canada (A) (USB)	3
POLS 3563	Le Canada dans le système mondial (USB)	3	GEOG 3481	Particularités de la géographie du Canada (A) (USB)	3
POLS 3670	Canadian Political Parties	3	GEOG 3831	L'espace francophone panaméricain (A, HS) (USB)	3
POLS 3730	Canadian Constitutional Politics	3	<b>Geological Sciences</b>		
POLS 3740	Provincial Politics	3	GEOG 2350	Canada Rocks: The Geology of Canada	3
POLS 3750	City Politics	3	<b>While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:</b>		
POLS 3860	Canadian Federalism	3			
POLS 3872	Indigenous Governance	3			
POLS 3940	Canadian Public Policy	3			

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.

9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Canadian Studies, Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in courses numbered at the 1000 or 2000 level from the list of approved courses in Canadian Studies		6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours from the list of approved courses in Canadian Studies		12
Within the 18 credit hours from the list of approved courses in Canadian Studies above: 1) at least 6 credit hours must be taken from each of two subject fields, and 2) a maximum of 6 credit hours in courses numbered at the 1000 level may be used toward the Minor (Concentration).		
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

### List of Approved Courses in Canadian Studies

Courses designated (USB) are offered in French at Université de Saint-Boniface.

#### Faculty of Arts

Course	Title	Hours
<b>Canadian Studies</b>		
CDN 1000	Introduction to Canada	3
CDN 3730	Canadian Identity: An Interdisciplinary Approach	3
CDN 4410	Seminar in Canadian Studies	6
<b>Anthropology</b>		
ANTH 2040	Native North America: A Sociocultural Survey	3
ANTH 2041	Les Amérindiens de l'Amérique du Nord : une étude socioculturelle (USB)	3
ANTH 2640	Manitoba Prehistory	3
ANTH 3461	Ethnologie des Amérindiens de l'Amérique du Nord (USB)	3
ANTH 3500	Peoples of the Arctic	3
ANTH 3501	Peuples de l'Arctique (USB)	3
ANTH 3550	Canadian Subcultures	3
ANTH 3551	Sous-cultures canadiennes (USB)	3
ANTH 3910	Archaeological Field Training	6
<b>Economics</b>		
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1211	Introduction aux politiques et aux problèmes économiques canadiens (USB)	3
ECON 2310	Canadian Economic Problems	6
ECON 2311	Problèmes économiques du Canada (USB)	6
ECON 2350	Community Economic Development	3



ECON 2362	Economics of Gender	3	HIST 3442	Race, Colonialism, and Migration in Canadian History (C)	3
ECON 3301	Histoire économique du Canada (USB)	6	HIST 3576	History of Women, Gender and Sexuality in Canada (C)	3
ECON 3690	Economic Issues of Health Policy	3	HIST 3730	A History of Western Canada (C)	6
ECON 3720	Urban and Regional Economics and Policies	3	HIST 3780	Studies in Canadian History 1 (C)	3
<b>English, Theatre, Film &amp; Media</b>			HIST 3910	The Ukrainians in Canada (C)	3
ENGL 2270	Canadian Literature	6	HIST 4060	Gender History in Canada (C)	6
ENGL 3270	Studies in Canadian Literature	3	HIST 4280	Topics in the Cultural History of Canada (C)	6
ENGL 3271	Studies in Canadian Literature	3	HIST 4340	Introduction to Archival Science (G)	6
FILM 2430	The Canadian Film	3	HIST 4680	Social History of Health and Disease in Modern Canada (C)	6
<b>Français (USB)</b>			HIST 4890	Canadian Social History (C)	6
FRAN 2313	La littérature du Canada français et du Québec, des origines à 1945 (USB)	3	<b>Icelandic</b>		
FRAN 2323	La littérature du Canada français et du Québec, de 1945 à nos jours (USB)	3	ICEL 2230	Icelandic-Canadian Literature	3
FRAN 2333	Héritage folklorique et tradition orale au Canada français (USB)	3	ICEL 4440	The Icelanders in Canada	3
FRAN 2343	Les influences de la littérature orale au Québec et au Canada français (USB)	3	<b>Labour Studies</b>		
FRAN 2881	Civilisation canadienne-française (USB)	3	LABR/HIST 2200	Labour History: Canada and Beyond (C)	3
FRAN 3313	La littérature québécoise avant la Révolution tranquille (1945-1960) (USB)	3	LABR/HIST 3214	Canada's Left: Rebellion and Repression (C)	3
FRAN 3343	Théories postcoloniales (USB)	3	LABR 3510	Industrial Relations	6
FRAN 3531	Le théâtre québécois (USB)	3	<b>Linguistics</b>		
FRAN 3541	Le théâtre de l'Ouest (USB)	3	LING 1360	Languages of Canada	3
FRAN 3851	Littérature de l'Ouest : poésie, nouvelles (USB)	3	<b>Indigenous Studies</b>		
FRAN 3861	Littérature de l'Ouest : roman (USB)	3	INDG 1200	Indigenous Peoples in Canada	6
<b>French, Spanish and Italian</b>			INDG 1220	Indigenous Peoples in Canada, Part 1	3
FREN 2700	Poésie et théâtre canadiens-français (B)	3	INDG 1240	Indigenous Peoples in Canada, Part 2	3
FREN 3140	Roman canadien-français (B)	3	INDG 1250	Introductory Cree 1	3
FREN 3850	Civilisation canadienne-française (A, B, C)	3	INDG 1260	Introductory Cree 2	3
<b>History</b>			INDG 1270	Introductory Anishinaabemowin (Ojibwe) 1	3
HIST 1390	History of Colonial Canada: 1500-1885 (C)	3	INDG 1280	Introductory Anishinaabemowin (Ojibwe) 2	3
HIST 1400	History of the Canadian Nation since 1867 (C)	3	INDG 1300	Selected Topics in Introductory Indigenous Language	3
HIST 1401	Histoire du Canada, des origines à 1800 (C) (USB)	3	INDG 2012	Indigenous History in Canada	6
HIST 1403	Histoire du Canada, de 1800 à aujourd'hui (C) (USB)	3	INDG 2020	The Métis in Canada	3
HIST 1440	History of Canada (C)	6	INDG 2040	The Dakota, Lakota, and Nakota Nations	3
HIST/LABR 2200	Labour History: Canada and Beyond (C)	3	INDG 2060	Eastern Woodlands Encounters Columbus to Confederation	3
HIST 2010	Indigenous History in Canada (C)	6	INDG 2070	Cree, Innu, and Dene Nations	3
HIST 2020	The Métis in Canada (C)	3	INDG 2080	Inuit Society and Culture	3
HIST 2282	Inventing Canada (C)	3	INDG 2220	Indigenous Societies and the Political Process	3
HIST 2283	Histoire des francophones de l'Ouest canadien (C) (USB)	3	INDG 2252	Intermediate Cree 1	3
HIST 2286	Modern Canada (C)	3	INDG 2254	Intermediate Cree 2	3
HIST 2288	History of Social Movements in Canada (C)	3	INDG 2272	Intermediate Anishinaabemowin (Ojibwe) 1	3
HIST 3031	Histoire de la francophonie canadienne minoritaire (C) (USB)	3	INDG 2274	Intermediate Anishinaabemowin (Ojibwe) 2	3
HIST 3052	Canada since the 1960s (C)	3	INDG 2300	Cree Literature	3
HIST 3054	Canada and the United States (C)	3	INDG 2410	Indigenous Literature in Canada	3
HIST 3097	Histoire du Manitoba (C) (USB)	3	INDG 2420	Inuit Literature in Translation	3
HIST/LABR 3214	Canada's Left: Rebellion and Repression (C)	3	INDG 2450	Images of the "Indian" in North American Society	3
HIST 3250	Canada and the World, 1867 to the Present (C)	6	INDG 3000	Selected Topics	3
HIST 3272	The Métis Nation: The Modern Era	3	INDG 3240	Indigenous Medicine and Health	3
			INDG 3270	The Métis Nation: The Modern Era	3
			INDG 3280	Indigenous Peoples and the Canadian Justice System	3

INDG 3300	Indigenous Language Planning and Development	3
INDG 3310	Canadian Law and Indigenous Peoples	3
INDG 3370	Political Development in the North	3
INDG 3380	Gender and Indigenous Societies	3
INDG 4200	First Nations' Government	3
INDG 4210	Seminar in Contemporary and Historical Métis Issues	3
INDG 4220	Environment, Economy and Indigenous Peoples	3
INDG 4230	Traditional Knowledge and Indigenous Studies Research	3
INDG 4240	Arctic Lifestyles	3
INDG 4250	Indigenous Identities	3
INDG 4280	Missionaries, Colonialism, and Indigenous People	3
<b>Political Studies</b>		
POLS 1502	Introduction to Political Studies	3
POLS 1506	Survey of Political Studies	3
POLS 2073	Introduction à la politique canadienne 1 : État et société (USB)	3
POLS 2075	Introduction à la politique canadienne II : Institutions et politiques publiques (USB)	3
POLS 2702	Introduction to Canadian Politics	3
POLS 2802	Introduction to Indigenous Politics	3
POLS 3100	Gender and Politics in Canada	3
POLS 3171	La Charte canadienne des droits et libertés	3
POLS 3470	Canadian Public Management	3
POLS 3512	Canadian Foreign and Defence Policy 1	3
POLS 3514	Canadian Foreign and Defence Policy 2	3
POLS 3563	Le Canada dans le système mondial	3
POLS 3670	Canadian Political Parties	3
POLS 3730	Canadian Constitutional Politics	3
POLS 3740	Provincial Politics	3
POLS 3750	City Politics	3
POLS 3860	Canadian Federalism	3
POLS 3872	Indigenous Governance	3
POLS 3940	Canadian Public Policy	3
POLS 4070	Advanced Seminar: Canadian Government	3
POLS 4080	Advanced Seminar: Canadian Democracy	3
POLS 4140	Canadian Political Ideas	3
POLS 4190	Manitoba Politics and Government	3
POLS 4560	Canada and the Arctic	3
POLS 4630	Indigenous Political Movements and Activism	3
POLS 4640	Comparative Indigenous Politics	3
<b>Religion</b>		
RLGN 2590	Religion and Social Issues	3
RLGN 2591	La religion et les problèmes sociaux (C) (USB)	3
<b>Slavic Studies</b>		
UKRN 2410	Ukrainian Canadian Cultural Experience	3
<b>Sociology and Criminology</b>		
SOC 2320	Canadian Society and Culture	3
SOC 2321	La société canadienne et sa culture (USB)	3
SOC 2370	Ethnic Relations	3
SOC 2371	Rapports ethniques (USB)	3
SOC 2531	Sociologie du Manitoba (USB)	6

SOC 2610	Sociology of Criminal Justice and Corrections	3
SOC 2620	The Sociology of Aging	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3471	Sociologie politique (USB)	3
SOC 3700	Sociology of Law	3
SOC 3762	Law, Justice, and Indigenous Peoples	3
<b>Ukrainian Canadian Heritage Studies</b>		
UCHS 3100	The Ukrainian Arts in Canada	3

### School of Arts

Course	Title	Hours
<b>Fine Art / Art History</b>		
FAAH 3260	Canadian Art and Architecture to World War 2	3
FAAH 3270	Canadian Art Since World War 2	3
FAAH 3430	Inuit Art	3

### Clayton H. Riddell Faculty of Environment, Earth, and Resources

Course	Title	Hours
<b>Geography</b>		
GEOG 2213	Géographies autochtones et relations interculturelles (USB)	3
GEOG 2570	Geography of Canada (A)	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
GEOG 3431	Géographie de Canada (A) (USB)	3
GEOG 3481	Particularités de la géographie du Canada (A) (USB)	3
GEOG 3831	L'espace francophone panaméricain (A, HS) (USB)	3
<b>Geological Sciences</b>		
GEOL 2350	Canada Rocks: The Geology of Canada	3

# Catholic Studies

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## Program Information

The historical relationships and ongoing encounters that the members of the Roman Catholic Church have had with disciplines such as history, the arts and sciences, as well as human thought comprise the framework around which the Catholic Studies program is formed. It seeks to explore

the Catholic tradition in ways that do justice to its full contributions and challenges as a historical and contemporary phenomenon.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulation (p. 211)s for the B.A. General, Advanced and Honours Degree Programs.

## Minor Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in CATH 1190 and a grade of "C" or better in at least three credit hours from the List of Approved Courses in Catholic Studies.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Catholic Studies, Minor (Concentration) (p. 250)		18	

## Catholic Studies, Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
CATH 1190	Introduction to Catholic Studies	3
3 credit hours from the List of Approved Courses in Catholic Studies		3
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
CATH 3900	Catholic Social Teaching	3
9 credit hours from the List of Approved Courses in Catholic Studies		9
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

CATH 2700	Catholicism and the Paranormal	3
CATH 3900	Catholic Social Teaching	3
History:		
HIST 2180	The History of Catholicism to 1540 (G)	3
HIST 2990	The History of Catholicism since 1540 (G)	3
HIST 2991	Histoire de l'Église catholique depuis 1540 (T)	3
Religion:		
RLGN 2840	The Second Vatican Council	3
RLGN 2850	Contemporary Issues in Roman Catholicism	3
RLGN 3870	The Thought of Bernard Lonergan	3
<b>School of Art</b>		
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3280	Early Byzantine Art and Architecture	3

## List of Approved Courses in Catholic Studies

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 2650	Archaeology of the Ancient Near East	3
Catholic Studies:		
CATH 1190	Introduction to Catholic Studies	3
CATH 2000	Special Topics in Catholic Studies	3
CATH 2010	Literature and Catholic Culture 1	3
CATH 2020	Literature and Catholic Culture 2	3
CATH 2100	Field Studies in Catholic Culture	6
CATH 2200	Catholicism and Human Sexuality	3
CATH 2300	The Jesuits: Their Legacy and Influence	3
CATH 2400	Mystics, Saints, and Sinners: The Quest for Holiness in the Catholic Church	3
CATH 2500	Reshaping the Catholic Landscape in Canada	3
CATH 2600	Pilgrimage and the Localization of Catholic Devotion	3

# Central and East European Studies

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## Program Information

The disintegration of the former Soviet Union has altered the social, political, and economic environment of Central and Eastern Europe. The emergence of new independent countries and the transition from an environment dominated by communist political and economic structures continue to reshape Europe. This program offers an array of courses from five departments. It explores past and present issues in the region.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

## Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both six credit hours of Russian, German, Polish, Ukrainian, Hungarian or Yiddish and six credit hours from the list of approved courses in Central and East European Studies below.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

## Single Advanced Major Cooperative Education Option

Students interested in alternating employment terms and academic terms as part of the Single Advanced Major may apply to enter the Cooperative Education option upon completion of their second year in the program (48 credit hours total). The course and grade requirements for entry to this option are the same as those required for entry to the regular four-year Single Advanced Major program. Students should refer to the general faculty regulations for Cooperative Options (p. 224).

## Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both six credit hours of Russian, German, Polish, Ukrainian, Hungarian or Yiddish and six credit hours from the list of approved courses in Central and East European Studies below.

## Honours Program (Double Honours Only)

For entry to the Honours program, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

This program is only available to students registered in the Honours program in Economics, History or Political Studies.

Courses used toward the Major, Minor (Concentration) or Honours may also be used toward a Major, Minor (Concentration) or Honours in the department in which they are offered.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Central and East European Studies, B.A. Double Advanced (p. 257)	4	120	
Central and East European Studies, B.A. Double Honours (p. 251)	4	120	
Central and East European Studies, B.A. General (p. 259)	3	90	
Central and East European Studies, B.A. Single Advanced (p. 253)	4	120	Yes
Central and East European Studies, Minor (Concentration) (p. 261)		18	

## Central and East European Studies, B.A. Double Honours

### Degree Requirements <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in a language from courses numbered at the 1000 or 2000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish <sup>2</sup>		6
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>5</sup>		6

12 credit hours in free options <sup>6</sup>	12
<b>Hours</b>	<b>30</b>
<b>Years 2-3</b>	
6 credit hours from the List of Approved Courses in Central and East European Studies	6
6 credit hours in a language from courses numbered at the 1000 or 2000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish <sup>2,3</sup>	6
6 credit hours in a language from courses numbered at the 3000 level in Russian, German, Ukrainian or Polish	6
6 credit hours from courses numbered at the 3000 level in Economics, German, History, Political Studies, Russian, Ukrainian or Fine Arts (Art History) <sup>4</sup>	6
24 credit hours in second Honours field as described in that unit's section of the calendar.	24

12 credit hours in free options <sup>6</sup>	12
<b>Hours</b>	<b>60</b>
<b>Year 4</b>	
12 credit hours from courses numbered at the 4000 level in Economics, German, History, Political Studies, Russian, Ukrainian or Fine Arts (Art History) (Within these 12 credit hours, a minimum of 3 credit hours must be completed in each of two different subject fields.) <sup>4</sup>	12
Minimum of 12 credit hours in second Honours Field as described in that unit's section of the calendar	12
6 credit hours in free options <sup>6</sup>	6
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Students must ensure that all course prerequisites are met when selecting courses for the Double Honours program. Students should consult the program coordinator when selecting courses in Year 1 and 2 of the program.

<sup>2</sup> Students should note that while the majority of students begin language instruction with courses numbered at the 1000 level, in exceptional circumstances and with the approval of the committee, students may begin language instruction with courses numbered at the 2000 level.

<sup>3</sup> Students who begin their language instruction in Year 1 with 6 credit hours of courses numbered beyond the 1000 level may take 6 credit hours at the 1000, 2000 or 3000 levels in a different language approved by the program coordinator.

<sup>4</sup> Courses must be individually approved by the program coordinator as relevant to Central and East European Studies. For information on available courses, please contact the program coordinator.

<sup>5</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Central and East European Studies courses).

<sup>6</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Central and East European Studies courses).

Note:

- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

## List of Approved Courses in Central and East European Studies

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 2060	European Archaeology	3
Economics:		
ECON 2510	The Economy of Ukraine	3
German and Slavic Studies:		
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3

GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3
GRMN 3260	Representations of the Holocaust (B)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
GRMN 3290	History in Literature in German-Speaking Countries (B)	3
GRMN 3390	German Representations of War (C)	3
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3
HUNG 2100	Hungarian Culture and Language	6
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POLS 3630	Russian Politics, Government, and Society	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 1410	Love in Russian Culture in English Translation	3
RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
RUSN 2410	Russian Literature after Stalin	3
RUSN 2600	Special Topics in Russian Culture in English Translation	3
RUSN 2740	Literature and Revolution	3
RUSN 3630	Russian Politics, Government, and Society	3
RUSN 3770	Tolstoy	3
RUSN 3780	Dostoevsky	3
SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
SLAV 3920	Gogol	3
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2800	Literature and Revolution in Ukraine	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
UKRN 3100	Ukrainian Story Writing Through the Ages	3
UKRN 3300	Literature of Independent Ukraine	3
History:		
HIST 2240	History of Antisemitism and the Holocaust (E)	6

HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
HIST 2660	History of the Soviet Union (E)	3
HIST 2661	Histoire de l'Union soviétique (E)	3
HIST 2840	A History of Russia to 1917 (E)	3
HIST 2841	Histoire de la Russie jusqu'en 1917 (E)	3
HIST 3062	German and German-Jewish History, 1618 to the Present (E)	6
Judaic Studies:		
JUD 3010	Topics in Jewish Studies (when its focus is on Central and Eastern European Studies)	3
YDSH 2320	Yiddish Literature and Language	6
Political Studies:		
POLS 3720	Politics, Government and Society in Ukraine	3
POLS 3810	Introduction to Marxism	3
Religion:		
RLGN 1350	The History of Eastern Christianity	6
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 3280	Hasidism	3
School of Art		
FAAH 3160	Topics in 20th Century Art (when its focus is on Central and Eastern European Studies)	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 4070	Seminar in Art History 1 (when its focus is on Central and Eastern European Studies)	3

Students are advised to consult the respective departmental *Calendar* entries for specific information on prerequisites and restrictions.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).

4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Central and East European Studies, B.A. Single Advanced

### Degree Requirements

(including Co-operative Education Option if selected)

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in a language from courses numbered at the 1000 or 2000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish <sup>1</sup>		6
6 credit hours from the List of Approved Courses in Central and East European Studies		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours from outside of your Major and Minor areas of study		12
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
30 credit hours from the List of Approved Courses in Central and East European Studies. Within these 30 credit hours, a minimum of 6 credit hours must be completed in each of two different subject fields		30
6 credit hours from the List of Approved Courses in Central and East European Studies or from language courses numbered at the 1000, 2000, or 3000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish <sup>2</sup>		6
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
30 credit hours from outside of your Major and Minor areas of study		30
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

#### Co-operative Education option

Course	Title	Hours
<b>Years 3-4</b>		

If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will replace three credit hours of elective credit in years 2-4

ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1

ARTS 3030	Arts Co-operative Option 3	1
	<b>Hours</b>	<b>3</b>
	<b>Total Hours</b>	<b>3</b>

<sup>1</sup> Students should note that while the majority of students begin language instruction with courses numbered at the 1000 level, in exceptional circumstances and with the approval of the committee, students may begin language instruction with courses numbered at the 2000 level.

<sup>2</sup> Students who begin their language instruction in Year 1 with 6 credit hours of courses numbered beyond the 1000 level may take 6 credit hours at the 1000, 2000 or 3000 levels in a different language approved by the program coordinator.

## List of Approved Courses in Central and East European Studies

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 2060	European Archaeology	3
Economics:		
ECON 2510	The Economy of Ukraine	3
German and Slavic Studies:		
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3
GRMN 3260	Representations of the Holocaust (B)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
GRMN 3290	History in Literature in German-Speaking Countries (B)	3
GRMN 3390	German Representations of War (C)	3
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3
HUNG 2100	Hungarian Culture and Language	6
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POLS 3630	Russian Politics, Government, and Society	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 1410	Love in Russian Culture in English Translation	3

RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
RUSN 2410	Russian Literature after Stalin	3
RUSN 2600	Special Topics in Russian Culture in English Translation	3
RUSN 2740	Literature and Revolution	3
RUSN 3630	Russian Politics, Government, and Society	3
RUSN 3770	Tolstoy	3
RUSN 3780	Dostoevsky	3
SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
SLAV 3920	Gogol	3
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2800	Literature and Revolution in Ukraine	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
UKRN 3100	Ukrainian Story Writing Through the Ages	3
UKRN 3300	Literature of Independent Ukraine	3
History:		
HIST 2240	History of Antisemitism and the Holocaust (E)	6
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
HIST 2660	History of the Soviet Union (E)	3
HIST 2661	Histoire de l'Union soviétique (E)	3
HIST 2840	A History of Russia to 1917 (E)	3
HIST 2841	Histoire de la Russie jusqu'en 1917 (E)	3
HIST 3062	German and German-Jewish History, 1618 to the Present (E)	6
Judaic Studies:		
JUD 3010	Topics in Jewish Studies (when its focus is on Central and Eastern European Studies)	3
YDSH 2320	Yiddish Literature and Language	6
Political Studies:		
POLS 3720	Politics, Government and Society in Ukraine	3
POLS 3810	Introduction to Marxism	3
Religion:		
RLGN 1350	The History of Eastern Christianity	6
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 3280	Hasidism	3
<b>School of Art</b>		
FAAH 3160	Topics in 20th Century Art (when its focus is on Central and Eastern European Studies)	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 4070	Seminar in Art History 1 (when its focus is on Central and Eastern European Studies)	3

Students are advised to consult the respective departmental *Calendar* entries for specific information on prerequisites and restrictions.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used

to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilius  
304 Tier Building  
arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.



## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

### Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

### Continuation in the Co-operative Education Option

#### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

#### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

#### Employment Term Requirements

##### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

##### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

##### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

##### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

##### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

##### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;

- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

## Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## Central and East European Studies, B.A. Double Advanced Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in a language from courses numbered at the 1000 or 2000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish <sup>1</sup>		6
6 credit hours from the List of Approved Courses in Central and East European Studies		6
6 credit hours from second Advanced Major field as described in that unit's section of the calendar		6
12 credit hours from outside both Advanced Major subject fields		12
<b>Hours</b>		<b>30</b>

### Years 2-4

24 credit hours from the List of Approved Courses in Central and East European Studies. Within these 24 credit hours, a minimum of 6 credit hours must be completed in each of two different subject fields	24
6 credit hours from the List of Approved Courses in Central and East European Studies or from language courses numbered at the 1000, 2000, or 3000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish <sup>2</sup>	6
36 credit hours from second Advanced Major subject field as prescribed in that unit's section of the calendar	36
24 credit hours from outside both Advanced Major subject fields	24
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> Students should note that while the majority of students begin language instruction with courses numbered at the 1000 level, in exceptional circumstances and with the approval of the committee, students may begin language instruction with courses numbered at the 2000 level.
- <sup>2</sup> Students who begin their language instruction in Year 1 with 6 credit hours of courses numbered beyond the 1000 level may take 6 credit hours at the 1000, 2000 or 3000 levels in a different language approved by the program coordinator.

## List of Approved Courses in Central and East European Studies

Course	Title	Hours
<b>Faculty of Arts</b>		
<b>Anthropology:</b>		
ANTH 2060	European Archaeology	3
<b>Economics:</b>		
ECON 2510	The Economy of Ukraine	3
<b>German and Slavic Studies:</b>		
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3
GRMN 3260	Representations of the Holocaust (B)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3

GRMN 3290	History in Literature in German-Speaking Countries (B)	3
GRMN 3390	German Representations of War (C)	3
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3
HUNG 2100	Hungarian Culture and Language	6
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POLS 3630	Russian Politics, Government, and Society	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 1410	Love in Russian Culture in English Translation	3
RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
RUSN 2410	Russian Literature after Stalin	3
RUSN 2600	Special Topics in Russian Culture in English Translation	3
RUSN 2740	Literature and Revolution	3
RUSN 3630	Russian Politics, Government, and Society	3
RUSN 3770	Tolstoy	3
RUSN 3780	Dostoevsky	3
SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
SLAV 3920	Gogol	3
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2800	Literature and Revolution in Ukraine	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
UKRN 3100	Ukrainian Story Writing Through the Ages	3
UKRN 3300	Literature of Independent Ukraine	3
History:		
HIST 2240	History of Antisemitism and the Holocaust (E)	6
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
HIST 2660	History of the Soviet Union (E)	3
HIST 2661	Histoire de l'Union soviétique (E)	3
HIST 2840	A History of Russia to 1917 (E)	3
HIST 2841	Histoire de la Russie jusqu'en 1917 (E)	3
HIST 3062	German and German-Jewish History, 1618 to the Present (E)	6
Judaic Studies:		
JUD 3010	Topics in Jewish Studies (when its focus is on Central and Eastern European Studies)	3
YDSH 2320	Yiddish Literature and Language	6
Political Studies:		
POLS 3720	Politics, Government and Society in Ukraine	3
POLS 3810	Introduction to Marxism	3
Religion:		

RLGN 1350	The History of Eastern Christianity	6
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 3280	Hasidism	3
<b>School of Art</b>		
FAAH 3160	Topics in 20th Century Art (when its focus is on Central and Eastern European Studies)	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 4070	Seminar in Art History 1 (when its focus is on Central and Eastern European Studies)	3

Students are advised to consult the respective departmental *Calendar* entries for specific information on prerequisites and restrictions.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

- Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
- A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.  
  
A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities) , or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 42 credit hours numbered at or above the 2000 level.
- Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Central and East European Studies, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in a language from courses numbered at the 1000 or 2000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish <sup>1</sup>		6
6 credit hours from the List of Approved Courses in Central and East European Studies		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours from outside of your Major and Minor areas of study		12
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
12 credit hours from the List of Approved Courses in Central and East European Studies. Within these 12 credit hours, a minimum of 3 credit hours must be completed in each of two different subject fields		12

6 credit hours from the List of Approved Courses in Central and East European Studies or from language courses numbered at the 1000, 2000, or 3000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish<sup>2</sup>

12 credit hours from your Minor area of study as described in that unit's section of the calendar

18 credit hours from outside of your Major and Minor areas of study

12 credit hours of open electives

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	60
<b>Total Hours</b>	<b>90</b>

<sup>1</sup> Students should note that while the majority of students begin language instruction with courses numbered at the 1000 level, in exceptional circumstances and with the approval of the committee, students may begin language instruction with courses numbered at the 2000 level.

<sup>2</sup> Students who begin their language instruction in Year 1 with 6 credit hours of courses numbered beyond the 1000 level may take 6 credit hours at the 1000, 2000 or 3000 levels in a different language approved by the program coordinator.

### List of Approved Courses in Central and East European Studies

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 2060	European Archaeology	3
Economics:		
ECON 2510	The Economy of Ukraine	3
German and Slavic Studies:		
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3
GRMN 3260	Representations of the Holocaust (B)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
GRMN 3290	History in Literature in German-Speaking Countries (B)	3
GRMN 3390	German Representations of War (C)	3

GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3
HUNG 2100	Hungarian Culture and Language	6
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POLS 3630	Russian Politics, Government, and Society	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 1410	Love in Russian Culture in English Translation	3
RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
RUSN 2410	Russian Literature after Stalin	3
RUSN 2600	Special Topics in Russian Culture in English Translation	3
RUSN 2740	Literature and Revolution	3
RUSN 3630	Russian Politics, Government, and Society	3
RUSN 3770	Tolstoy	3
RUSN 3780	Dostoevsky	3
SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
SLAV 3920	Gogol	3
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2800	Literature and Revolution in Ukraine	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
UKRN 3100	Ukrainian Story Writing Through the Ages	3
UKRN 3300	Literature of Independent Ukraine	3
History:		
HIST 2240	History of Antisemitism and the Holocaust (E)	6
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
HIST 2660	History of the Soviet Union (E)	3
HIST 2661	Histoire de l'Union soviétique (E)	3
HIST 2840	A History of Russia to 1917 (E)	3
HIST 2841	Histoire de la Russie jusqu'en 1917 (E)	3
HIST 3062	German and German-Jewish History, 1618 to the Present (E)	6
Judaic Studies:		
JUD 3010	Topics in Jewish Studies (when its focus is on Central and Eastern European Studies)	3
YDSH 2320	Yiddish Literature and Language	6
Political Studies:		
POLS 3720	Politics, Government and Society in Ukraine	3
POLS 3810	Introduction to Marxism	3
Religion:		
RLGN 1350	The History of Eastern Christianity	6
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 3280	Hasidism	3

**School of Art**

FAAH 3160	Topics in 20th Century Art (when its focus is on Central and Eastern European Studies)	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 4070	Seminar in Art History 1 (when its focus is on Central and Eastern European Studies)	3

Students are advised to consult the respective departmental *Calendar* entries for specific information on prerequisites and restrictions.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. General Degree**

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to

satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.

6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Central and East European Studies, Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in a language from courses numbered at the 1000 or 2000 level in Russian, German, Ukrainian, Polish, Hungarian or Yiddish <sup>1</sup>		6
6 credit hours from the List of Approved Courses in Central and East European Studies <sup>2</sup>		6
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
6 credit hours from the List of Approved Courses in Central and East European Studies		6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Students should note that while the majority of students begin language instruction with courses numbered at the 1000 level, in exceptional circumstances and with the approval of the committee, students may begin language instruction with courses numbered at the 2000 level.

<sup>2</sup> Students who have declared a Major in Russian, German or Ukrainian can either take 6 credit hours from each of two different subject fields from the List of Approved Courses in Central and East European Studies, or 6 credit hours from courses numbered at the 1000 or 2000 level in a language (Russian, German, Ukrainian, Polish, Hungarian or Yiddish) other than their declared Major and 6 credit hours from the List of Approved Courses in Central and East European Studies.

### List of Approved Courses in Central and East European Studies

Course	Title	Hours
<b>Faculty of Arts</b>		
<b>Anthropology:</b>		
ANTH 2060	European Archaeology	3
<b>Economics:</b>		
ECON 2510	The Economy of Ukraine	3
<b>German and Slavic Studies:</b>		
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3
GRMN 3260	Representations of the Holocaust (B)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
GRMN 3290	History in Literature in German-Speaking Countries (B)	3
GRMN 3390	German Representations of War (C)	3
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3
HUNG 2100	Hungarian Culture and Language	6
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POLS 3630	Russian Politics, Government, and Society	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 1410	Love in Russian Culture in English Translation	3
RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
RUSN 2410	Russian Literature after Stalin	3
RUSN 2600	Special Topics in Russian Culture in English Translation	3
RUSN 2740	Literature and Revolution	3
RUSN 3630	Russian Politics, Government, and Society	3
RUSN 3770	Tolstoy	3
RUSN 3780	Dostoevsky	3
SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
SLAV 3920	Gogol	3

UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2800	Literature and Revolution in Ukraine	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
UKRN 3100	Ukrainian Story Writing Through the Ages	3
UKRN 3300	Literature of Independent Ukraine	3
History:		
HIST 2240	History of Antisemitism and the Holocaust (E)	6
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
HIST 2660	History of the Soviet Union (E)	3
HIST 2661	Histoire de l'Union soviétique (E)	3
HIST 2840	A History of Russia to 1917 (E)	3
HIST 2841	Histoire de la Russie jusqu'en 1917 (E)	3
HIST 3062	German and German-Jewish History, 1618 to the Present (E)	6
Judaic Studies:		
JUD 3010	Topics in Jewish Studies (when its focus is on Central and Eastern European Studies)	3
YDSH 2320	Yiddish Literature and Language	6
Political Studies:		
POLS 3720	Politics, Government and Society in Ukraine	3
POLS 3810	Introduction to Marxism	3
Religion:		
RLGN 1350	The History of Eastern Christianity	6
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 3280	Hasidism	3
<b>School of Art</b>		
FAAH 3160	Topics in 20th Century Art (when its focus is on Central and Eastern European Studies)	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 4070	Seminar in Art History 1 (when its focus is on Central and Eastern European Studies)	3

Students are advised to consult the respective departmental *Calendar* entries for specific information on prerequisites and restrictions.

## Classics

**Head:** James Chlup

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**E-mail:** classics@umanitoba.ca

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## Program Information

Classics programs focus on the languages, literature and material cultures of ancient Greece and Rome. The two cultures are considered for their formative role at the beginnings of western civilization and for their continuing influence on modern civilization. Although courses, and entire programs, are available to students without any Latin or Greek, those intending to pursue specialist studies in any field of classical studies are urged to begin study of the languages as early as possible. The department, through academic staff members with expertise in art history and archaeology, offers a variety of opportunities for travel courses and fieldwork overseas.

The Department of Classics offers Major and Minor (Concentration) programs in Classical Studies, Greek, and Latin.

## Classical Studies

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulation (p. 211)s for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours in Classical Studies (CLAS), Greek (GRK) or Latin (LATN) or six credit hours from List A below.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both CLAS 1270 and CLAS 1280, or written permission of the department head.

## Greek

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulation (p. 211)s for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both GRK 1010 and GRK 1020, or written consent of the department head.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

## Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both GRK 1010 and GRK 1020, or written consent of the department head.

## Latin

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

## Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both LATN 1080 and LATN 1090, or written consent of the department head.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

## Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both LATN 1080 and LATN 1090, or written consent of the department head.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Classical Studies, B.A. Double Advanced Major (p. 264)	4	120	
Classical Studies, B.A. General (p. 265)	3	90	
Classical Studies, B.A. Single Advanced Major (p. 263)	4	120	
Classical Studies, Minor (Concentration) (p. 266)		18	
Greek, B.A. Single Advanced (p. 267)	4	120	
Greek, Minor (Concentration) (p. 268)		18	
Latin, B.A. Single Advanced (p. 268)	4	120	
Latin Minor (Concentration) (p. 269)		18	

## Classical Studies, B.A. Single Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
CLAS 1270	Introduction to Ancient Greek Culture	3
CLAS 1280	Introduction to Ancient Roman Culture	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
6 credit hours in Classical Studies (CLAS) courses numbered at the 2000 level or above		6
36 credit hours in Classical Studies (CLAS), Latin (LATN), Greek (GRK) or List A courses of which at least 6 credit hours must be numbered at the 3000 level or above <sup>1</sup>		36
12 credit hours from your Minor area of study as described in that unit's section of the calendar.		12
24 credit hours from outside your Major and Minor areas of study.		24

12 credit hours of open electives 12

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	90
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Within the 36 credit hours, a student may include up to a maximum of 21 credit hours from List A below.

### List A: Approved List of Courses Offered by Other Departments Acceptable for Credit in a Major/Minor (Concentration) in Classical Studies

Course	Title	Hours
<b>History</b>		
HIST 2420	The Medieval World (D)	6
<b>Philosophy</b>		
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
<b>Religion</b>		
RLGN 2112	Medicine, Magic, and Miracle in the Ancient World	3



RLGN 3640	Religion in the Hellenistic and Roman Mediterranean	3
<b>Total Hours</b>		<b>18</b>

For course descriptions, see the departmental listings in this *Calendar*.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor.

A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Classical Studies, B.A. Double Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
CLAS 1270	Introduction to Ancient Greek Culture	3
CLAS 1280	Introduction to Ancient Roman Culture	3
6 credit hours from second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
6 credit hours in Classical Studies (CLAS) courses numbered at the 2000 level or above		6
30 credit hours in Classical Studies (CLAS), Latin (LATN), Greek (GRK) or List A courses of which at least 6 credit hours must be numbered at the 3000 level or above <sup>1</sup>		30
36 credit hours from second Advanced Major subject field as described in that unit's section of the calendar		36
18 credit hours from outside both Advanced Major subject fields		18
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Within the 30 credit hours, a student may include up to a maximum of 15 credit hours from List A below.

## List A: Approved List of Courses Offered by Other Departments Acceptable for Credit in a Major/Minor (Concentration) in Classical Studies

Course	Title	Hours
<b>History</b>		
HIST 2420	The Medieval World (D)	6
<b>Philosophy</b>		
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
<b>Religion</b>		
RLGN 2112	Medicine, Magic, and Miracle in the Ancient World	3
RLGN 3640	Religion in the Hellenistic and Roman Mediterranean	3
<b>Total Hours</b>		<b>18</b>

For course descriptions, see the departmental listings in this *Calendar*.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major

in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Classical Studies, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
CLAS 1270	Introduction to Ancient Greek Culture	3
CLAS 1280	Introduction to Ancient Roman Culture	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
6 credit hours in Classical Studies (CLAS) courses numbered at the 2000 level or above		6
18 credit hours in Classical Studies (CLAS), Latin (LATN), Greek (GRK) or List A courses below <sup>1</sup>		18

12 credit hours from your Minor area of study as described in that unit's section of the calendar	12
12 credit hours from outside your Major and Minor areas of study	12
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>60</b>
<b>Total Hours</b>	<b>90</b>

<sup>1</sup> Within the 18 credit hours, a student may include up to a maximum of 15 credit hours from List A below.

### List A: Approved List of Courses Offered by Other Departments Acceptable for Credit in a Major/Minor (Concentration) in Classical Studies

Course	Title	Hours
<b>History</b>		
HIST 2420	The Medieval World (D)	6
<b>Philosophy</b>		
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
<b>Religion</b>		
RLGN 2112	Medicine, Magic, and Miracle in the Ancient World	3
RLGN 3640	Religion in the Hellenistic and Roman Mediterranean	3
<b>Total Hours</b>		<b>18</b>

For course descriptions, see the departmental listings in this *Calendar*.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.

4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Classical Studies, Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
CLAS 1270	Introduction to Ancient Greek Culture	3
CLAS 1280	Introduction to Ancient Roman Culture	3
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours in Classical Studies (CLAS) <sup>1</sup>		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Within the 12 credit hours, a student may include up to 6 credit hours in Latin (LATN) or Greek (GRK) courses and may substitute up to 9 credit hours from List A below.

### List A: Approved List of Courses Offered by Other Departments Acceptable for Credit in a Major/Minor (Concentration) in Classical Studies

Course	Title	Hours
<b>History</b>		
HIST 2420	The Medieval World (D)	6
<b>Philosophy</b>		
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
<b>Religion</b>		
RLGN 2112	Medicine, Magic, and Miracle in the Ancient World	3
RLGN 3640	Religion in the Hellenistic and Roman Mediterranean	3
<b>Total Hours</b>		<b>18</b>

For course descriptions, see the departmental listings in this *Calendar*.

## Greek, B.A. Single Advanced Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
GRK 1010	Introduction to the Reading of Ancient Greek 1	3
GRK 1020	Introduction to the Reading of Ancient Greek 2	3
6 credit hours from your Minor area of Study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
GRK 2700	Intermediate Readings in Ancient Greek	3
GRK 2770	Greek Prose Composition and Sight Translation	3
36 credit hours in Greek of which 6 credit hours must be numbered at the 3000 level		36
12 credit hours from your Minor area of study as described in that unit's section of the calendar.		12
24 credit hours from outside your Major and Minor areas of study.		24
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

- Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
- A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Greek, Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
GRK 1010	Introduction to the Reading of Ancient Greek 1	3
GRK 1020	Introduction to the Reading of Ancient Greek 2	3
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
GRK 2700	Intermediate Readings in Ancient Greek	3
9 credit hours in Greek		9
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

## Latin, B.A. Single Advanced Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
LATN 1080	Introduction to the Reading of Latin 1	3
LATN 1090	Introduction to the Reading of Latin 2	3
6 credit hours from your Minor area of Study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
LATN 2700	Intermediate Readings in Latin	3
LATN 2760	Latin Prose Composition and Sight Translation	3
36 credit hours in Latin of which 6 credit hours must be numbered at the 3000 level		36
12 credit hours from your Minor area of study as described in that unit's section of the calendar.		12
24 credit hours from outside your Major and Minor areas of study.		24
12 credit hours of open electives		12

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	90
<b>Total Hours</b>	<b>120</b>

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor.

A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
- A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
  8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
  9. At least 42 credit hours numbered at or above the 2000 level.
  10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Latin Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
LATN 1080	Introduction to the Reading of Latin 1	3
LATN 1090	Introduction to the Reading of Latin 2	3
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
LATN 2700	Intermediate Readings in Latin	3
9 credit hours in Latin		9
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

## Economics

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### Program Information

The economy is important to all Canadians, and economics is the field of study that helps us understand our world: wages and employment, economic growth, productivity, wealth and poverty, government budgets and taxation, resource exploitation, business practices, inflation, recession, regional economic differences. In economics we study the history and current reality of these issues. We learn the principles and techniques necessary to gain a sound understanding of the choices and problems facing us during our lifetime.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### General Major Program

For entry to the General Major, the prerequisite is a grade of "C" or better in both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Advanced Major Program

For entry to the Advanced Major, the prerequisite is a grade of "C" or better in both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220.

When entering the four-year Advanced Major program in Economics, students are required to select from one of two available streams: Economics and Econometrics stream or Economics and Society stream. For information on the courses required in the different streams, please review the stream-specific program charts (p. 270). Students who decide to switch streams are eligible to do so and are responsible for ensuring that they will meet the specific requirements of the stream they select.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220.

### Honours Program

For entry to the Honours program, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

When entering the four-year Single Honours program in Economics, students are required to select from one of two available streams: Economics and Econometrics stream or Economics and Society stream. For information on the courses required in the different streams, please

review the stream-specific program charts (p. 270). Students who decide to switch streams are eligible to do so and are responsible for ensuring that they will meet the specific requirements of the stream they select.

Honours students are advised to select their ancillary options from the following disciplines: Geography, History, Mathematics, Political Studies, Statistics, Sociology, and Philosophy. However, other fields may be selected to satisfy study or career interests.

## Co-operative Education Options

Students interested in alternating employment terms and academic terms as part of the Single Advanced Major or the Single Honours programs in Economics may apply to enter the Co-operative Education Option upon completion of their second year in the program (min. 48 credit hours completed). The course and grade requirements for entry to this option are the same as those required for entry to the Single Advanced Major and Honours programs respectively, as indicated above. Students should refer to the general faculty regulations for Co-operative Options for additional conditions of the option.

## Preparation for Graduate Studies

Students contemplating graduate work are advised to complete the Honours program. Students who pursue the Economics and Econometrics stream will obtain good background knowledge of mathematics, statistics, and econometrics, as well as core theory

courses in economics. Students who pursue the Economics and Society stream are advised to confirm what undergraduate econometrics or statistics courses may be necessary for admission to a future Economics graduate program at this or another institution, and plan their optional courses accordingly.

## Economics-Mathematics Joint Honours Program

The Department of Economics and the Department of Mathematics (Faculty of Science) offer a Joint Honours program for students wishing in-depth study in Economics and Mathematics. For Mathematics course listings, refer to the Faculty of Science (p. 799) in the Calendar.

Students in the Joint Honours program will follow the regulations outlined in the Honours program, see: Honours Degree Program (p. 211).

## Economics-Statistics Joint Honours Program

The Department of Economics and the Department of Statistics (Faculty of Science) offer a Joint Honours program for students wishing in-depth study in Economics and Statistics. For Statistics course listings, refer to the Faculty of Science (p. 799) in the Calendar.

Students in the Joint Honours program will follow the regulations outlined in the Honours program, see: Honours Degree Program. (p. 211)

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Economics, B.A. Double Honours (p. 274)	4	120	
Economics, B.A. General (p. 279)	3	90	
Economics, B.A. Single Advanced (p. 275)	4	120	Yes
Economics, B.A. Single Honours (p. 270)	4	120	Yes
Economics Minor (Concentration) (p. 282)		18	
Economics-Mathematics, B.A. Joint Honours (p. 280)	4	120	
Economics-Statistics, B.A. Joint Honours (p. 281)	4	120	

## Economics, B.A. Single Honours

### Degree Requirements

### Economics, B.A. Single Honours - Economics and Econometrics Stream <sup>1</sup> (including Co-operative Education Option if selected)

Course	Title	Hours
<b>Year 1</b>		
Select one of the following pairs of Introductory Economics courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		

ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
MATH 1500 or MATH 1520	Introduction to Calculus or Introductory Calculus for Management and Social Sciences	3
21 credit hours of ancillary options <sup>2</sup>		21
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
ECON 2030	Mathematical Economics 1	3
ECON 2040	Quantitative Methods in Economics	3
6 credit hours of Economics numbered at the 2000 level or higher		6

3 credit hours of ancillary options <sup>2</sup>	3
9 credit hours of free options <sup>3</sup>	9

<b>Hours</b>	<b>30</b>
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**Year 3**

ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
ECON 3030	Mathematical Economics 2	3
ECON 3040	Introduction to Econometrics	3
ECON 3810	Alternative Approaches to Macroeconomic Analysis	3

12 credit hours of Economics numbered at the 3000 level or higher	12
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3 credit hours of free options <sup>3</sup>	3
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<b>Hours</b>	<b>30</b>
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**Year 4**

ECON 4010	Advanced Microeconomic Theory	3
ECON 4020	Topics in Advanced Macroeconomic Theory	3
ECON 4040	Seminar in Applied Econometrics	3
ECON 4050	History of Economic Thought 1	3

6 credit hours of Economics numbered at the 4000 level	6
--	---

12 credit hours of free options <sup>3</sup>	12
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Refer to the information below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.

<b>Hours</b>	<b>30</b>
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<b>Total Hours</b>	<b>120</b>
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**Co-operative Education Option**

Course	Title	Hours
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**Years 3-4****Fall**

If the Co-operative Education Option is selected, time to degree completion will be extended by 12 months, and the following three, 1 credit hour work-term courses will count toward the free options listed above:

ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1

<b>Hours</b>	<b>3</b>
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<b>Total Hours</b>	<b>3</b>
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<sup>1</sup> Students contemplating graduate work in Economics should refer to the notes above under "Preparation for Graduate Studies".

<sup>2</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Economics courses).

<sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Economics courses).

**Economics, B.A. Single Honours - Economics and Society Stream<sup>1</sup> (including Co-operative Education Option if selected)**

Course	Title	Hours
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**Year 1**

Select one of the following pairs of introductory Economics courses:

Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	6

or both of:

ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	6
MATH 1500 or MATH 1520	Introduction to Calculus or Introductory Calculus for Management and Social Sciences	3

21 credit hours of ancillary options <sup>2</sup>	21
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<b>Hours</b>	<b>30</b>
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**Year 2**

ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
ECON 2030	Mathematical Economics 1	3
ECON 2040	Quantitative Methods in Economics	3

6 credit hours of Economics numbered at the 2000 level or higher	6
--	---

3 credit hours of ancillary options <sup>2</sup>	3
--	---

9 credit hours of free options <sup>3</sup>	9
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<b>Hours</b>	<b>30</b>
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**Year 3**

ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
ECON 3040	Introduction to Econometrics	3
ECON 3810	Alternative Approaches to Macroeconomic Analysis	3

9 credit hours from:	9
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ECON 2310	Canadian Economic Problems	3
ECON 2630	An Introduction to the World's Economies	3
ECON 3374	Public Expenditure Analysis and Policy Evaluation	3
ECON 3376	Taxation, Tax Policy and Inter-government Public Finance Issues	3
ECON 3392	An Introduction to Development Economics	3
ECON 3394	Development Economics: Problems and Policies	3
ECON 3690	Economic Issues of Health Policy	3
ECON 3692	Economic Determinants of Health	3
ECON 3710	Sustainable Development: Issues and Policy	3
ECON 3720	Urban and Regional Economics and Policies	3



9 credit hours of free options <sup>3</sup>	9
<b>Hours</b>	<b>30</b>
<b>Year 4</b>	
ECON 4040 Seminar in Applied Econometrics	3
ECON 4050 History of Economic Thought 1	3
6 credit hours of Economics numbered at the 3000 level or higher	6
12 credit hours of Economics numbered at the 4000 level	12
6 credit hours of free options <sup>3</sup>	6
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

### Co-operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work-term courses will count toward the free options listed above:		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Students contemplating graduate work in Economics should refer to the notes above under "Preparation for Graduate Studies".

<sup>2</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Economics courses).

<sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Economics courses).

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.

3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to

maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

## Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

#### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator

will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

## Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## Economics, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following pairs of Introductory Economics courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
MATH 1500 or MATH 1520	Introduction to Calculus or Introductory Calculus for Management and Social Sciences	3
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>1</sup>		6
9 credit hours in free options <sup>2</sup>		9
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
ECON 2030	Mathematical Economics 1	3
ECON 2040	Quantitative Methods in Economics	3
ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
ECON 3040	Introduction to Econometrics	3

A further 9 credit hours in Economics numbered at the 2000 level or higher	9
A further 6 credit hours in Economics numbered at the 4000 level	6
36 credit hours in second Honours field as described in that unit's section of the calendar	36
18 credit hours in in free options <sup>2</sup>	18
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Economics courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Economics courses).

### Notes:

- Students contemplating Double Honours in Economics and Mathematics, or Economics and Statistics are referred to the Economics-Mathematics Joint Honours Program or the Economics-Statistics Joint Honours Program.
- Students contemplating graduate work in Economics should refer to the notes above under "Preparation for Graduate Studies".
- If the second Honours field chosen is Sociology, students need to be aware that Sociology requires an additional 3 credit hours of required course work in their Double Honours program.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

# Economics, B.A. Single Advanced

## Degree Requirements

### Economics and Econometrics Stream (including Co-operative Education Option if selected)

Course	Title	Hours
<b>Year 1</b>		
Select one of the following pairs of Introductory courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
Select one of the following		
MATH 1500 or MATH 1520	Introduction to Calculus or Introductory Calculus for Management and Social Sciences	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
15 credit hours from outside of your Major and Minor areas of study		15
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
ECON 2030	Mathematical Economics 1	3
ECON 2040	Quantitative Methods in Economics	3
<b>Hours</b>		<b>12</b>
<b>Years 2-4</b>		
3 credit hours from:		3
ECON 2350	Community Economic Development	
ECON 2362	Economics of Gender	
ECON 2540	Political Economy 1: Production and Distribution	
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	
ECON 3392	An Introduction to Development Economics	
ECON 3692	Economic Determinants of Health	
ECON 3810	Alternative Approaches to Macroeconomic Analysis	
ECON 4050	History of Economic Thought 1	
ECON 4052	History of Economic Thought 2	
9 credit hours in Economics numbered at the 2000 level or higher		9
12 credit hours from your Minor area of study as described in that unit's section of the calendar.		12
27 credit hours from outside your Major and Minor areas of study.		27
12 credit hours of open electives		12
<b>Hours</b>		<b>63</b>

<b>Year 3</b>		
ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
ECON 3040	Introduction to Econometrics	3
<b>Hours</b>		<b>9</b>
<b>Year 4</b>		
ECON 4822	Economic Research and Communication	6
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

### Co-operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will count toward the outside or open elective credit listed above:		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

### Economics and Society Stream <sup>1</sup> (including Co-operative Education Option if selected)

Course	Title	Hours
<b>Year 1</b>		
Select one of the following pairs of Introductory Economic courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
ECON 2040	Quantitative Methods in Economics	3
<b>Hours</b>		<b>9</b>
<b>Years 2-4</b>		
3 credit hours from:		3
ECON 2350	Community Economic Development	

ECON 2362	Economics of Gender	
ECON 2540	Political Economy 1: Production and Distribution	
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	
6 credit hours from:		6
ECON 3374	Public Expenditure Analysis and Policy Evaluation	
ECON 3376	Taxation, Tax Policy and Inter-government Public Finance Issues	
ECON 3392	An Introduction to Development Economics	
ECON 3394	Development Economics: Problems and Policies	
ECON 3690	Economic Issues of Health Policy	
ECON 3692	Economic Determinants of Health	
ECON 3710	Sustainable Development: Issues and Policy	
ECON 3720	Urban and Regional Economics and Policies	
ECON 4050	History of Economic Thought 1	
ECON 4052	History of Economic Thought 2	
12 credit hours in Economics numbered at the 2000 level or higher		12
12 credit hours from your Minor area of study as described in that unit's section of the calendar.		12
24 credit hours from outside your Major and Minor areas of study.		24
12 credit hours of open electives		12
<b>Hours</b>		<b>69</b>
<b>Year 3</b>		
ECON 3040	Introduction to Econometrics	3
ECON 3810	Alternative Approaches to Macroeconomic Analysis	3
<b>Hours</b>		<b>6</b>
<b>Year 4</b>		
Select one of the following:		6
ECON 4822	Economic Research and Communication <sup>2</sup>	
or		
6 credit hours in Economics at the 4000 level		
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

### Co-operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will count toward the outside or open elective credit listed above:		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1

ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

- Students in the General Major may choose to apply for admission to the Single Advanced Major, Single Honours or Double Honours programs in Economics. Such students are recommended to take MATH 1500 or MATH 1520 as an elective as it may be a prerequisite to upper level Economics courses in those programs. Students in the Single Advanced Major Economics and Society stream are strongly encouraged to complete either MATH 1500 or MATH 1520 to satisfy their University Math (M) requirement as it is good preparation for many other optional upper level Economics courses and is required for students who may switch to the Economics and Econometrics stream or who wish to proceed to either of the Honours streams.
- Students electing to take ECON 4822 are advised that ECON 3010 is prerequisite to this course.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

- A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.
- The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**
- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
  - At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
  - Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major

in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilius

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace

to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

### Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

#### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

#### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

#### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

#### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in

the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

## Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

# Economics, B.A. General

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following pairs of Introductory Economics courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
	<b>Hours</b>	<b>30</b>
<b>Years 2-3</b>		
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
ECON 2040	Quantitative Methods in Economics	3
3 credit hours from:		3
ECON 2350	Community Economic Development	
ECON 2362	Economics of Gender	
ECON 2540	Political Economy 1: Production and Distribution	
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	
ECON 2630	An Introduction to the World's Economies	
ECON 3392	An Introduction to Development Economics	
ECON 3692	Economic Determinants of Health	
ECON 3810	Alternative Approaches to Macroeconomic Analysis	
ECON 4050	History of Economic Thought 1	
6 credit hours in Economics numbered at the 2000 level or higher		6
6 credit hours in Economics numbered at the 3000 level or higher		6
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
	<b>Hours</b>	<b>60</b>
	<b>Total Hours</b>	<b>90</b>

### Note:

Students in the General Major may choose to apply for admission to the Single Advanced Major, Single Honours or Double Honours programs in Economics. Such students are recommended to take MATH 1500 or MATH 1520 as an elective as it may be a prerequisite to upper level Economics courses in those programs. Students in the Single Advanced Major Economics and Society stream are strongly encouraged to complete either MATH 1500 or MATH 1520 to satisfy their University Math (M) requirement as it is good preparation for many other optional upper level Economics courses and is required for students who may switch to the Economics and Econometrics stream or who wish to proceed to either of the Honours streams.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to



satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.

6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Economics-Mathematics, B.A. Joint Honours

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following pairs of Introductory Economics courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics <sup>1</sup>	3
STAT 1150	Introduction to Statistics and Computing <sup>1,2</sup>	3
COMP 1010	Introductory Computer Science <sup>1 2</sup>	3
6 credit hours of electives, which should include the required "Written English" course <sup>3</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3

MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
9 credit hours of approved electives <sup>3</sup>		9

**Hours 30**

#### Years 3-4

ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
ECON 3040	Introduction to Econometrics <sup>2</sup>	3
MATH 2030	Combinatorics 1	3
MATH 2160	Numerical Analysis 1	3
MATH 3320	Algebra 2	3
MATH 3340	Complex Analysis 1	3
MATH 3440	Ordinary Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3472	Real Analysis 3	3

24 credit hours of approved Economics courses <sup>4</sup> 24

3 credit hours from: 3

MATH 3420 Numerical Analysis 2

MATH 3460 Partial Differential Equations

MATH 3610 Introduction to Mathematical Modelling

MATH 4370 Linear Algebra and Matrix Analysis

or any Mathematics course at the 4000 level

3 credit hours of Mathematics courses at the 3000 or 4000 level 3

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

**Hours 60**

**Total Hours 120**

<sup>1</sup> Students in this program must achieve a minimum grade of "B" in MATH 1230, MATH 1232, MATH 1220, and MATH 1240. Students are strongly advised to take MATH 1220, MATH 1230, and MATH 1232. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: MATH 1210 (A), MATH 1300 (A) in place of MATH 1220, MATH 1500 (A) in place of MATH 1230, MATH 1700 (A) in place of MATH 1232, MATH 1690 (B) in place of MATH 1230 and MATH 1232. With permission from the department, students may be able to substitute STAT 1000 and STAT 2000 in place of STAT 1150.

<sup>2</sup> Some courses may be taken in a different year than indicated; STAT 1150, COMP 1010, ECON 3040 may be taken in Year 2. The normal prerequisite for ECON 3040 is ECON 2040, which will be waived for students in this program who have completed Year 1.

<sup>3</sup> Students may not use the following courses for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, and MATH 1090.

<sup>4</sup> Of the 24 credit hours in electives in Economics in Years 3 and 4, no more than 6 credit hours may be at the 2000 level or below and at least 6 credit hours must be at the 4000 level. Students are encouraged to take ECON 4010, ECON 4020 and ECON 4040.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and**

### Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Economics-Statistics, B.A. Joint Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following pairs of Introductory Economics courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics <sup>1</sup>	3
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
COMP 1010	Introductory Computer Science 1	3

6 credit hours of electives which should include the required "Written English" course	6
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<b>Hours</b>	<b>30</b>
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#### Year 2

ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
STAT 2150	Statistics and Computing	3
STAT 2300	Principles of Data Collection	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
MATH 2080	Introduction to Analysis	3
MATH 2150	Multivariable Calculus <sup>1</sup>	3
6 credit hours of approved Economics electives <sup>2</sup>		6

<b>Hours</b>	<b>30</b>
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#### Year 3

ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3
MATH 2160	Numerical Analysis 1	3
MATH 3610	Introduction to Mathematical Modelling	3
3 credit hours of approved Economics electives <sup>2</sup>		3
6 credit hours of approved Statistics electives <sup>3</sup>		6

<b>Hours</b>	<b>30</b>
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#### Year 4

ECON 4040	Seminar in Applied Econometrics	3
ECON 4042	Topics in Econometrics	3
STAT 4100	Statistical Inference	3
12 credit hours of approved Economics electives <sup>2</sup>		12
9 credit hours of approved Statistics electives <sup>3</sup>		9

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

<b>Hours</b>	<b>30</b>
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<b>Total Hours</b>	<b>120</b>
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<sup>1</sup> The following substitutions are allowed: MATH 1300 in place of MATH 1220, MATH 1500 or MATH 1520 in place of MATH 1230, MATH 1700 in place of MATH 1232, MATH 2720 in place of MATH 2150, STAT 1000 and STAT 2000 (B) or STAT 2220 in place of STAT 1150. Students must attain specific grade requirements in order to meet the upper level course prerequisites. Consult course descriptions for further information.

<sup>2</sup> Of the 21 credit hours of electives in Economics in Years 2, 3 and 4, no more than 6 credit hours may be at the 2000 level or below; ECON 2030 and ECON 3040 are recommended in Year 2 or 3. The normal prerequisite for ECON 3040 is ECON 2040, which will be waived for students in this program who have completed Year 1.

<sup>3</sup> The 15 credit hours of electives in Statistics in Years 3 and 4 must all be at the 3000 level or higher, at least 9 of which must be at the 4000 level. The following courses are recommended: STAT 3030, STAT 3490, STAT 3550, STAT 3690, STAT 4150, STAT

While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Economics Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following pairs of introductory Economics courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours in Economics numbered at the 2000 level or higher		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

## English, Theatre, Film & Media

**Head:** Brenda Austin-Smith

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**Telephone:** 204 474 9678

**E-mail:** english@umanitoba.ca

**Website:** [http://umanitoba.ca/faculties/arts/departments/English\\_theatre\\_film\\_media/](http://umanitoba.ca/faculties/arts/departments/English_theatre_film_media/)

### English Program

Literature, and related graphic media, connects us in vital ways to times, places, and cultures, including our own; engages us in important moral and social questions; encourages us to reflect upon the capacities of the human mind and imagination; invites us to probe connections between language, form, structure, and meaning; asks us to think critically about arts of representation; and, not least, entertains, surprises, shocks, and moves us. With its wide range of courses in English-language literature, historical and contemporary, and in creative writing, our program fosters the study of literary works from these myriad perspectives and approaches.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in ENGL 1200 or ENGL 1300 or both ENGL 1400 and ENGL 1340.

A minimum "C" average in all courses that comprise the Major is required to graduate, including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in ENGL 1200 or ENGL 1300 or both ENGL 1400 and ENGL 1340.

### Honours Program

For entry to the Honours program see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs. A grade of "B" or better is required in ENGL 1200 or ENGL 1300 or in both ENGL 1400 and ENGL 1340; ENGL 1200 is strongly recommended. Students may also be admitted to Honours in English in the third year of undergraduate study, in consultation with the department. Honours students must have their programs approved by the department each year. A minimum "B" average in all courses that comprise the Honours subject field is required to graduate, including the higher grade of repeated courses and excluding failed courses.

Honours courses are also open to students who have been accepted into the pre-M.A. program and to students who have obtained the written consent of the department head.

Honours students who revert to a General program in English must meet the literature prior to the 1900 requirement for a Major or Minor, and they should consult the department head before continuing.

Students taking Single Honours should, if possible, take at least 12 credit hours in one of the following languages: French, German, Greek, Icelandic, Italian, Latin, Russian, Spanish.

## Notes

ENGL 0930, ENGL 0940, ENGL 1061 and ENGL 1071 are not designed to teach English as a second language.

For students who need help with basic writing skills, the Department of English, Theatre, Film & Media offers two half courses: ENGL 0930 and ENGL 0940. These courses are limited in size. Both ENGL 0930 and ENGL 0940 are acceptable for credit towards a degree in Arts or Science, but they may not be counted for credit in the 48 hours for a Single Advanced Major, the 42 hours for a Double Advanced Major, the 30 hours for a General Major, or the 18 hours for a Minor (Concentration). Either or both will, however, be included in the total number of hours a student is allowed to take in the combined Major and Minor. There is no prerequisite for entry into ENGL 0930 or ENGL 0940, and these courses are not required for admission to subsequent English courses.

## Study Resources

All students taking English should own a writing handbook and a good dictionary such as Webster's *New Collegiate*, Funk and Wagnall's *Standard College*, *The Concise Oxford*, *The Gage Canadian*, or *The New World*. Students will also find useful *The MLA Handbook and M.H. Abrams, A Glossary of Literary Terms*.

## Film Studies Program

Our knowledge and perception of the modern world is shaped by film and related televisual and digital media. Film is a social, cultural, and historical document that, in addition to being worthy of study as an artistic medium, also explores topics and issues of value to many other disciplines (philosophy, sociology, gender studies, history, art). Instructors in this program include people who make films, write about film and other media forms, and who are well prepared to discuss film history, film as cultural artifact and the connections between film, television, on-line media, and other areas of knowledge.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulation (p. 211)s for the B.A. General, Advanced and Honours Degree Programs.

## Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both FILM 1290 and FILM 1310.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

## Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both FILM 1290 and FILM 1310.

## Theatre Program

Theatre is a way of finding out what it means to be human and is therefore a very effective component of a liberal, humanist education. The Theatre Program is focused yet multi-faceted, offering both creative and intellectual opportunities. An intensive, hands-on experience in every aspect of play creation is a hallmark of University of Manitoba Theatre.

The program provides excellent preparation for professional acting and technical training, while also offering a particular focus on new play development and directing. Many University of Manitoba Theatre graduates have gone on to pursue professional careers in theatre, opera, and film, with or without further study. Many other students have pursued graduate studies or have taken the skills of theatre and applied them in making an impact in careers as diverse as education, advertising, the media, law, business, politics, psychology, fine arts, and design.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the Three Programs Leading to a B.A.

## Major Program

For entry to the General Major and Double Advanced Major, the prerequisite is a grade of "C" or better in THTR 1220. For entry to the Single Advanced Major, the prerequisite is a grade of "C" or better in THTR 1220 and a grade of "C" or better in ENGL 1200 or ENGL 1300 or both ENGL 1400 and ENGL 1340.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

It is not possible for students who have previously completed a Major in Drama to complete a Minor in Theatre.

Courses used toward the Major in Theatre may not be used for a Minor in the other areas (English or Film Studies) and no more than 6 credit hours numbered at the 1000 level in addition to THTR 1220, may be credited towards a Theatre Major.

## Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in THTR 1220.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
English, B.A. Double Advanced Major (p. 288)	4	120	
English, B.A. Double Honours (p. 285)	4	120	
English, B.A. General (p. 289)	3	90	
English, B.A. Single Advanced Major (p. 286)	4	120	
English, B.A. Single Honours (p. 284)	4	120	

English Minor (Concentration) (p. 290)		18
Film Studies, B.A. Double Advanced Major (p. 292)	4	120
Film Studies, B.A. General (p. 293)	3	90
Film Studies, B.A. Single Advanced Major (p. 291)	4	120
Film Studies Minor (Concentration) (p. 294)		18
Theatre, B.A. Double Advanced Major (p. 295)	4	120
Theatre, B.A. General (p. 296)	3	90
Theatre, B.A. Single Advanced Major (p. 294)	4	120
Theatre Minor (Concentration) (p. 297)		18

## English, B.A. Single Honours Degree Requirements<sup>1,2,3</sup>

Course	Title	Hours
<b>Year 1</b>		
Select one of the following:		6
ENGL 1200	Representative Literary Works	
or		
ENGL 1300	Literature since 1900	
or both of:		
ENGL 1400 & ENGL 1340	Thematic Approaches to the Study of Literature and Introduction to Literary Analysis	
24 credit hours of ancillary options <sup>6</sup>		24
		<b>30</b>
<b>Years 2-4</b>		
ENGL 2650	Introduction to Critical Theory <sup>4</sup>	3
3 credit hours selected from the following:		3
ENGL 2550	Critical Practise	
ENGL 2620	Introduction to Print Culture and Book History	
ENGL 3620	Special Topics in Print Culture and Book History	
ENGL 3630	Studies in Critical Theory	
FILM 2330	Film and Contemporary Thought	
FILM 3420	Film Theory	
THTR 3460	Theory of Drama and Performance	
9 credit hours in ENGL at or above the 2000 level <sup>3</sup>		9
12 credit hours of ENGL selected from the Literature prior to 1900 list <sup>2</sup>		12
12 credit hours of literature prior to the Romantic Period selected from:		12
ENGL 2070	Literature of the Sixteenth Century	
ENGL 2080	Medieval Literature	
ENGL 2090	Literature of the Seventeenth Century	
ENGL 2120	Literature of the Restoration and Eighteenth Century	

ENGL 3000	Chaucer	
ENGL 3010	Shakespeare	
ENGL 3030	Studies in Sixteenth-Century Literature	
ENGL 3050	Studies in Old English	
ENGL 3080	Studies in Medieval Literature	
ENGL 3090	Studies in Seventeenth-Century Literature	
ENGL 3120	Studies in Restoration and Eighteenth- Century Literature	
ENGL 3180	Studies in Renaissance Literature <sup>5</sup>	
12 credit hours in other literature after 1900, selected from:		12
ENGL 2160	British Literature since 1900	
ENGL 2180	American Literature since 1900	
ENGL 2830	Literature of Africa and/or the Caribbean	
ENGL 3980	Studies in Modernism	
ENGL 3990	Studies in Post-Modernism <sup>5</sup>	
6 credit hours in Canadian Literature selected from:		6
ENGL 2270	Canadian Literature	
ENGL 3270	Studies in Canadian Literature <sup>5</sup>	
Of the ENGL courses selected above, a minimum of 9 credit hours must be at or above the 3000 level.		
9 credit hours of 4000 level ENGL		9
24 credit hours in free options <sup>7</sup>		24
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
		<b>90</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students in the Single Honours program may use up to 6 credit hours in Film Studies or Theatre courses, with the exception of FILM 1290, FILM 1310 (or the former FILM 1300), THTR 1220, THTR 2170, THTR 2180 and THTR 2490. Any Film Studies or Theatre courses so applied may not also be used toward a Minor (Concentration) in Film Studies or Theatre respectively

<sup>2</sup> Students may use ENGL 2490 (maximum 3 credit hours) to satisfy requirements for the General Major, Single Advanced Major, Double Advanced Major, Single Honours or Double Honours. Students may not use ENGL 2490 to satisfy the requirements for a Minor (Concentration).

- <sup>3</sup> Credit in ENGL 2000 may be used toward the 48 hours in general courses required for a Single Advanced Major only
- <sup>4</sup> Single Honours and Double Honours students should attempt to complete ENGL 2650 (required year 2 course) as early as possible, as it may not be offered every year.
- <sup>5</sup> Certain courses that vary in content from year to year may also satisfy this requirement, as determined by the Department.
- <sup>6</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding English courses).
- <sup>7</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including English courses).

## Literature Prior to 1900

Course	Title	Hours
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 2090	Literature of the Seventeenth Century	6
ENGL 2120	Literature of the Restoration and Eighteenth Century	6
ENGL 2130	Literature of the Romantic Period	6
ENGL 2140	Literature of the Victorian Period	6
ENGL 2170	American Literature to 1900	6
ENGL 2190	Special Topics <sup>1</sup>	3
ENGL 2620	Introduction to Print Culture and Book History	3
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3120	Studies in Restoration and Eighteenth-Century Literature	3
ENGL 3130	Studies in the Romantics	3
ENGL 3140	Studies in the Victorians	3
ENGL 3180	Studies in Renaissance Literature	3
ENGL 3190	Studies in Special Topics <sup>1</sup>	6
ENGL 3620	Special Topics in Print Culture and Book History	3
ENGL 3800	Special Studies <sup>1</sup>	3

<sup>1</sup> When the topic relates to Literature prior to 1900

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

- The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
- In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
- Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
- Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## English, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following:		6
ENGL 1200	Representative Literary Works	
or		
ENGL 1300	Literature since 1900	
or both of:		
ENGL 1400 & ENGL 1340	Thematic Approaches to the Study of Literature and Introduction to Literary Analysis	
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>3</sup>		6
12 credit hours in free options <sup>4</sup>		12
		<b>30</b>
<b>Years 2-4</b>		
ENGL 2650	Introduction to Critical Theory <sup>1</sup>	3
3 credit hours from the following courses:		3
ENGL 2550	Critical Practise	
ENGL 2620	Introduction to Print Culture and Book History	
ENGL 3620	Special Topics in Print Culture and Book History	
ENGL 3630	Studies in Critical Theory	
FILM 2330	Film and Contemporary Thought	
FILM 3420	Film Theory	
THTR 3460	Theory of Drama and Performance	
18 credit hours of ENGL selected from the Literature prior to 1900 list <sup>2</sup>		18
6 credit hours in ENGL at or above the 2000 level		6
Of the English requirements listed above, at least 6 credit hours must be taken at the 3000 level		
6 credit hours of 4000 level ENGL		6
36 credit hours in second Honours field as described in that unit's section of the calendar		36

18 credit hours in free options <sup>4</sup>	18
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> Single Honours and Double Honours students should attempt to complete ENGL 2650 (required year 2 course) as early as possible, as it may not be offered every year.
- <sup>2</sup> Students may use ENGL 2490 (maximum 3 credit hours) to satisfy requirements for the General Major, Single Advanced Major, Double Advanced Major, Single Honours or Double Honours. Students may not use ENGL 2490 to satisfy the requirements for a Minor (Concentration).
- <sup>3</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding English courses).
- <sup>4</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including English courses).

**Notes:**

- FILM 2280 may be used as an English course to satisfy requirements in the English Minor (Concentration) and Double Honours programs. If it is used as such, it may not also be applied to a Minor (Concentration) in Film Studies or as an ancillary option in the Film Studies Single Honours program.
- Credit in ENGL 2000 may be used toward the 48 hours in general courses required for a Single Advanced Major only
- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

**Literature Prior to 1900**

Course	Title	Hours
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 2090	Literature of the Seventeenth Century	6
ENGL 2120	Literature of the Restoration and Eighteenth Century	6
ENGL 2130	Literature of the Romantic Period	6
ENGL 2140	Literature of the Victorian Period	6
ENGL 2170	American Literature to 1900	6
ENGL 2190	Special Topics <sup>1</sup>	3
ENGL 2620	Introduction to Print Culture and Book History	3
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3120	Studies in Restoration and Eighteenth-Century Literature	3
ENGL 3130	Studies in the Romantics	3
ENGL 3140	Studies in the Victorians	3
ENGL 3180	Studies in Renaissance Literature	3

ENGL 3190	Studies in Special Topics <sup>1</sup>	6
ENGL 3620	Special Topics in Print Culture and Book History	3
ENGL 3800	Special Studies <sup>1</sup>	3

<sup>1</sup> When the topic relates to Literature prior to 1900

## English, B.A. Single Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following:		6
ENGL 1200	Representative Literary Works	
or		
ENGL 1300	Literature since 1900	
or both of		
ENGL 1400 & ENGL 1340	Thematic Approaches to the Study of Literature and Introduction to Literary Analysis	
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
6 credit hours of ENGL or FILM or THTR at or above the 1000 level <sup>1</sup>		6
6 credit hours of ENGL or FILM or THTR at or above the 2000 level <sup>1</sup>		6
21 credit hours of ENGL at or above the 2000 level		21
9 credit hours of ENGL at or above the 3000 level		9
Of the 2000 and 3000 level ENGL courses taken above, a minimum of 15 credit hours must be selected from the Literature Prior to 1900 list.		
12 credit hours from your Minor area of study as described in that unit's section of the calendar.		12
24 credit hours from outside your Major and Minor areas of study.		24
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students in the Single Advanced Major and Double Advanced Major programs in English may use up to 12 credit hours in Film Studies or Theatre courses toward the completion of their Major requirements, with the exception of THTR 1220, THTR 2170, THTR 2180 and THTR 2490. Any FILM or THTR courses so applied may not also be used toward a Minor (Concentration) in Film Studies or Theatre respectively.

**Notes:**

- Students may use ENGL 2490 (maximum 3 credit hours) to satisfy requirements for the General Major, Single Advanced Major, Double Advanced Major, Single Honours or Double Honours. Students

may not use ENGL 2490 to satisfy the requirements for a Minor (Concentration).

- Credit in ENGL 2000 may be used toward the 48 hours in general courses required for a Single Advanced Major only.
- It is recommended that students in the Single and Double Advanced Major programs complete ENGL 2650.

## Literature Prior to 1900

Course	Title	Hours
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 2090	Literature of the Seventeenth Century	6
ENGL 2120	Literature of the Restoration and Eighteenth Century	6
ENGL 2130	Literature of the Romantic Period	6
ENGL 2140	Literature of the Victorian Period	6
ENGL 2170	American Literature to 1900	6
ENGL 2190	Special Topics <sup>1</sup>	3
ENGL 2620	Introduction to Print Culture and Book History	3
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3120	Studies in Restoration and Eighteenth-Century Literature	3
ENGL 3130	Studies in the Romantics	3
ENGL 3140	Studies in the Victorians	3
ENGL 3180	Studies in Renaissance Literature	3
ENGL 3190	Studies in Special Topics <sup>1</sup>	6
ENGL 3620	Special Topics in Print Culture and Book History	3
ENGL 3800	Special Studies <sup>1</sup>	3

<sup>1</sup> When the topic relates to Literature prior to 1900

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts

requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.

4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. **Residency Requirement:** A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).



## English, B.A. Double Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following:		6
ENGL 1200	Representative Literary Works	
or		
ENGL 1300	Literature since 1900	
or both of		
ENGL 1400 & ENGL 1340	Thematic Approaches to the Study of Literature and Introduction to Literary Analysis	
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
6 credit hours of ENGL or FILM or THTR at or above the 1000 level <sup>1</sup>		6
6 credit hours of ENGL or FILM or THTR at or above the 2000 level <sup>1</sup>		6
15 credit hours of ENGL at or above the 2000 level		15
9 credit hours of ENGL at or above the 3000 level		9
Of the 2000 and 3000 level ENGL courses taken above, a minimum of 12 credit hours must be selected from the Literature Prior to 1900 list.		
36 credit hours from second Advanced Major subject field as described in that unit's section of the calendar		36
18 credit hours from outside both Advanced Major subject fields		18
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students in the Single Advanced Major and Double Advanced Major programs in English may use up to 12 credit hours in Film Studies or Theatre courses toward the completion of their Major requirements, with the exception of THTR 1220, THTR 2170, THTR 2180 and THTR 2490. Any FILM or THTR courses so applied may not also be used toward a Minor (Concentration) in Film Studies or Theatre respectively.

### Notes:

- Students may use ENGL 2490 (maximum 3 credit hours) to satisfy requirements for the General Major, Single Advanced Major, Double Advanced Major, Single Honours or Double Honours. Students may not use ENGL 2490 to satisfy the requirements for a Minor (Concentration).
- Credit in ENGL 2000 may be used toward the 48 hours in general courses required for a Single Advanced Major only
- It is recommended that students in the Single and Double Advanced Major programs complete ENGL 2650.

## Literature Prior to 1900

Course	Title	Hours
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 2090	Literature of the Seventeenth Century	6
ENGL 2120	Literature of the Restoration and Eighteenth Century	6
ENGL 2130	Literature of the Romantic Period	6
ENGL 2140	Literature of the Victorian Period	6
ENGL 2170	American Literature to 1900	6
ENGL 2190	Special Topics <sup>1</sup>	3
ENGL 2620	Introduction to Print Culture and Book History	3
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3120	Studies in Restoration and Eighteenth-Century Literature	3
ENGL 3130	Studies in the Romantics	3
ENGL 3140	Studies in the Victorians	3
ENGL 3180	Studies in Renaissance Literature	3
ENGL 3190	Studies in Special Topics <sup>1</sup>	6
ENGL 3620	Special Topics in Print Culture and Book History	3
ENGL 3800	Special Studies <sup>1</sup>	3

<sup>1</sup> When the topic relates to Literature prior to 1900

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who

declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## English, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of the following:		
6		

ENGL 1200	Representative Literary Works	
or		
ENGL 1300	Literature since 1900	
or both of:		
ENGL 1400 & ENGL 1340	Thematic Approaches to the Study of Literature and Introduction to Literary Analysis	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
6 credit hours of ENGL or FILM or THTR at or above the 2000 level <sup>1</sup>		6
12 credit hours of ENGL at or above the 2000 level		12
6 credit hours of ENGL at or above the 3000 level		6
Of the 2000 and 3000 level ENGL courses taken above, a minimum of 9 credit hours must be selected from the Literature Prior to 1900 list.		
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

- <sup>1</sup> Students in the General Major program in English may use up to 6 credit hours in Film Studies or Theatre courses toward the completion of their Major requirements, with the exception of THTR 1220, THTR 2170, THTR 2180 and THTR 2490. Additionally, students may use up to 3 credit hours of FILM at the 1000 level toward this requirement. Any FILM or THTR courses so applied may not also be used toward a Minor (Concentration) in Film Studies or Theatre respectively.

### Notes:

- Students may use ENGL 2490 (maximum 3 credit hours) to satisfy requirements for the General Major, Single Advanced Major, Double Advanced Major, Single Honours or Double Honours. Students may not use ENGL 2490 to satisfy the requirements for a Minor (Concentration).
- Credit in ENGL 2000 may be used toward the 48 hours in general courses required for a Single Advanced Major only.

### Literature Prior to 1900

Course	Title	Hours
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 2090	Literature of the Seventeenth Century	6
ENGL 2120	Literature of the Restoration and Eighteenth Century	6
ENGL 2130	Literature of the Romantic Period	6

ENGL 2140	Literature of the Victorian Period	6
ENGL 2170	American Literature to 1900	6
ENGL 2190	Special Topics <sup>1</sup>	3
ENGL 2620	Introduction to Print Culture and Book History	3
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3120	Studies in Restoration and Eighteenth-Century Literature	3
ENGL 3130	Studies in the Romantics	3
ENGL 3140	Studies in the Victorians	3
ENGL 3180	Studies in Renaissance Literature	3
ENGL 3190	Studies in Special Topics <sup>1</sup>	6
ENGL 3620	Special Topics in Print Culture and Book History	3
ENGL 3800	Special Studies <sup>1</sup>	3

<sup>1</sup> When the topic relates to Literature prior to 1900

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor*

*in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## English Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one of:		6
ENGL 1200	Representative Literary Works	
or		
ENGL 1300	Literature since 1900	
or both of:		
ENGL 1400 & ENGL 1340	Thematic Approaches to the Study of Literature and Introduction to Literary Analysis	
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
9 credit hours of ENGL at or above the 2000 level		9
3 credit hours of ENGL at or above the 3000 level		3
Of the 2000 and 3000 level ENGL courses taken above, a minimum of 6 credit hours must be selected from the Literature Prior to 1900 list.		
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

**Notes:**

- Students may use ENGL 2490 (maximum 3 credit hours) to satisfy requirements for the General Major, Single Advanced Major, Double Advanced Major, Single Honours or Double Honours. Students may not use ENGL 2490 to satisfy the requirements for a Minor (Concentration).
- Credit in ENGL 2000 may be used toward the 48 hours in general courses required for a Single Advanced Major only
- FILM 2280 may be used as an English course to satisfy requirements in the English Minor (Concentration) and Double Honours programs. If it is used as such, it may not also be applied to a Minor (Concentration) in Film Studies or as an ancillary option in the Film Studies Single Honours program.

## Literature Prior to 1900

Course	Title	Hours
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 2090	Literature of the Seventeenth Century	6
ENGL 2120	Literature of the Restoration and Eighteenth Century	6
ENGL 2130	Literature of the Romantic Period	6
ENGL 2140	Literature of the Victorian Period	6
ENGL 2170	American Literature to 1900	6
ENGL 2190	Special Topics <sup>1</sup>	3
ENGL 2620	Introduction to Print Culture and Book History	3
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3120	Studies in Restoration and Eighteenth-Century Literature	3
ENGL 3130	Studies in the Romantics	3
ENGL 3140	Studies in the Victorians	3
ENGL 3180	Studies in Renaissance Literature	3
ENGL 3190	Studies in Special Topics <sup>1</sup>	6
ENGL 3620	Special Topics in Print Culture and Book History	3
ENGL 3800	Special Studies <sup>1</sup>	3

<sup>1</sup> When the topic relates to Literature prior to 1900

## Film Studies, B.A. Single Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FILM 1290	The Art of the Film 1	3
FILM 1310	Film History	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6

18 credit hours from outside of your Major and Minor areas of study	18
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**Hours 30**

### Years 2-4

33 credit hours in Film Studies at or above the 2000 level	33
FILM 3420 Film Theory	3
6 credit hours in Film Studies at or above the 3000 level	6
6 credit hours of ENGL or THTR at or above the 1000 level <sup>1</sup>	6
6 credit hours of ENGL or THTR at or above the 2000 level <sup>1</sup>	6
12 credit hours from your Minor area of study as described in that unit's section of the calendar.	12
24 credit hours from outside your Major and Minor areas of study.	24

Refer to the information directly below this list for other important degree requirements you will need to complete prior to graduation

**Hours 90**

**Total Hours 120**

<sup>1</sup> Students shall not use the following courses to satisfy the ENGL / THTR requirements in the Single Advanced Major program: ENGL 0930, ENGL 2000, THTR 2170, THTR 2180, THTR 2490. Any English or Theatre course(s) used to satisfy this requirement may not also be used to satisfy a Minor (Concentration) in Film Studies or Theatre respectively.

### Note:

The content of topics courses (FILM 2380, FILM 2460, FILM 3250, FILM 3270, FILM 3400) will vary from term to term and may be taken more than once for credit.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who

declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
 

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Film Studies, B.A. Double Advanced Major

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FILM 1290	The Art of the Film 1	3
FILM 1310	Film History	3
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
FILM 2280	Film and Literature	6
FILM 2380 or FILM 2430	The International Cinema 1 or The Canadian Film	3
FILM 3420	Film Theory <sup>1</sup>	3
18 credit hours in Film Studies at or above the 2000 level		18
6 credit hours in Film Studies at or above the 3000 level		6
36 credit hours from second Advanced Major subject field as described in that unit's section of the calendar		36
18 credit hours from outside both Advanced Major subject fields		18
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students may use ENGL 2650 in place of FILM 3420 to satisfy the theory requirement in the Double Advanced Major program in Film Studies.

#### Note:

- The content of topics courses (FILM 2380, FILM 2460, FILM 3250, FILM 3270, FILM 3400) will vary from term to term and may be taken more than once for credit.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.  
  
A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.

10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Film Studies, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FILM 1290	The Art of the Film 1	3
FILM 1310	Film History	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
21 credit hours in Film Studies courses at or above the 2000 level		21
FILM 3420	Film Theory	3
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

### Note:

The content of topics courses (FILM 2380, FILM 2460, FILM 3250, FILM 3270, FILM 3400) will vary from term to term and may be taken more than once for credit.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject->

field) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.

4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Film Studies Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
FILM 1290	The Art of the Film 1	3
FILM 1310	Film History	3
<b>Hours</b>		<b>6</b>

### Years 2-3

12 credit hours in Film Studies courses at or above the 2000 level	12
<b>Hours</b>	<b>12</b>
<b>Total Hours</b>	<b>18</b>

### Note:

The content of topics courses (FILM 2380, FILM 2460, FILM 3250, FILM 3270, FILM 3400) will vary from term to term and may be taken more than once for credit.

## Theatre, B.A. Single Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
THTR 1220	Introduction to Theatre	6
6 credit hours from:		6
ENGL 1200	Representative Literary Works	
or		
ENGL 1300	Literature since 1900	
or both of		
ENGL 1400 & ENGL 1340	Thematic Approaches to the Study of Literature and Introduction to Literary Analysis	
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
12 credit hours from outside of your Major and Minor areas of study		12
<b>Hours</b>		<b>30</b>

### Years 2-4

THTR 2160	Theatrical Techniques: Backstage	6
THTR 2470	Fundamentals of Dramatic Analysis	3
6 credits from the following THTR courses:		6
THTR 2150	Theatrical Techniques: Onstage	
THTR 2170	Specialized Practical Training 1	
THTR 2180	Specialized Practical Training 2	
THTR 2490	Specialized Practical Training 3	
12 credit hours from the following THTR courses:		12
THTR 2480	Theatre History	
THTR 2600	Special Studies	
THTR 3460	Theory of Drama and Performance	
THTR 3470	Text and Performance	
THTR 3610	Special Studies	
THTR 3630	Practicum 1	
THTR 3640	Practicum 2	
15 additional credit hours from the THTR courses specified above		15
12 credit hours from your Minor area of study as described in that unit's section of the calendar.		12
30 credit hours from outside your Major and Minor areas of study.		30
6 credit hours of open electives		6

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> In addition to the first year required ENGL courses in the Single Advanced Major program, students may use up to 6 credit hours in English or Film courses at the 2000 level or higher with the exception of ENGL 2000. Any English or Theatre courses so applied may not also be used toward a Minor in English or Film.

#### Notes:

The content of topics courses (THTR 2600, THTR 3470, THTR 3610, or THTR 3620 (course no longer offered), will vary from term to term and may be taken more than once for credit.

It is recommended that students complete a three credit hour theory course, specifically THTR 3460.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed

to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

- Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
- A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 42 credit hours numbered at or above the 2000 level.
- Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Theatre, B.A. Double Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
THTR 1220	Introduction to Theatre	6
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
		<b>Hours</b>
		<b>30</b>
<b>Years 2-4</b>		
THTR 2470	Fundamentals of Dramatic Analysis	3
9 credit hours selected from the following:		9
THTR 2150	Theatrical Techniques: Onstage	
THTR 2160	Theatrical Techniques: Backstage	
THTR 2170	Specialized Practical Training 1	
THTR 2180	Specialized Practical Training 2	



THTR 2490	Specialized Practical Training 3	
THTR 3470	Text and Performance	
24 additional credit hours of THTR courses at the 2000 level and above		24
36 credit hours from second Advanced Major subject field as described in that unit's section of the calendar		36
18 credit hours from outside both Advanced Major subject fields		18
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
	<b>Hours</b>	<b>90</b>
	<b>Total Hours</b>	<b>120</b>

**Notes:**

- The content of topics courses (THTR 2600, THTR 3470, THTR 3610, THTR 3620 (course no longer offered), will vary from term to term and may be taken more than once for credit.
- It is recommended that students complete a three credit hour theory course, specifically THTR 3460.
- It is strongly recommended that students enrolled in a Double Advanced Major in Theatre and Film Studies complete THTR 2160.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. Advanced Degree**

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum

"C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. **Residency Requirement:** A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Theatre, B.A. General

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
THTR 1220	Introduction to Theatre	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
	<b>Hours</b>	<b>30</b>
<b>Years 2-3</b>		
THTR 2160	Theatrical Techniques: Backstage	6
THTR 2470	Fundamentals of Dramatic Analysis	3

6 credit hours from the following:	6
THTR 2150 Theatrical Techniques: Onstage	
THTR 2170 Specialized Practical Training 1	
THTR 2180 Specialized Practical Training 2	
THTR 2490 Specialized Practical Training 3	
6 credit hours from the following:	6
THTR 2480 Theatre History	
THTR 2600 Special Studies	
THTR 3460 Theory of Drama and Performance	
THTR 3470 Text and Performance	
THTR 3610 Special Studies	
THTR 3630 Practicum 1	
THTR 3640 Practicum 2	
3 additional credit hours from THTR courses specified above or ENGL or FILM courses <sup>1</sup>	3
12 credit hours from your Minor area of study as described in that unit's section of the calendar	12
12 credit hours from outside your Major and Minor areas of study	12
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>60</b>
<b>Total Hours</b>	<b>90</b>

<sup>1</sup> Excluding both of ENGL 0930 and ENGL 2000.

#### Note:

The content of topics courses (THTR 2600, THTR 3470, THTR 3610, THTR 3620 (course no longer offered) will vary from term to term and may be taken more than once for credit.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social

Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.

4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Theatre Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
THTR 1220	Introduction to Theatre	6
	<b>Hours</b>	<b>6</b>
<b>Years 2-3</b>		
12 credits hours selected from:		12
THTR 2150	Theatrical Techniques: Onstage	
THTR 2160	Theatrical Techniques: Backstage	
THTR 2170	Specialized Practical Training 1	
THTR 2180	Specialized Practical Training 2	

THTR 2470	Fundamentals of Dramatic Analysis	
THTR 2480	Theatre History	
THTR 2490	Specialized Practical Training 3	
THTR 2600	Special Studies	
THTR 3460	Theory of Drama and Performance	
THTR 3470	Text and Performance	
THTR 3610	Special Studies	
THTR 3620	Course no longer offered	
THTR 3630	Practicum 1	
THTR 3640	Practicum 2	
	<b>Hours</b>	<b>12</b>
	<b>Total Hours</b>	<b>18</b>

**Note:**

The content of topics courses (THTR 2600, THTR 3470, THTR 3610, THTR 3620 (course no longer offered), will vary from term to term and may be taken more than once for credit.

## French, Spanish and Italian

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Romance languages – French, Spanish and Italian – are descendants of Latin and are the most widely spoken of the Romance languages. The department offers language instruction and a rich variety of literature and culture courses, with a particular emphasis on French Canadian literature. Language instruction also includes translation courses in French, Spanish and Italian.

### French Program

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulation (p. 211)ns (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

#### Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in FREN 1190 or FREN 1200. Only one of FREN 1190 or FREN 1200 may be used for credit in the 30 hour Major.

A minimum “C” average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

#### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in FREN 1190 or FREN 1200. Only one of FREN 1190 or FREN 1200 may be used for credit in the 18 hour Minor (Concentration).

#### Honours Program

For entry to the Honours program, see see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Spanish Program

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulation (p. 211)s (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

#### Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in SPAN 1180, or a grade of “C” or better in both SPAN 1190 and SPAN 1262 (or SPAN 1290), or a grade of “C” or better in both SPAN 1280 and 3 credit hours from Spanish courses numbered at the 2000 level.

A minimum “C” average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

It is recommended that students who wish to Major in Spanish take the introductory course in the Summer Term prior to entering the fall program, or take SPAN 1262 and SPAN 1272 (or SPAN 1290) in the Summer Session prior to their entry into the second year. This will allow for a wider variety of course selections in the final two years.

## Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in SPAN 1180, or a grade of "C" or better in both SPAN 1190 and SPAN 1262 (or SPAN 1290), or a grade of "C" or better in both SPAN 1280 and 3 credit hours from Spanish courses numbered at the 2000 level.

### Other

Students entering the university with prior knowledge of Spanish may be allowed 'prerequisite standing' in course SPAN 1180 by the Spanish section of the department. Special permission is required to enter a higher numbered course.

All Spanish courses except SPAN 1180 and SPAN 1190 are taught in Spanish.

With written permission of the department head, students registered on the Fort Garry campus may take courses in Spanish language and literature at Université de Saint-Boniface.

For information regarding the Minor program in Latin American Studies please refer to that department (p. 374).

## Italian Program

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in ITLN 1080.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
French, B.A. Double Advanced Major (p. 302)	4	120	
French, B.A. Double Honours (p. 300)	4	120	
French, B.A. General (p. 303)	3	90	
French, B.A. Single Advanced Major (p. 301)	4	120	
French, B.A. Single Honours (p. 300)	4	120	
French Minor (Concentration) (p. 304)		18	
Italian Minor (Concentration) (p. 308)		18	
Italian Studies, B.A. General (p. 306)	3	90	
Italian Studies, B.A. Single Advanced Major (p. 305)	4	120	
Spanish, B.A. General (p. 310)	3	90	
Spanish, B.A. Single Advanced Major (p. 308)	4	120	
Spanish Minor (Concentration) (p. 312)		18	

It is not possible to have a Minor in Italian and a Major in Italian Studies.

### Other

All Italian courses except ITLN 1080 and ITLN 3780 are taught in Italian.

Travel/study courses in Italian may be offered in the Summer Term.

## Italian Studies Program

The Major (General and Advanced) in Italian Studies is an interdisciplinary program designed to provide advanced reading, writing, oral, and translation skills in contemporary Italian language, in the context of a broad appreciation for Italian/Roman history and its contributions to art and culture. For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in ITLN 1080.

It is not possible to have a Major in Italian Studies and a Minor in Italian.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

## Programs

## French, B.A. Single Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FREN 1190 or FREN 1200	Français or French 1	6
24 credit hours of ancillary options <sup>1</sup>		24
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
12 credit hours of French language or civilization courses at or above the 2000 level		12
12 credit hours of French literature or civilization courses at or above the 2000 level		12
6 credit hours of free options <sup>2</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
6 credit hours of French language or civilization courses at or above the 3000 level		6
6 credit hours of French literature or civilization courses at or above the 3000 level		6
9 credit hours of French at or above the 3000 level		9
9 credit hours of free options <sup>2</sup>		9
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
FREN 4426	Initiation à la recherche	3
6 credit hours of French at the 4000 level		6
21 credit hours of free options <sup>2</sup>		21
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding French courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including French courses).

The three areas of study are identified in the course listings with the following letters in brackets after the course title:

- A. French Language
- B. French Literature
- C. French Civilization

**Note:** Civilization courses FREN 2810 and FREN 3850 may be counted as either French language or literature credits, but not both.

The language of instruction in all French courses except FREN 1152, FREN 1154 and FREN 1200 is French. In courses FREN 1152, FREN 1154 and FREN 1200, at the discretion of the instructor, English may be used to clarify difficult points of grammar and critical analysis of literature.

With written permission of the department head, students registered on the Fort Garry campus may take courses in French language and literature at Université de Saint-Boniface.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## French, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FREN 1190 or FREN 1200	Français or French 1	6
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>1</sup>		6
12 credit hours in free options <sup>2</sup>		12
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
15 credit hours of French language or civilization courses at or above the 2000 level		15
9 credit hours of French literature at or above the 2000 level		9
6 credit hours of French at or above the 3000 level		6
FREN 4426	Initiation à la recherche	3
3 credit hours of French at the 4000 level		3

36 credit hours from second Honours field as described in that unit's section of the calendar	36
18 credit hours of free options <sup>2</sup>	18

Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.

<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding French courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including French courses).

**Note:**

- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

**The three areas of study are identified in the course listings with the following letters in brackets after the course title:**

- A. French Language
- B. French Literature
- C. French Civilization

**Note:** Civilization courses FREN 2810 and FREN 3850 may be counted as either French language or literature credits, but not both.

The language of instruction in all French courses except FREN 1152, FREN 1154 and FREN 1200 is French. In courses FREN 1152, FREN 1154 and FREN 1200, at the discretion of the instructor, English may be used to clarify difficult points of grammar and critical analysis of literature.

With written permission of the department head, students registered on the Fort Garry campus may take courses in French language and literature at Université de Saint-Boniface.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

**Note:** Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)

2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## French, B.A. Single Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FREN 1190 or FREN 1200	Français or French 1	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
3 credit hours of French language at or above the 2000 level		3
3 credit hours of French literature at or above the 2000 level		3
12 credit hours of French at or above the 2000 level		12
3 credit hours of French language at or above the 3000 level		3
3 credit hours of French literature at or above the 3000 level		3
18 credit hours of French at or above the 3000 level		18
12 credit hours from your Minor area of study as described in that unit's section of the calendar.		12
24 credit hours from outside your Major and Minor areas of study.		24
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

The three areas of study are identified in the course listings with the following letters in brackets after the course title:

- A. French Language
- B. French Literature
- C. French Civilization

**Note:** Civilization courses FREN 2810 and FREN 3850 may be counted as either French language or literature credits, but not both.

The language of instruction in all French courses except FREN 1152, FREN 1154 and FREN 1200 is French. In courses FREN 1152, FREN 1154 and FREN 1200, at the discretion of the

instructor, English may be used to clarify difficult points of grammar and critical analysis of literature.

With written permission of the department head, students registered on the Fort Garry campus may take courses in French language and literature at Université de Saint-Boniface.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor.

A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## French, B.A. Double Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FREN 1190 or FREN 1200	Français or French 1	6
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
3 credit hours of French language at or above the 2000 level		3
3 credit hours of French literature at or above the 2000 level		3
9 credit hours of French at or above the 2000 level		9
3 credit hours of French language at or above the 3000 level		3
3 credit hours of French literature at or above the 3000 level		3
15 credit hours of French at or above the 3000 level		15
36 credit hours from second Advanced Major subject field as described in that unit's section of the calendar		36
18 credit hours from outside both Advanced Major subject fields		18
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

The three areas of study are identified in the course listings with the following letters in brackets after the course title:

- A. French Language
- B. French Literature
- C. French Civilization

**Note:** Civilization courses FREN 2810 and FREN 3850 may be counted as either French language or literature credits, but not both.

The language of instruction in all French courses except FREN 1152, FREN 1154 and FREN 1200 is French. In courses FREN 1152, FREN 1154 and FREN 1200, at the discretion of the instructor, English may be used to clarify difficult points of grammar and critical analysis of literature.

With written permission of the department head, students registered on the Fort Garry campus may take courses in French language and literature at Université de Saint-Boniface.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major

department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## French, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FREN 1190 or FREN 1200	Français or French 1	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
		<b>Hours</b>
		<b>30</b>
<b>Years 2-3</b>		
3 credit hours of French language at or above the 2000 level		3
3 credit hours of French literature at or above the 2000 level		3
6 credit hours of French at or above the 2000 level		6
3 credit hours of French language at or above the 3000 level		3
3 credit hours of French literature at or above the 3000 level		3
6 credit hours of French at or above the 3000 level		6



12 credit hours from your Minor area of study as described in that unit's section of the calendar	12
12 credit hours from outside your Major and Minor areas of study	12
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>60</b>
<b>Total Hours</b>	<b>90</b>

The three areas of study are identified in the course listings with the following letters in brackets after the course title:

- A. French Language
- B. French Literature
- C. French Civilization

**Note:** Civilization courses FREN 2810 and FREN 3850 may be counted as either French language or literature credits, but not both.

The language of instruction in all French courses except FREN 1152, FREN 1154 and FREN 1200 is French. In courses FREN 1152, FREN 1154 and FREN 1200, at the discretion of the instructor, English may be used to clarify difficult points of grammar and critical analysis of literature.

With written permission of the department head, students registered on the Fort Garry campus may take courses in French language and literature at Université de Saint-Boniface.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationtext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and

that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## French Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
FREN 1190 or FREN 1200	Français or French 1	6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
3 credit hours of French language at or above the 2000 level		3
3 credit hours of French literature at or above the 2000 level		3
3 credit hours of French language at or above the 3000 level		3
3 credit hours of French literature at or above the 3000 level		3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

The three areas of study are identified in the course listings with the following letters in brackets after the course title:

- A. French Language  
B. French Literature  
C. French Civilization

**Note:** Civilization courses FREN 2810 and FREN 3850 may be counted as either French language or literature credits, but not both.

The language of instruction in all French courses except FREN 1152, FREN 1154 and FREN 1200 is French. In courses FREN 1152, FREN 1154 and FREN 1200, at the discretion of the instructor, English may be used to clarify difficult points of grammar and critical analysis of literature.

With written permission of the department head, students registered on the Fort Garry campus may take courses in French language and literature at Université de Saint-Boniface.

## Italian Studies, B.A. Single Advanced Major

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ITLN 1080	Introductory Italian	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
Either:		6
ITLN 2080	Intermediate Italian	
or		
6 credit hours from the following:		
ITLN 2090	Speaking in Italian	
ITLN 2100	Writing in Italian	
ITLN 2200	Let's Get Graphic: Italian through Graphic Novels	
ITLN 2300	Special Studies in Italian	
12 credit hours of additional courses selected from List A		12
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside of your Major and Minor areas of study		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
6 credit hours selected from:		6
ITLN 3050	Italian Through Literature	
ITLN 3060	Italian Through Film	
ITLN 3760	Italian Translation Workshop	
ITLN 3770	Modern Italian Usage	
ITLN 3780	A Voyage through the Italian Mind: An Italian Culture Course	
9 credit hours of additional courses selected from List A		9

6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
9 credit hours from outside of your Major and Minor areas of study	9
<b>Hours</b>	<b>30</b>
<b>Year 4</b>	
9 credit hours of additional courses selected from List A	9
9 credit hours from outside of your Major and Minor areas of study	9
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

### List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Italian:		
ITLN 2200	Let's Get Graphic: Italian through Graphic Novels	3
ITLN 2300	Special Studies in Italian	3
ITLN 3050	Italian Through Literature	3
ITLN 3060	Italian Through Film	3
ITLN 3760	Italian Translation Workshop	3
ITLN 3770	Modern Italian Usage	3
ITLN 3780	A Voyage through the Italian Mind: An Italian Culture Course	3
Classics:		
CLAS 1280	Introduction to Ancient Roman Culture	3
CLAS 2160	Roman History: The Roman Republic, 753-30 BC	3
CLAS 2170	Roman History: The Roman Empire, 30 BC-AD 337	3
CLAS 2622	Latin Literature in Translation	3
CLAS 2680	Roman Art and Archaeology	3
LATN 1080	Introduction to the Reading of Latin 1	3
LATN 1090	Introduction to the Reading of Latin 2	3
LATN 2700	Intermediate Readings in Latin	3
LATN 2720	Selected Readings in Republican and Augustan Poetry	3
LATN 2740	Selected Readings in Republican and Augustan Prose	3
LATN 2780	History of the Latin Language	3
LATN 2800	Readings in Medieval or Renaissance Latin	3
LATN 3740	Roman Comedy	3
LATN 3760	Orations of Cicero	3
LATN 3780	Roman Satire	3
LATN 3800	Lyric and Elegiac Poetry of the Augustan Age	3
LATN 3820	Vergil's Aeneid	3
LATN 3840	Vergil's Eclogues and Georgics	3
LATN 3860	The Roman Historians	3
LATN 3880	Poetry of the Silver Age	3
History:		
HIST 2350	Europe 1789-1870 (E)	3

HIST 2360	Europe 1870 to the Present (E)	3
HIST 2900	Topics in Social History (G) (when taught as "Topic: Italy)	6
HIST 3138	History of Medieval Italy, 1300-1500 (D)	3
<b>School of Art</b>		
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
<b>Marcel A. Desautels Faculty of Music</b>		
MUSC 3100	Opera Repertoire	3

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. **Residency Requirement:** A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Italian Studies, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ITLN 1080	Introductory Italian	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
		<b>Hours</b>
		<b>30</b>
<b>Year 2</b>		
Either:		6
ITLN 2080	Intermediate Italian	
or		
6 credit hours from the following:		
ITLN 2090	Speaking in Italian	
ITLN 2100	Writing in Italian	
ITLN 2200	Let's Get Graphic: Italian through Graphic Novels	
ITLN 2300	Special Studies in Italian	

12 credit hours of additional courses selected from List A	12
6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
6 credit hours from outside your Major and Minor areas of study	6
<b>Hours</b>	<b>30</b>
<b>Year 3</b>	
6 credit hours from the following:	6
ITLN 3050 Italian Through Literature	
ITLN 3060 Italian Through Film	
ITLN 3760 Italian Translation Workshop	
ITLN 3770 Modern Italian Usage	
ITLN 3780 A Voyage through the Italian Mind: An Italian Culture Course	
6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
6 credit hours from outside your Major and Minor areas of study	6
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>90</b>

## List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Italian:		
ITLN 2200	Let's Get Graphic: Italian through Graphic Novels	3
ITLN 2300	Special Studies in Italian	3
ITLN 3050	Italian Through Literature	3
ITLN 3060	Italian Through Film	3
ITLN 3760	Italian Translation Workshop	3
ITLN 3770	Modern Italian Usage	3
ITLN 3780	A Voyage through the Italian Mind: An Italian Culture Course	3
Classics:		
CLAS 1280	Introduction to Ancient Roman Culture	3
CLAS 2160	Roman History: The Roman Republic, 753-30 BC	3
CLAS 2170	Roman History: The Roman Empire, 30 BC-AD 337	3
CLAS 2622	Latin Literature in Translation	3
CLAS 2680	Roman Art and Archaeology	3
LATN 1080	Introduction to the Reading of Latin 1	3
LATN 1090	Introduction to the Reading of Latin 2	3
LATN 2700	Intermediate Readings in Latin	3
LATN 2720	Selected Readings in Republican and Augustan Poetry	3
LATN 2740	Selected Readings in Republican and Augustan Prose	3
LATN 2780	History of the Latin Language	3
LATN 2800	Readings in Medieval or Renaissance Latin	3
LATN 3740	Roman Comedy	3
LATN 3760	Orations of Cicero	3
LATN 3780	Roman Satire	3

LATN 3800	Lyric and Elegiac Poetry of the Augustan Age	3
LATN 3820	Vergil's Aeneid	3
LATN 3840	Vergil's Eclogues and Georgics	3
LATN 3860	The Roman Historians	3
LATN 3880	Poetry of the Silver Age	3
History:		
HIST 2350	Europe 1789-1870 (E)	3
HIST 2360	Europe 1870 to the Present (E)	3
HIST 2900	Topics in Social History (G) (when taught as "Topic: Italy)	6
HIST 3138	History of Medieval Italy, 1300-1500 (D)	3
<b>School of Art</b>		
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
<b>Marcel A. Desautels Faculty of Music</b>		
MUSC 3100	Opera Repertoire	3

While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
- The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**
2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
  3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
  4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor*

in the appropriate department. A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Italian Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
ITLN 1080	Introductory Italian	6
		<b>Hours</b>
		<b>6</b>
<b>Year 2</b>		
6 credit hours from Italian courses numbered at the 2000 level		6
		<b>Hours</b>
		<b>6</b>
<b>Year 3</b>		
6 credit hours from Italian courses numbered at the 3000 level		6
		<b>Hours</b>
		<b>6</b>
		<b>Total Hours</b>
		<b>18</b>

## Spanish, B.A. Single Advanced Major Degree Requirements

### Single Advanced Major (Option 1) <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
SPAN 1180	Introductory Spanish	6

6 credit hours from your Minor area of study as described in that unit's section of the calendar.	6
18 credit hours from outside of your Major and Minor areas of study	18

**Hours** **30**

### Year 2

Select one of the following options: 6

<b>Option A:</b>	
SPAN 1262 & SPAN 1272	Intermediate Spanish Grammar and Conversation 1 and Intermediate Spanish Grammar and Conversation 2

<b>Option B:</b>	
SPAN 1290	Accelerated Intermediate Spanish

<b>Option C:</b>	
SPAN 1280	Spanish for Native Speakers <sup>2</sup> and 3 credit hours from Spanish courses numbered at the 2000 level

6 credit hours from your Minor area of study as described in that unit's section of the calendar. 6

12 credit hours from outside of your Major and Minor areas of study 12

6 credit hours of open electives 6

**Hours** **30**

### Year 3

SPAN 2550 Advanced Spanish Composition 3

12 credit hours from Spanish courses numbered at the 2000 level 12

6 credit hours from Spanish courses numbered at the 3000 level 6

6 credit hours from your Minor area of study as described in that unit's section of the calendar. 6

3 credit hours of open electives 3

**Hours** **30**

### Year 4

15 credit hours from Spanish courses numbered at the 3000 level 15

12 credit hours from outside your Major and Minor areas of study. 12

3 credit hours of open electives 3

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

**Hours** **30**

**Total Hours** **120**

<sup>1</sup> Options 1 and 2 are not open to students with native oral fluency in Spanish. Students with native oral fluency in Spanish are advised to follow Option 3.

<sup>2</sup> With written consent of the department head students may be allowed to substitute both SPAN 1262 and SPAN 1272 (or SPAN 1290) with both SPAN 1280 and an additional 3 credit hours of 2000 level Spanish courses.

### Single Advanced Major (Option 2) <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
SPAN 1190	Introductory Spanish 2	3

6 credit hours from your Minor area of study as described in that unit's section of the calendar.	6
21 credit hours from outside of your Major and Minor areas of study	21

<b>Hours</b>	<b>30</b>
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**Year 2**

Select one of the following options:	6
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Option A:	
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SPAN 1262 & SPAN 1272	Intermediate Spanish Grammar and Conversation 1 and Intermediate Spanish Grammar and Conversation 2
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Option B:	
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SPAN 1290	Accelerated Intermediate Spanish
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Option C:	
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SPAN 1280	Spanish for Native Speakers <sup>2</sup> and 3 credit hours from Spanish courses numbered at the 2000 level
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SPAN 2550	Advanced Spanish Composition	3
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6 credit hours from Spanish courses numbered at the 2000 level	6
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6 credit hours from your Minor area of study as described in that unit's section of the calendar.	6
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9 credit hours from outside your Major and Minor areas of study	9
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<b>Hours</b>	<b>30</b>
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**Year 3**

6 credit hours from Spanish courses numbered at the 2000 level	6
--	---

9 credit hours from Spanish courses numbered at the 3000 level	9
--	---

6 credit hours from your Minor area of study as described in that unit's section of the calendar.	6
---	---

9 credit hours from outside your Major and Minor areas of study	9
---	---

<b>Hours</b>	<b>30</b>
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**Year 4**

15 credit hours from Spanish courses numbered at the 3000 level	15
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3 credit hours from outside your Major and Minor areas of study	3
---	---

12 credit hours of open electives	12
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Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

<b>Hours</b>	<b>30</b>
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<b>Total Hours</b>	<b>120</b>
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<sup>1</sup> Options 1 and 2 are not open to students with native oral fluency in Spanish. Students with native oral fluency in Spanish are advised to follow Option 3.

<sup>2</sup> With written consent of the department head students may be allowed to substitute both SPAN 1262 and SPAN 1272 (or SPAN 1290) with both SPAN 1280 and an additional 3 credit hours of 2000 level Spanish courses.

**Single Advanced Major (Option 3) <sup>1</sup>**

Course	Title	Hours
<b>Year 1</b>		
SPAN 1280	Spanish for Native Speakers	3
3 credit hours from Spanish courses numbered at the 2000 level		3

6 credit hours from your Minor area of study as described in that unit's section of the calendar.	6
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18 credit hours from outside of your Major and Minor areas of study	18
---	----

<b>Hours</b>	<b>30</b>
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**Year 2**

SPAN 2550	Advanced Spanish Composition	3
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9 credit hours from Spanish courses numbered at the 2000 level	9
--	---

6 credit hours from your Minor area of study as described in that unit's section of the calendar.	6
---	---

12 credit hours from outside your Major and Minor areas of study	12
--	----

<b>Hours</b>	<b>30</b>
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**Year 3**

6 credit hours from Spanish courses numbered at the 2000 level	6
--	---

9 credit hours from Spanish courses numbered at the 3000 level	9
--	---

6 credit hours from your Minor area of study as described in that unit's section of the calendar.	6
---	---

9 credit hours from outside your Major and Minor areas of study	9
---	---

<b>Hours</b>	<b>30</b>
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**Year 4**

15 credit hours from Spanish courses numbered at the 3000 level	15
---	----

3 credit hours from outside your Major and Minor areas of study	3
---	---

12 credit hours of open electives	12
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Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

<b>Hours</b>	<b>30</b>
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<b>Total Hours</b>	<b>120</b>
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<sup>1</sup> Option 3 is open to students with native oral fluency in Spanish. Such students may enter Spanish courses numbered at the 2000 level with a grade of "C" or better in SPAN 1280.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. Advanced Degree**

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by

the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
 

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. **Residency Requirement:** A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Spanish, B.A. General

### Degree Requirements

#### General Major (Option 1) <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
SPAN 1180	Introductory Spanish	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
One of the following options:		6
Option A:		
SPAN 1262 & SPAN 1272	Intermediate Spanish Grammar and Conversation 1 and Intermediate Spanish Grammar and Conversation 2	
Option B:		
SPAN 1290	Accelerated Intermediate Spanish	
Option C:		
SPAN 1280	Spanish for Native Speakers <sup>2</sup>	
and 3 credit hours from Spanish courses numbered at the 2000 level		
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours from outside your Major and Minor areas of study		12
6 credit hours of open electives		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
SPAN 2550	Advanced Spanish Composition	3
9 credit hours from Spanish courses numbered at the 2000 level		9
6 credit hours from Spanish courses numbered at the 3000 level		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours of open electives		6
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> Options 1 and 2 are not open to students with native oral fluency in Spanish. Students with native oral fluency in Spanish are advised to follow Option 3.

<sup>2</sup> With written consent of the department head students may be allowed to substitute both SPAN 1262 and SPAN 1272 (or SPAN 1290) with both SPAN 1280 and an additional 3 credit hours of 2000 level Spanish courses.

**General Major (Option 2)**<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
SPAN 1190	Introductory Spanish 2	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
21 credit hours from outside of your Major and Minor areas of study		21
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
One of the following options:		6
<b>Option A:</b>		
SPAN 1262 & SPAN 1272	Intermediate Spanish Grammar and Conversation 1 and Intermediate Spanish Grammar and Conversation 2	
<b>Option B:</b>		
SPAN 1290	Accelerated Intermediate Spanish	
<b>Option C:</b>		
SPAN 1280	Spanish for Native Speakers <sup>2</sup>	
and 3 credit hours from Spanish courses numbered at the 2000 level		
SPAN 2550	Advanced Spanish Composition	3
6 credit hours from Spanish courses numbered at the 2000 level		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
9 credit hours from outside your Major and Minor areas of study		9
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
12 credit hours from Spanish courses numbered at the 3000 level		12
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> Options 1 and 2 are not open to students with native oral fluency in Spanish. Students with native oral fluency in Spanish are advised to follow Option 3.

<sup>2</sup> With written consent of the department head students may be allowed to substitute both SPAN 1262 and SPAN 1272 (or SPAN 1290) with both SPAN 1280 and an additional 3 credit hours of 2000 level Spanish courses.

**General Major (Option 3)**<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
SPAN 1280	Spanish for Native Speakers	3
3 credit hours from Spanish courses numbered at the 2000 level		3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6

18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
SPAN 2550	Advanced Spanish Composition	3
9 credit hours from Spanish courses numbered at the 2000 level		9
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside your Major and Minor areas of study		6
6 credit hours of open electives		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
12 credit hours from Spanish courses numbered at the 3000 level		12
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside your Major and Minor areas of study		6
6 credit hours of open electives		6
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> Option 3 is open to students with native oral fluency in Spanish. Such students may enter Spanish courses numbered at the 2000 level with a grade of "C" or better in SPAN 1280.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. General Degree**

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

- At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationtext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any



course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Spanish Minor (Concentration)

### Minor Requirements

#### Option 1 <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
SPAN 1180	Introductory Spanish	6
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
Select one of the following options:		6
<b>Option A:</b>		
SPAN 1262 & SPAN 1272	Intermediate Spanish Grammar and Conversation 1 and Intermediate Spanish Grammar and Conversation 2	
<b>Option B:</b>		
SPAN 1290	Accelerated Intermediate Spanish	
<b>Option C:</b>		
SPAN 1280	Spanish for Native Speakers <sup>2</sup>	

and		
3 credit hours from Spanish courses numbered at the 2000 level		
<b>Hours</b>		<b>6</b>
<b>Year 3</b>		
3 credit hours from Spanish courses numbered at the 2000 level		3
SPAN 2550	Advanced Spanish Composition	3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Options 1 and 2 are not open to students with native oral fluency in Spanish. Students with native oral fluency in Spanish are advised to follow Option 3.

<sup>2</sup> With written consent of the department head students may be allowed to substitute both SPAN 1262 and SPAN 1272 (or SPAN 1290) with both SPAN 1280 and an additional 3 credit hours of 2000 level Spanish courses.

#### Option 2 <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
SPAN 1190	Introductory Spanish 2	3
<b>Hours</b>		<b>3</b>
<b>Year 2</b>		
Select one of the following options:		6
<b>Option A:</b>		
SPAN 1262 & SPAN 1272	Intermediate Spanish Grammar and Conversation 1 and Intermediate Spanish Grammar and Conversation 2	
<b>Option B:</b>		
SPAN 1290	Accelerated Intermediate Spanish	
<b>Option C:</b>		
SPAN 1280	Spanish for Native Speakers <sup>2</sup>	
and		
3 credit hours from Spanish courses numbered at the 2000 level		
SPAN 2550	Advanced Spanish Composition	3
<b>Hours</b>		<b>9</b>

<b>Year 3</b>		
6 credit hours from Spanish courses numbered at the 3000 level		6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Options 1 and 2 are not open to students with native oral fluency in Spanish. Students with native oral fluency in Spanish are advised to follow Option 3.

<sup>2</sup> With written consent of the department head students may be allowed to substitute both SPAN 1262 and SPAN 1272 (or SPAN 1290) with both SPAN 1280 and an additional 3 credit hours of 2000 level Spanish courses.

### Option 3<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
SPAN 1280	Spanish for Native Speakers	3
3 credit hours from Spanish courses numbered at the 2000 level		3
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
SPAN 2550	Advanced Spanish Composition	3
3 credit hours from Spanish courses numbered at the 2000 level		3
<b>Hours</b>		<b>6</b>
<b>Year 3</b>		
6 credit hours from Spanish courses numbered at the 3000 level		6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Option 3 is open to students with native oral fluency in Spanish. Such students may enter Spanish courses numbered at the 2000 level with a grade of "C" or better in SPAN 1280.

## German and Slavic Studies

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### Program Information

This department's program covers two European cultural and language groups. German is the official language of five European countries and an understanding of German language and culture is essential to any understanding of European history. Courses are offered in German language, literature and culture. In Slavic Studies, the department offers language, literature and culture courses in Russian, Ukrainian and Polish – the three largest Slavic language groups. The Slavic countries of Eastern Europe exert an important influence on international affairs. In Canada, immigration from both German and Slavic language groups has contributed greatly to the country's cultural mosaic. The department also offers language courses in Hungarian.

## German

### German Program Information

For entry, continuation and graduation requirements for the General Degree and Honours Degree, see: Basic Faculty Regulation (p. 211)s for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in 6 credit hours in German courses at any level.

A minimum "C" average in all courses that comprise the Major is required to graduate, including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in 6 credit hours in German.

### Honours Program

For entry to the Honours program, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Co-operative Education Options

Students interested in alternating employment terms and academic terms as part of a program in German may apply to enter one of the Co-operative Education option. The course and grade requirements for entry to this option are the same as those required for entry to the regular four-year Single Advanced Major and Single Honours programs. Students should refer to the general faculty regulations for Cooperative Options (p. 224).

### Other

German courses are arranged into categories as follows:

- Category A: Language courses
- Category B: Literature, Culture and Applied Linguistics courses conducted in German

- Category C: Literature, Culture and Applied Linguistics courses conducted in English

## Russian

### Program Information: Slavic Studies - Russian

For entry, continuation and graduation requirements for the General Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours in Russian courses at any level.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours in Russian courses at any level.

## Ukrainian

### Program Information: Slavic Studies - Ukrainian

For entry, continuation and graduation requirements for the General Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

## General Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours in Ukrainian courses at any level.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours in Ukrainian courses at any level.

## Polish

### Program Information: Slavic Studies - Polish

For entry, continuation and graduation requirements for the General Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours in Polish courses.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
German, B.A. Double Advanced Major (p. 320)	4	120	
German, B.A. Double Honours (p. 332)	4	120	
German, B.A. General (p. 333)	3	90	
German, B.A. Single Advanced Major (p. 315)	4	120	Yes
German, B.A. Single Honours (p. 317)	4	120	Yes
German Minor (Concentration) (p. 334)		18	
Polish Minor (Concentration) (p. 334)		18	
Russian, B.A. General (p. 335)	3	90	
Russian Minor (Concentration) (p. 336)		18	
Ukrainian, B.A. General (p. 336)	3	90	
Ukrainian Minor (Concentration) (p. 337)		18	

# German, B.A. Single Advanced Major

## Degree Requirements

(including Co-operative Education Option if selected)

Course	Title	Hours
<b>Years 1-4</b>		
48 credit hours of German (of which at least 15 credit hours must be German courses numbered at or above the 3000 level and an additional 21 credit hours at or above the 2000 level) to include:		48
GRMN 1120	Beginning German (A) <sup>1,2</sup>	
GRMN 2100	Intermediate German (A) <sup>1,2,3</sup>	
GRMN 2120 or GRMN 2130	Introduction to German Culture from 1918 to the Present (C) or Introduction to German Culture from the Beginnings to 1918 (C)	
GRMN 2140 or GRMN 2480	Exploring German Literature (B) or Special Topics in German (B)	
GRMN 3200	Deutsche Sprachpraxis 1 (A) <sup>2,3</sup>	
Within the required credit hours in German, 9 credit hours must be from Category B courses and a further 15 credit hours must be from Category B or C courses		
18 credit hours from your Minor area of study as described in that unit's section of the calendar		18
42 credit hours from outside of your Major and Minor areas of study		42
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>120</b>
<b>Total Hours</b>		<b>120</b>

### Co-operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will count toward the open elective credit required in this program:		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Students with superior language ability in German, who did not have to complete either GRMN 1120 or GRMN 2100 can replace GRMN 1120 or GRMN 2100 with either 6 credit hours in German courses or with YDSH 1220.

<sup>2</sup> Students with superior language ability will not be required to complete GRMN 1120 if they complete either GRMN 2100 or GRMN 3200 with a minimum grade of "C".

<sup>3</sup> Students with superior language ability will not be required to complete GRMN 2100 if they complete GRMN 3200 with a minimum grade of "C".

German courses are arranged into categories as follows:

- Category A: Language courses
- Category B: Literature, Culture and Applied Linguistics courses conducted in German
- Category C: Literature, Culture and Applied Linguistics courses conducted in English

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which

constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

- A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 42 credit hours numbered at or above the 2000 level.
- Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

### Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

### Continuation in the Co-operative Education Option

#### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;

- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

## Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## German, B.A. Single Honours Degree Requirements (including Co-operative Option if selected)

Course	Title	Hours
<b>Years 1-4</b>		
36 credit hours of German (of which at least 24 credit hours must be German courses numbered at or above the 2000 level) to include:		36
GRMN 1120	Beginning German (A) <sup>1,2</sup>	
GRMN 2100	Intermediate German (A) <sup>1,2,3</sup>	
GRMN 2120 or GRMN 2130	Introduction to German Culture from 1918 to the Present (C) or Introduction to German Culture from the Beginnings to 1918 (C)	
GRMN 2140 or GRMN 2480	Exploring German Literature (B) or Special Topics in German (B)	
GRMN 3200	Deutsche Sprachpraxis 1 (A) <sup>2,3</sup>	

GRMN 4600	Senior Seminar in German Studies (B) <sup>4</sup>	3
GRMN 4570	Honours Thesis in German Studies (B,C)	3
6 credit hours in German courses numbered at the 3000 or 4000 level		6
6 credit hours in German courses at the 4000 level		6
Within the required credit hours in German, 15 credit hours must be from Category B courses and a further 15 credit hours must be from Categories B or C courses		
24 credit hours of ancillary options <sup>5</sup>		24
42 credit hours of free options <sup>6</sup>		42
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
	<b>Hours</b>	<b>120</b>
	<b>Total Hours</b>	<b>120</b>

### Co-operative Education option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will count toward the ancillary option credit required in this program:		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
	<b>Hours</b>	<b>3</b>
	<b>Total Hours</b>	<b>3</b>

<sup>1</sup> Students with superior language ability in German, who did not have to complete either GRMN 1120 or GRMN 2100 can replace GRMN 1120 or GRMN 2100 with either 6 credit hours in German courses or with YDSH 1220.

<sup>2</sup> Students with superior language ability will not be required to complete GRMN 1120 if they complete either GRMN 2100 or GRMN 3200 with a minimum grade of "C".

<sup>3</sup> Students with superior language ability will not be required to complete GRMN 2100 if they complete GRMN 3200 with a minimum grade of "C".

<sup>4</sup> With written consent of department head, students may substitute GRMN 4600 with GRMN 4200.

<sup>5</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding German courses in the Single Honours, and excluding German and the second Honours field courses in the Double Honours).

<sup>6</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including German courses).

#### Notes:

- Honours courses: all 4000 level courses.

#### Other:

German courses are arranged into categories as follows:

- Category A: Language courses
- Category B: Literature, Culture and Applied Linguistics courses conducted in German

- Category C: Literature, Culture and Applied Linguistics courses conducted in English

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.

- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

## Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for

information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

#### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

#### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

#### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

#### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.



### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

### Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## German, B.A. Double Advanced Major

Course	Title	Hours
<b>Years 1-4</b>		
42 credit hours of German (of which at least 12 credit hours must be German courses numbered at or above the 3000 level and an additional 18 credit hours at or above the 2000 level) to include:		42
GRMN 1120	Beginning German (A) <sup>1,2</sup>	
GRMN 2100	Intermediate German (A) <sup>1,2,3</sup>	
GRMN 2120 or GRMN 2130	Introduction to German Culture from 1918 to the Present (C) or Introduction to German Culture from the Beginnings to 1918 (C)	

GRMN 2140	Exploring German Literature (B)	
or GRMN 2480	or Special Topics in German (B)	
GRMN 3200	Deutsche Sprachpraxis 1 (A) <sup>2,3</sup>	
Within the required credit hours in German, 6 credit hours must be from Category B courses and a further 12 credit hours must be from Category B or C courses		
42 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		42
36 credit hours from outside both Advanced Major subject fields		36
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>120</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> Students with superior language ability in German, who did not have to complete either GRMN 1120 or GRMN 2100 can replace GRMN 1120 or GRMN 2100 with either 6 credit hours in German courses or with YDSH 1220.
- <sup>2</sup> Students with superior language ability will not be required to complete GRMN 1120 if they complete either GRMN 2100 or GRMN 3200 with a minimum grade of "C".
- <sup>3</sup> Students with superior language ability will not be required to complete GRMN 2100 if they complete GRMN 3200 with a minimum grade of "C".

German courses are arranged into categories as follows:

- Category A: Language courses
- Category B: Literature, Culture and Applied Linguistics courses conducted in German
- Category C: Literature, Culture and Applied Linguistics courses conducted in English

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average

in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
 

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

### **GRMN 1120 Beginning German (A) 6 cr**

(Lab required) Three hours of lectures, plus one hour of language lab or conversation class per week. The course is intended for students with little or no previous knowledge of German. Basic grammar is included, but emphasis is placed on the development of broad reading and speaking skills. Satisfactory completion of this course enables students to proceed to GRMN 2100 or GRMN 2103. Students may not hold credit for GRMN 1120 and any of: GRMN 1123 or GRMN 1125 or the former GRMN 1121. Students with Grade 12 German or its equivalent may not normally take the course for credit. Not open to students who have previously obtained credit for GRMN 2100 or GRMN 2103 or GRMN 2105 or the former GRMN 2101.

**Equiv To:** GRMN 1121

**Mutually Exclusive:** GRMN 1123, GRMN 1125

**Attributes:** Humanities, Recommended Intro Courses

### **GRMN 1300 Masterpieces of German Literature in English Translation (C) 3 cr**

Language of instruction: English. The course introduces students to representative works (prose, poetry, and drama) by German-speaking writers such as Goethe, Kleist, Thomas Mann, Kafka, and Rilke, with an emphasis on the ages of Classicism, Romanticism, and Modernism. Stresses the development of English reading and writing skills. The course is designed for students who have little or no prior knowledge of German literature.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

### **GRMN 1310 Love in German Culture in English Translation (C) 3 cr**

Language of instruction: English. An introduction to the discourse and meaning of love through German culture from the Middle Ages to the present; analyzes the expression of different concepts of love (spiritual, courtly, erotic, romantic, sexual, free, same-sex, familial, virtual) in literature and other cultural forms. Stresses the development of English reading and writing skills. The course is designed for students who have little or no prior knowledge of German culture.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

### **GRMN 2100 Intermediate German (A) 6 cr**

Grammar review, exercises, development of practical oral skills, conversation and modern usage. Introduction to German poetry and prose. Students may not hold credit for GRMN 2100 and any of: GRMN 2103 or GRMN 2105 or the former GRMN 2101.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [German 40S] or [GRMN 1120 or GRMN 1125 or the former GRMN 1121] or written consent of department head.

**Equiv To:** GRMN 2101

**Mutually Exclusive:** GRMN 2103, GRMN 2105

**Attributes:** Humanities, Recommended Intro Courses

### **GRMN 2110 Discovering German Life and Culture (C) 3 cr**

Language of instruction: English. An introduction to German life and culture with an emphasis on experiential and reflective learning. The course will cover topics like popular music, film, memory culture, multiculturalism, environmentalism, food, and family structures in Germany. These topics will be addressed through the analysis of, among others, short texts, songs, movies, and graphic novels. Involvement of the German-Canadian community in Manitoba and of presenters from German-speaking countries is an integral part of this course.

**Attributes:** Humanities

**GRMN 2120 Introduction to German Culture from 1918 to the Present (C) 3 cr**

Language of instruction: English. An introduction to the culture of contemporary German-speaking countries; analyzes literature and other cultural forms since the end of World War I, including the Weimar Republic, the Third Reich and the Holocaust, divided Germany, Re-Unification, and the European Union.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2130 Introduction to German Culture from the Beginnings to 1918 (C) 3 cr**

Language of instruction: English. An introduction to the culture of the German-speaking countries from the Romans to the end of World War I; analyzes literature and other cultural forms and their relation to the rise of the German Nation in the 19th century and its first "fall" in the 20th century.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2140 Exploring German Literature (B) 3 cr**

Language of instruction: German. In this intermediate course, we will read and discuss a number of works belonging to different literary genres by major German-speaking authors, such as Kafka, Mann, Brecht, Böll, Grass, Jelinek, Wolf, and others. Activities and assignments in this course will focus on the development of reading competency in different literary genres, the expansion of students' German vocabulary, and the development of German written and oral expression.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2100 or GRMN 2105 or GRMN 3200 or GRMN 3201 or the former GRMN 2101] or written consent of department head.

**Attributes:** Humanities, Recommended Intro Courses

**GRMN 2480 Special Topics in German (B) 3 cr**

Language of instruction: German. Topics dealing with German literature and culture. Course content will vary from year to year depending on the interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2100 or GRMN 2105 or GRMN 3200 or GRMN 3201 or the former GRMN 2101] or written consent of department head.

**Attributes:** Humanities

**GRMN 2500 Special Topics in German in English Translation (C) 3 cr**

Language of instruction: English. Topics dealing with German literature and culture. Course content will vary from term to term depending on the interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** GRMN 2520, GRMN 2530

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2510 German Fairy Tales from the Brothers Grimm to Hollywood (C) 3 cr**

Language of instruction: English. Study of the German fairy tales with a specific emphasis on the "folk fairy tales" collected by the Brothers Grimm and their adaptations in the 20th and 21st centuries in film (Disney, DEFA, among others), literature, and music. The course familiarizes students with the historical, cultural, and national contexts of the original fairy tales, and trains students in different approaches to understanding those fairy tales (gender, psycho-analysis, child developmental psychology, horror, and others).

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2520 Spies: Stories of Secret Agents, Treason, and Surveillance (C) 3 cr**

Language of instruction: English. Discusses German stories of espionage in film, television series, historical novel, literary fiction, autobiography, and comic books. The course familiarizes students with spying in its cultural techniques and forms, its imaginary power, its gender patterns, and the complexities and ambiguities of concepts such as treason, performance, truth, good and evil. May not be held with GRMN 2500 when titled "Spies: Stories of Secret Agents, Treason, and Surveillance."

**Mutually Exclusive:** GRMN 2500

**Attributes:** Humanities

**GRMN 2530 My Friend the Tree: Environment and Ecology in German Culture in English Translation (C) 3 cr**

Language of instruction: English. Discusses the representation of nature in German culture through the analysis of a broad variety of texts (novels, short stories, movies, television series etc.). The course familiarizes students with how the German-speaking world conceptualizes nature and climate change and introduces them to the field of Ecocriticism. May not be held with GRMN 2500 when titled "My Friend the Tree: Environment and Ecology in German Culture in English Translation."

**Mutually Exclusive:** GRMN 2500

**Attributes:** Humanities

**GRMN 3200 Deutsche Sprachpraxis 1 (A) 6 cr**

Modern German usage through conversation, writing and practical exercises; study of contemporary fictional and non-fictional texts and films. Emphasis on vocabulary and structural and stylistic problems. Students may not hold credit for both GRMN 3200 and GRMN 3201.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRMN 2100 or GRMN 2105 or the former GRMN 2101 or written consent of department head.

**Equiv To:** GRMN 3201

**Attributes:** Humanities

**GRMN 3220 Deutsche Sprachpraxis 2 (A) 3 cr**

Advanced work on various aspects of the German language, involving intensive practice in writing and conversational skills; translation of literary and non-literary materials from and into German; and exercise in stylistic and structural analysis of literary and non-literary German in a variety of registers and contexts.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRMN 3200 or GRMN 3201.

**Attributes:** Humanities

**GRMN 3230 Business German (A) 3 cr**

An introduction to the contemporary terminology and usage of German in the workplace. Listening, speaking, reading, and writing skills will be developed through a variety of activities. This course also aims at developing cross-cultural awareness. The course prepares the student for the business exam *Zertifikat für den Beruf*. Students may not hold credit for both GRMN 3230 and GRMN 3211.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2100 or GRMN 2105 or GRMN 3200 or GRMN 3201 or the former GRMN 2101] or written consent of department head.

**Mutually Exclusive:** GRMN 3211

**Attributes:** Humanities

**GRMN 3232 Introduction to German Translation (A) 3 cr**

Language of instruction: German. An introduction to the art of translation (German to English) with a focus on translation principles, language analysis, and hands-on translation of texts from a variety of fields.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3234 Special Topics in German Language (A) 3 cr**

Language of instruction: German. Topics dealing with learning the German language. Advanced German language practice. Course content will vary from year to year depending on the interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3240 German Enlightenment and Classicism (B) 3 cr**

Language of instruction: German. A study of selected texts of the German Enlightenment and Classicism, including works by Lessing, Schiller, Goethe and others; advanced language practise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3250 German Romanticism (B) 3 cr**

Language of instruction: German. Study of selected fairy tales, novellas, letters, poetry and other texts by authors such as Novalis, Tieck, E.T.A. Hoffmann, and Kleist; topics discussed include the relationship between Enlightenment and Romanticism, the role of women, the discovery of the uncanny, the role of the fantastic, and romantic vampires, advanced language practise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3260 Representations of the Holocaust (B) 3 cr**

Language of instruction: German. This course will focus on the literary rendering, including film versions and German memorial culture, of the Holocaust experience by authors from the German-speaking countries, such as Anna Seghers, Jurek Becker, Paul Celan, Max Frisch, Peter Weiss, Ruth Klüger, W.G. Sebald, and others. Students may not hold credit for both GRMN 3260 and GRMN 3262.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Equiv To:** GRMN 3262

**Attributes:** Humanities

**GRMN 3262 Representations of the Holocaust in English Translation (C) 3 cr**

Language of instruction: English. This course will focus on the literary rendering, including film versions and German memorial culture, of the Holocaust experience by authors from the German-speaking countries, such as Anna Seghers, Jurek Becker, Paul Celan, Max Frisch, Peter Weiss, Ruth Klüger, W.G. Sebald, and others. Students may not hold credit for both GRMN 3262 and GRMN 3260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Equiv To:** GRMN 3260

**Attributes:** Humanities, Written English Requirement

**GRMN 3270 Studies in Contemporary German Cinema (C) 3 cr**

Language of instruction: English. Studies the major accomplishments of East and West German cinema of the postwar period, as well as cinematic trends since German unification. We will consider questions of narrative, genre, and authorship, examine film's relationship to other media, and focus on the dynamic interaction between film history and social history.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Attributes:** Humanities, Written English Requirement

**GRMN 3282 Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C) 3 cr**

Language of instruction: English. Explores a wide range of literary and cultural texts that deal with sex and gender in the German-speaking world. Discussion will address topics such as representation of women and men in literature and the social and historical climate in which the literature was and is produced. Students may not hold credit for both GRMN 3282 and the former GRMN 3280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Equiv To:** GRMN 3280

**Attributes:** Humanities, Written English Requirement

**GRMN 3290 History in Literature in German-Speaking Countries (B) 3 cr**

Language of instruction: German. Analyzes how history is represented and remembered in literature and other genres. The course will focus on the representation of one historical period such as the Weimar Republic or the Nazi Third Reich. Please consult the instructor for details on which historical period as it appears in literature will be considered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3390 German Representations of War (C) 3 cr**

Language of instruction: English. Focuses on representations of war, particularly World War II from a German and European perspective in fiction, historiography, film, photography, and memorial culture. Students may not hold credit for both GRMN 3390 and the former GRMN 3392.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Equiv To:** GRMN 3392

**Attributes:** Humanities, Written English Requirement

**GRMN 3500 Special Topics in German (B) 3 cr**

Language of instruction: German. Topics dealing with German literature and culture. Course content will vary from year to year depending on interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3510 Special Topics in German in English Translation (C) 3 cr**

Language of instruction: English. Topics dealing with German literature and culture. Course content will vary from year to year depending on interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Attributes:** Humanities, Written English Requirement

**GRMN 3530 Special Topics in Comparative German and Slavic Studies (C) 3 cr**

Language of instruction: English. Topics comparing German and Slavic – Ukrainian, Russian, Polish – literatures and cultures. Course is co-taught by a member from the German and one from the Slavic Section. Course content will vary from year to year depending on interests and needs of students and staff. Possible topics include Memory of World War II, Cold War and Post-Cold War, and Modernism. Students may not hold credit for both GRMN 3530 and SLAV 3530 when topic is the same. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Attributes:** Humanities, Written English Requirement

**GRMN 4200 Literary and Cultural Theory (C) 3 cr**

Language of instruction: English. A survey of the major theoretical approaches to German literatures and cultures. Discusses the aesthetics of Enlightenment and Idealism, Nietzsche, Freud, Prague Structuralism, hermeneutics, semiotics, the Frankfurt School, collective memory, gender studies, and multi-culturalism; application of theories to German literary texts and other cultural examples.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4210 Survey of Second Language Acquisition and Methods of Language Teaching in German (B) 3 cr**

Language of instruction: German. For advanced undergraduate students with a high proficiency in German who are interested in the learning and teaching of German as a foreign / second language; the course provides a general introduction to theories and approaches in second language acquisition (SLA) and to methods of the teaching of German as a foreign language. This course is not acceptable for credit in a Bachelor of Education program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4540 Introduction to German Language Structure (B) 3 cr**

Language of instruction: German. An introduction to the scientific study of the German language and to the role of the language teacher in the examination, analysis, and description of the German language. Topics include grammar, word formation, meaning, sound systems, language acquisition and change, and language in society.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4570 Honours Thesis in German Studies (B,C) 3 cr**

The Thesis presents the results of an independent research project supervised by a faculty member. The thesis can be written in German or in English.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4600 Senior Seminar in German Studies (B) 3 cr**

Language of instruction: German. Introduces basic methodology of German literary and cultural studies (genres, periods, resources, bibliographical methods). Examines German culture during critical periods in German history with specific emphasis on literature. Students work closely with a faculty advisor during the semester and are expected to produce a major research paper.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4660 Special Topics in German (B) 3 cr**

Language of instruction: German. The specific content of this course will vary from year to year. A description of the course is available in advance at the Department Office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4670 Special Topics in German in English Translation (C) 3 cr**

Language of instruction: English. The specific content of this course will vary from year to year. A description of the course is available in advance at the Department Office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

## Introduction

This chapter contains the regulations and requirements that apply to all students, regardless of faculty or school.

Each faculty and school has its own supplementary regulations and requirements. These are published in the faculty or school chapters of the Academic Calendar. Some faculties and schools also have additional regulations and requirements governing their programs; these are available from the faculty or school.

It is the responsibility of each student to be familiar with the academic regulations and requirements of the University of Manitoba in general and of the specific academic regulations and requirements of their faculty or school of registration. Accordingly, students are asked to seek the advice of advisors in faculty and school general offices whenever there is any question concerning how specific regulations apply to their situations.

## Residence and Written English and Mathematics Requirements

### Residence Requirements For Graduation

Each faculty and school recommends to the Senate the number of credit hours each student must complete in order to graduate from its programs. Senate also requires each student to complete a minimum number of credit hours at the University of Manitoba – this is called the “residence requirement.”

Unless otherwise stated in faculty and school chapters, the minimum residence requirement of the University of Manitoba is the work normally associated with one year in the case of programs of three years’ duration, and two years for programs of four years’ duration. Some faculties and schools may have additional residence requirements specified in their program regulations. However, in all cases, the residence requirement is assessed following an appraisal of the educational record of the student applying to transfer credits from another institution or applying to earn credits elsewhere on a letter of permission. The residence requirement is not reduced for students whose “challenge for credit” results in a passing grade.

### University English and Mathematics Requirements for Undergraduate Students

All students are required to complete, within the first 60 credit hours of their programs, a minimum of one three credit hour course with significant content in written English, and a minimum of one three credit hour course with significant content in mathematics.

Some degree programs have designated specific written English and mathematics courses to fulfil this requirement.

Price Faculty of Engineering have their own written English requirements (p. 461).

Some degree programs require that the written English and/or mathematics requirements be completed prior to admission.

See the program descriptions in the faculty and school chapters of the Academic Calendar for details.

### Exemptions to the Written English and Mathematics Requirement

- All students with completed baccalaureate degrees and who transfer into any program to which these requirements apply.

- Registered Nurses entering the Bachelor of Nursing Program for Registered Nurses.
- Students admitted before the 1997-98 Regular Session.
- Written English exemption only: Students transferring from Université de Saint-Boniface who have completed a written French requirement (at the university) before transferring to the University of Manitoba will be deemed to have met the written English requirement.

## Approved English and Mathematics Courses

A complete list of all courses which satisfy the university written English and mathematics requirement is provided below. (When searching for courses in Aurora, students may search Course Attributes for courses that satisfy the written English and Mathematics requirements).

**Note that some programs may restrict the choice of English or Mathematics courses. See the program descriptions in the faculty and school chapters of the Academic Calendar for details.**

### Written English Courses

Course	Title	Hours
AGRI 2030	Technical Communications	3
ANTH 1520	Critical Cultural Anthropology	3
ANTH 2020	Relatedness in a Globalizing World	3
ANTH 2230	Anthropology of Travel and Tourism	3
ANTH 3330	Sex and Sexualities	3
ARTS 1110	Introduction to University	3
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
CATH 1190	Introduction to Catholic Studies	3
CATH 2010	Literature and Catholic Culture 1	3
CATH 2020	Literature and Catholic Culture 2	3
CLAS 2612	Greek Literature in Translation	3
CLAS 2622	Latin Literature in Translation	3
ENGL 0930	English Composition	3
ENGL 0940	Writing About Literature	3
ENGL 1XXX	All English courses at the 1000 level	
ENGL 2XXX	All English courses at the 2000 level	
ENGL 3XXX	All English courses at the 3000 level	
ENGL 4XXX	All English courses at the 4000 level	
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
FAAH 2930	Writing about Art	3
FILM 2280	Film and Literature	6
FORS 2000	Introductory Forensic Science	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
GEOL 3130	Communication Methods in the Geological Sciences	3
GMGT 1010	Business and Society	3
GMGT 2010	Business Communications	3
GPE 2700	Perspectives on Global Political Economy	3
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3

GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3	RLGN 1420	Ethics in World Religions	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3	RLGN 1424	Religion and Sexuality	3
GRMN 2500	Special Topics in German in English Translation (C)	3	RLGN 1440	Evil in World Religions	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3	RLGN 2032	Introduction to the Study of Religion	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3	RLGN 2036	Introduction to Christianity	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3	RLGN 2052	Conservative Christianity in the United States	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3	RLGN 2112	Medicine, Magic, and Miracle in the Ancient World	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3	RLGN 2116	Cognitive Science and Religion	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3	RLGN 2140	Introduction to Judaism	3
GRMN 3390	German Representations of War (C)	3	RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
GRMN 3510	Special Topics in German in English Translation (C)	3	RLGN 2162	Great Jewish Books	3
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3	RLGN 2170	Introduction to the New Testament	3
HIST 1XXX	All History courses at 1000 level		RLGN 2222	The Supernatural in Popular Culture	3
HIST 2XXX	All History courses at 2000 level		RLGN 2590	Religion and Social Issues	3
HNSC 2000	Research Methods and Presentation	3	RLGN 3102	Myth and Mythmaking: Narrative, Ideology, Scholarship	3
HYGN 1340	Communications	2	RLGN 3280	Hasidism	3
INDG 2020	The Métis in Canada	3	RUSN 1400	Masterpieces of Russian Literature in Translation	3
INDG 2110	Introduction to Indigenous Community Development	3	RUSN 1410	Love in Russian Culture in English Translation	3
INDG 2530	Introduction to Indigenous Theory	3	RUSN 2280	Russian Culture until 1900	3
KPER 2120	Academic Skills in Kinesiology and Recreation Management	3	RUSN 2290	Russian Culture from 1900 to the Present	3
LABR 1260	Working for a Living	3	RUSN 2310	Exploring Russia through Film	3
LABR 1290	Introduction to the Canadian Labour Movement	3	RUSN 2410	Russian Literature after Stalin	3
LABR 2200	Labour History: Canada and Beyond (C)	3	RUSN 2600	Special Topics in Russian Culture in English Translation	3
LABR 2300	Workers, Employers and the State	3	RUSN 2740	Literature and Revolution	3
LABR 4510	Labour Studies Field Placement Seminar	3	SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
LAW 1540	Legal Methods	5	SOC 3100	Practicum in Criminological/Sociological Research	6
LAW 2650	Introduction to Advocacy	3	SOC 3350	Feminism and Sociological Theory	3
LING 2740	Interpretation Theory	3	UKRN 2200	Ukrainian Myth, Rites and Rituals	3
PHIL 2612	A Philosophical History of Science	3	UKRN 2410	Ukrainian Canadian Cultural Experience	3
PHIL 2614	Philosophy of Science	3	UKRN 2590	Ukrainian Literature and Film	3
PHIL 2790	Moral Philosophy	6	UKRN 2600	Special Topics in Ukrainian Studies	3
PHIL 3220	Feminist Philosophy	3	UKRN 2770	Ukrainian Culture until 1900	3
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3	UKRN 2780	Ukrainian Culture from 1900 to the Present	3
POL 2600	Polish Culture until 1918	3	UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
POL 2610	Polish Culture 1918 to the Present	3	UKRN 3970	Women and Ukrainian Literature	3
POL 2660	Special Topics in Polish Literature and Culture	3	WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3
POLS 1502	Introduction to Political Studies	3	WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
PSYC 2500	Elements of Ethology	3	WOMN 2560	Women, Science and Technology	3
PSYC 3200	Thinking Critically About Psychological Research	3	WOMN 3520	Transnational Feminisms	3
PSYC 3380	Nature, Nurture and Behaviour	3	<b>Mathematics Courses</b>		
PSYC 4520	Honours Research Seminar	6	<b>Course</b>	<b>Title</b>	<b>Hours</b>
RLGN 1322	Introduction to Eastern Religions	3	AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
RLGN 1324	Introduction to Western Religions	3	ECON 2040	Quantitative Methods in Economics	3
			FA 1020	Mathematics in Art	3
			GEOG 3810	Quantitative Research Methods in Geography (TS)	3
			MATH 1XXX	All Mathematics courses at 1000 level	

MATH 2XXX	All Mathematics at 2000 level	
MATH 3XXX	All Mathematics at 3000 level	
MATH 4XXX	All Mathematics at 4000 level	
MUSC 3230	Acoustics of Music	3
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PSYC 2260	Introduction to Research Methods in Psychology	3
SOC 2294	Understanding Social Statistics	3
STAT 1XXX	All Statistics courses at 1000 level	
STAT 2XXX	All Statistics courses at 2000 level	
STAT 3XXX	All Statistics courses at 3000 level	
STAT 4XXX	All Statistics courses at 4000 level	

## Course Identification

### Credit Hours (Cr.Hrs.)

Each faculty and school develops courses for its degree credit programs, subject to Senate approval, and assigns a credit hour value to each course.

The credit hours for a course are expressed as a number associated with the course which indicates its relative weight. There is a correlation between class hours and credit hours (i.e. 6 credit hours = 3 hours a week, two terms; and 3 credit hours = 3 hours a week, one term).

For the purposes of registration, courses taught over both the Fall and Winter Terms have been divided into two parts. The credit hour value of the course are divided equally and applied to each part of the course. For example: for a six credit hour spanned course each of the Fall and Winter Term parts of the course will be assigned the value of three credit hours. Students registering for term spanning courses will receive one grade for the course and only when the second part is completed. The course grade will be applied to both the Fall and Winter parts of the course.

### Prerequisite and Co-requisite Courses

**Prerequisite:** If a course is prerequisite for a second course, the prerequisite must be met in order to begin the second course. To determine whether or not a course has a prerequisite, see the course descriptions in the chapter of the faculty or school offering the course. Normally, a minimum grade of "C" is required in all courses listed as prerequisites, except as otherwise noted in the course descriptions.

For some courses, the prerequisite may be completed before registering for the second course or may be taken concurrently with the second course. To determine if a course may be taken concurrently, see the course descriptions in the chapter of the faculty or school offering the course.

**Co-requisite:** If a first course is a co-requisite for a second course, the first course **must** be completed in the same term as the second course. To determine if a course has a co-requisite, see the course descriptions in the chapter of the faculty or school offering the course.

### Course Numbers

#### First Two to Four Characters

The two, three or four characters in every course number are a shortened version of the subject of the course.

#### Last Four Digits

At the University of Manitoba the last four digits of the course number reflect the level of contact with the subject.

#### For example:

ECON 1210

ECON is the code for Economics.

1210 indicates that it is an introductory or entry level course.

If the course requires a laboratory, this will be shown following the credit hours immediately following the title.

#### For example:

BIOL 3242 (lab required)

The 2000, 3000, 4000 course numbers indicate the second, third, and fourth levels of university contact with a subject.

Numbers in the 5000 range are normally associated with pre-Master's work or courses in the Post Baccalaureate Diploma and the Post-Graduate Medical Education programs.

Courses numbered 6000-8000 are graduate courses of the Faculty of Graduate Studies.

Course numbers in the 9000 series are used to identify courses taken at the University of Winnipeg by students in the University of Manitoba/University of Winnipeg Joint Master's Programs. The 9000 numbers do not indicate the level of the course taken (see *Graduate Calendar* or *University of Winnipeg Calendar*).

In most cases, some correlation exists between the course number and a student's year of study; that is, students in the third year of a program will generally carry course loads comprised primarily of 3000-level courses.

#### Other course numbering information

Courses with numbers that end in 0 or an even number are taught in English, most of which are offered on the Fort Garry or Bannatyne campuses or through Distance and Online Education.

Courses with numbers that end in odd numbers are taught in French at Université de Saint-Boniface. (<http://www.cusb.ca/>)

## Grades and Grade Point Average Calculation

### Introduction

Final grades in most courses are expressed as letters, ranging from F, to A+ the highest. A grade of D is the lowest passing grade, however the minimum grade required to use a course as credit toward a degree or diploma program may be set higher by a faculty or school. Refer to faculty and school regulations. Each letter grade has an assigned numerical value which is used to calculate grade point averages. Grading scales used to determine the final letter grade may vary between courses and programs.

Some courses are graded on a pass/fail basis and because no numerical value is assigned to these courses, they do not affect grade point averages. Courses graded in this way are clearly identified in course descriptions and program outlines.



## The Letter Grade System

Letter Grade	Grade Point Value	Description
A+	4.5	Exceptional
A	4.0	Excellent
B+	3.5	Very Good
B	3.0	Good
C+	2.5	Satisfactory
C	2.0	Adequate
D	1.0	Marginal
F	0	Failure
P		Pass
S		Standing

The grade of "D" is regarded as marginal in most courses by all faculties and schools. It contributes to decreasing a term, degree or cumulative Grade Point Average to less than 2.0. Courses graded "D" may be repeated for the purpose of improving a GPA. Note that some faculties and schools consider a grade of "D" as unacceptable and will not apply the course toward the program as credit. In most cases the course will need to be repeated to attain the acceptable grade. Refer to faculty and school regulations.

## Calculation of Grade Point Average

The University of Manitoba will report cumulative and term grade point averages for all students through Aurora Student.

Please also refer to the Grade Point Averages Policy (p. 53) found in the University Policies and Procedures..

### Quality Points

The quality points for a course are the product of the credit hours for the course and the grade point obtained by the student; e.g., 3 credit hours with a grade of "B" (3.0 points) = 3 credit hours x 3.0 = 9.0 quality points.

### Quality Point Total

The quality point total is the sum of quality points accumulated as students proceed through their program of studies.

### Grade Point Average (GPA)

The grade point average (GPA) is the quality point total divided by the total number of credit hours.

Example:

Course	Credit Hours	Grade	Grade Points	Quality Points
Course 1	3	B	3	9
Course 2	3	B+	3.5	10.5
Course 3	3	C+	2.5	7.5
Course 4	3	B	3	9
Course 5	3	A	4	12
Totals	15			48

Grade point average: 240 Quality Points / 15 Credit Hours = 3.20

## Poor Grades and Program Progression

A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Students in doubt as to the status of their record should consult an advisor in their faculty or school.

For minimum grade levels, especially as they affect progression requirements, see the faculty or school regulations in the *Academic Calendar* or consult an advisor.

## Academic Honours

Students qualify for the Honour List (Dean's, Director's, University 1) when they achieve qualifying grade point averages, as specified by the faculty/school or program regulations.

In addition, outstanding academic achievement will qualify students for other honours and awards. These include:

- the University Gold Medal, which is awarded at graduation in each faculty or school to the student with the most outstanding academic record;
- program medals, which are awarded by faculties and schools to the best student graduating from a specific program;
- graduation "with distinction", which is recorded on the transcripts of all students who attain a qualifying grade point average;
- and other medals and prizes that are specific to programs or disciplines.

## Academic Evaluation

### Methods of Evaluation

Students shall be informed of the method of evaluation to be used in each course, as specified in the *Responsibilities of Academic Staff with Regard to Students Policy* (p. 75), found in the University Policies and Procedures.

In departments where a course is offered in more than one section, the department offering the course endeavours to provide instruction so that all sections cover similar topics and that all students achieve a similar level of competency in the topic. However, there will be differences in evaluation as well as in teaching style, readings and assignments from one section to another. Students may contact the department for additional information before registration.

### Credit for Term Work

In subjects involving written examinations, laboratories, and term assignments, a student may be required to pass each component separately. If no final examination is scheduled in a course, the student's final grade will be determined on the basis of the method of evaluation as announced in the first week of lectures.

If credit is not given for term work, the student's final grade will be determined entirely by the results of the final written examination. Where the final grade is determined from the results of both term work and final examinations, the method of computing the final grade will be as announced within the first week of classes. Should a student write a deferred examination, term grades earned will normally be taken into account as set out in the immediately preceding paragraph.

### Repeating a Course

A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Elective courses graded “F” may either be repeated or another elective substituted. All electives in a program must be approved by the faculty or school.

### Probation and Academic Suspension

Failure to meet minimum levels of performance as specified in the regulations of the faculty or school will result in a student being placed either on probation or academic suspension in accordance with the faculty or school regulations.

A student’s status is determined, following final examinations, at the end of each term (Fall, Winter or Summer terms) or at the end of an academic session as specified in faculty regulations. A student placed on probation is advised to discuss his/her program prior to the next registration with a representative of the dean or director to determine which courses, if any, should be repeated.

A student placed on academic suspension will normally be permitted to apply for re-entry to the faculty or school after one year has elapsed, but reinstatement is not automatic and individual faculty or school regulations must always be consulted.

While on suspension, students are not normally admissible to another faculty or school.

## Other Forms of Earning Degree Credit

### Letter of Permission for Transfer of Credit

Students in degree programs at this university may take courses at other recognized colleges or universities for transfer of credit provided such courses are approved at least one month prior to the commencement of classes at the other institution by the faculty or school in which they are currently registered. The approval is subject to individual faculty/school regulations and is granted in the form of a Letter of Permission. The student must obtain a Letter of Permission whether or not the course/s being taken are for transfer of credit to the University of Manitoba. Failure to obtain a Letter of Permission may have serious academic implications.

To obtain a Letter of Permission (<https://umanitoba.ca/registrar/letter-permission/>), application must be made to the Registrar’s Office as early as possible and at least one month prior to when required at the other institution.

Each application must be accompanied by the appropriate fee. The fees are for each application and a separate application is required for each session and institution regardless of the number of courses being considered. Students planning to seek permission to take courses elsewhere for transfer of credit to the University of Manitoba are cautioned to check the current Academic Calendar for the residence and degree requirements of the degree programs in which they are enrolled.

Transferred courses will be given assigned credit hour values and grades. The transferred grade will be included in the student’s degree and cumulative GPA.

### Challenge for Credit

The purpose of Challenge for Credit is to provide students of the university with some means of obtaining academic credit in University of Manitoba courses (not otherwise obtainable as a transfer of credit from other institutions) for practical training and experience, or reading and study previously completed. Students who have registered to challenge would normally not attend classes or laboratories. Courses which have previously been taken at the University of Manitoba may not be challenged for credit.

To be eligible to challenge for credit a student must first be admitted to a faculty or school of the University of Manitoba. Eligible students will be required to demonstrate their competence in the courses which they are challenging for credit. Where formal, written examinations are required, these will be generally scheduled during the regular examination sessions in April/May, June, August, or December.

For information regarding requirements, procedures, applications and fees a student should contact the office of the faculty or school in which the student is enrolled, or in the case of new students, the faculty or school to which the new student has been admitted.

### Application of Course Credit when transferring between Programs within the University of Manitoba

When students transfer into program from another faculty or school within the University of Manitoba, some course credits previously earned may be applied to the new program. The credit hour value assigned by the faculty or school that offers the course is used. That is, there can only be one credit weight designated for a course with a particular course number.

## Academic Appeals

With the exception of decisions on admissions or disciplinary matters, all academic appeals from decisions of faculty or school appeals committees at the University of Manitoba or by the Comité d’appels at Université de Saint-Boniface shall be heard by the Senate Appeals Committee regardless of the institute of registration of the student concerned.

The complete terms of reference for the Senate Committee on Appeals as well as an Appeal Form may be obtained from the Office of the University Secretary, 312 Administration Building or Student Advocacy/Student Resource Services, 519 University Centre.

## Academic Integrity

The University of Manitoba takes academic integrity seriously. As a member of the International Centre for Academic Integrity, the University defines academic integrity as a commitment to six fundamental values: honesty, trust, fairness, respect, responsibility and courage. (International Centre for Academic Integrity, 2014)

To help students understand the expectations of the University of Manitoba, definitions for the types of prohibited behaviours are in the Student Academic Misconduct Procedure (p. 84) and provided below.

“Academic Misconduct” means any conduct that has, or might reasonably be seen to have, an adverse effect on the academic integrity of the University, including but not limited to:

- (a) Plagiarism – the presentation or use of information, ideas, images, sentences, findings, etc. as one’s own without appropriate attribution in a written assignment, test or final examination.
- (b) Cheating on Quizzes, Tests, or Final Examinations – the circumventing of fair testing procedures or contravention of exam regulations. Such acts may be premeditated/planned or may be unintentional or opportunistic.
- (c) Inappropriate Collaboration – when a student and any other person work together on assignments, projects, tests, labs or other work unless authorized by the course instructor.

(d) Duplicate Submission – cheating where a student submits a paper/ assignment/test in full or in part, for more than one course without the permission of the course instructor.

(e) Personation – writing an assignment, lab, test, or examination for another student, or the unauthorized use of another person’s signature or identification in order to impersonate someone else. Personation includes both the personator and the person initiating the personation.

(f) Academic Fraud – falsification of data or official documents as well as the falsification of medical or compassionate circumstances/ documentation to gain accommodations to complete assignments, tests or examinations.

Note that the above applies to written, visual, and spatial assignments as well as oral presentations.

Over the course of your university studies, you may find yourself in situations that can make the application of these definitions unclear. The University of Manitoba wants to help you be successful, and this includes providing you with the knowledge and tools to support your decisions to act with integrity. There are a number of people and places on campus that will help you understand the rules and how they apply to your academic work. If you have questions or are uncertain about what is expected of you in your courses, you have several options:

- Ask your professor, instructor, or teaching assistant for assistance or clarification.
- Get support from the Academic Learning Centre (p. 1769) or Libraries (p. 1772):
- Visit the Academic Integrity site (p. 1769) for information and tools to help you understand academic integrity.
- Make an appointment with the Student Advocacy (p. 1773) office. This office assists students to understand their rights and responsibilities and provides support to students who have received an allegation of academic misconduct.

## Appeals of Grades

### Appeal of Term Work

Students may formally appeal a grade received for term work provided that the matter has been discussed with the instructor in the first instance in an attempt to resolve the issue without the need of formal appeal. Term work grades normally may be appealed up to ten (10) working days after the grades for the term work have been made available to the student.

The fee which is charged for each appealed term work grade will be refunded for any grade which is changed as a result of the appeal.

### Appeal of Final Grades

Final grades are not released to students who are on “Hold Status”; the deadline for appeal of assigned grades will not be extended for students who were unable to access their final grades due to a hold.

*These regulations expand on the Final Grades Procedures (p. 48) found in the University Policies and Procedures.*

## Attendance and Withdrawal

### Attendance at Class and Debarment

Regular attendance is expected of all students in all courses.

An instructor may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by the faculty or school regulations.

A student may be debarred from class, laboratories, and examinations by action of the dean/director for persistent non-attendance, failure to produce assignments to the satisfaction of the instructor, and/or unsafe clinical practice or practicum. Students so debarred will have failed that course.

## Withdrawal from Courses and Programs

### Voluntary Withdrawal

The registration revision period extends two weeks from the first day of classes in both Fall and Winter terms. Courses dropped during this period shall not be regarded as withdrawals and shall not be recorded on official transcripts or student histories. The revision period is prorated for Summer terms and for parts of term.

After the registration revision period ends, voluntary withdrawals (VWs) will be recorded on official transcripts and student histories.

The following dates are deadlines for voluntary withdrawals:

- The Voluntary Withdrawal deadline shall be the 48th teaching day in both Fall and Winter term for those half-courses taught over the whole of each term;
- The Voluntary Withdrawal deadline for full-courses taught over both Fall and Winter term shall be the 48th teaching day of the Winter term; and
- The Voluntary Withdrawal deadline for full-and-half courses taught during Summer terms or during some other special schedule shall be calculated in a similar manner using a pro-rated number of teaching days.

The exact Voluntary Withdrawal dates that apply to courses offered in the current academic session are published in the Academic Schedule (p. 28).

### Authorized Withdrawal

Subject to the provision of satisfactory documentation to the faculty of registration, Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds.

### Required Withdrawal from Professional Programs

Senate, at the request of some faculties and schools, has approved bylaws granting them the authority to require a student to withdraw on the basis of unsuitability for the practice of the profession to which the program of study leads.

This right may be exercised at any time throughout the academic year or following the results of examinations at the end of every year.

This right to require a student to withdraw prevails notwithstanding any other provisions in the academic regulations of the particular faculty or school regarding eligibility to proceed or repeat.

Where Senate has approved such a bylaw, that fact is indicated in the *Academic Calendar* chapter for that faculty or school. A copy of the professional unsuitability bylaw may be obtained from the general office of the faculty or school.

## Deferred and Supplemental Examinations

*These regulations expand on the Deferred and Supplemental Examinations Procedures ([https://umanitoba.ca/admin/governance/governing\\_documents/academic/1299.html](https://umanitoba.ca/admin/governance/governing_documents/academic/1299.html)) found in the University Policies and Procedures.*

### Accepting Standing in Course without Examination

In the event that a student is unable to write a deferred examination as it has been scheduled, a grade may be assigned without examination (please refer to the Deferred and Supplemental Examinations Procedures) (p. 48). A student who accepts standing in a course without examination may not, at a later date, request permission to write a deferred examination in the course.

### Supplemental Examinations

Supplemental Examinations are offered by some faculties to students who have not achieved the minimum result in required courses.

Students who are granted supplemental privileges are normally required to sit the examination within thirty (30) working days from the end of the examination series in which the supplemental grade was received, unless the progression rules of a faculty or school require the successful completion of an entire academic year before a student is eligible to proceed into the next. In this case, students are obliged to sit the examination at the next ensuing examination period.

## Final Examinations

*These regulations expand on the Final Examinations and Final Grades Policy and Procedures found in the University Policies and Procedures.*

### General Examination Regulations

Students (with the exception of students auditing courses) are required to write all final examinations. Those who absent themselves without an acceptable reason will receive a grade classification of "NP" (No Paper) accompanied by a letter grade based on term work completed, using a zero value for incomplete term work and for the final examination. If no credit for term work is involved, a grade of "F" will be assigned. Under certain conditions a student may apply for a deferred examination; see Deferred and Supplemental Examinations.

### Examination Schedules

For most faculties, schools and colleges, final examinations are normally conducted in December for Fall Term courses; in April/May for Winter Term and Fall/Winter Term spanned courses; and in August for Distance and Online Education Summer Term courses. Exact dates for the exam period can be found in the Academic Schedule (p. 28).

The Schedule of Final Exams for Fall and Winter is made available by the Registrar's Office approximately one month after the beginning of the term. This schedule is made available on the Registrar's Office Website (<https://umanitoba.ca/registrar/final-exams/>) and includes finalized dates and times for each exam. Exam locations are added to the schedule at a later date. Summer Term courses, final exam details will be made available at the time of registration.

**Students must remain available until all examination and test obligations have been fulfilled. Travel plans are not an acceptable reason for missing an exam.**

## Examination Personations

A student who arranges for another individual to undertake or write any nature of examination for and on his/her behalf, as well as the individual who undertakes or writes the examination, will be subject to discipline under the university's Student Discipline Bylaw, which could lead to suspension or expulsion from the university. In addition, the Canadian Criminal Code treats the personation of a candidate at a competitive or qualifying examination held at a university as an offence punishable by summary conviction.

## Hold Status

*More details about being on Hold can be found online on the Registrar's Office website (<https://umanitoba.ca/registrar/hold-status/>).*

Students will be placed on "Hold Status" if they incur any type of outstanding obligation (either financial or otherwise) to the university or its associated faculties, schools, colleges or administrative units.

Some typical reasons for holds are:

- Program/course selection must be approved
- U1 student must transit into the Faculty of Arts or Science
- Required Major, Minor and/or Concentration declaration
- Transcripts or documents required from other institutions
- Unpaid tuition and/or other university fees
- Outstanding library books and/or fines
- Parking fines
- Pending disciplinary action

Depending on the reason for the hold, limited or no administrative or academic services will be provided to students on Hold Status until the specific obligations have been met.

Students must clear their holds prior to registration by contacting the appropriate office. Students with outstanding financial obligations to the university will not be permitted to register again until the hold has been cleared or permission to register has been obtained from the Office of the Vice-President (Administration).

### Advisor and Program Holds

Students enrolled in some programs are required to discuss their course selections and program status with an advisor prior to registration. Advisor and Program Holds normally only restrict registration activity; other administrative services remain available.

Students can verify whether their program requires consultation with an advisor by checking their faculty/school section of the Academic Calendar, or by viewing their Registration Time and Status in Aurora.

## Graduation and Convocation

### Graduation

Students may graduate from the University of Manitoba in May/June, October, and February of each year. (Convocation ceremonies are held in May/June and October only).

Students are eligible to graduate when they have completed all of the requirements for their degree program in accordance with the regulations described in the chapter General Academic Regulations (p. 118) and the regulations available from the general offices of their faculties and schools.

It is the responsibility of each student to be familiar with the graduation requirements of the program in which they are enrolled. Consultation with academic advisors is advised to ensure that graduation requirements are met.

Please refer to the Registrar's Office website (<https://umanitoba.ca/registrar/graduation-convocation/FAQ/>) for Frequently asked Questions about Graduation and Convocation.

## Application for Graduation

Every candidate for a degree, diploma or certificate must make formal application at the beginning of the session in which he/she expects to complete graduation requirements.

Application is to be made through Aurora Student. (Log into Aurora Student; click Enrolment and Academic Records, then Declarations, then Declare Graduation Date.)

## Changing a Graduation Date

If you need to change your graduation date after you have made your declaration, you must contact the general office of your faculty, college, or school as soon as possible.

## Receipt of Information about Graduation

After you have declared your graduation, you will be sent a series of e-mails to your University e-mail account, requesting you to verify your full legal name, asking you about your attendance at convocation, providing convocation information, and so on. **It is imperative that you activate your University of Manitoba email account and check it regularly.**

## Convocation

Convocation ceremonies are held in May/June and October of each year.

February graduates are invited to attend the May/June ceremonies.

Graduating students are encouraged to attend with their families and friends because it is the one ceremonial occasion that marks the successful conclusion of their program of studies.

Graduates who wish to attend Convocation, verify their attendance at the Convocation ceremony by reserving their academic attire through the University approved supplier.

Students who, for any reason, do not attend Convocation will receive their degrees in absentia.

The Registrar's Office will hold unclaimed parchments for a maximum of twelve months after graduation when any unclaimed parchments will be destroyed. These will include those not given at Convocation, those that were to be picked up in person but not claimed, those that were mailed but returned to the Registrar's Office by the postal outlet or courier depot, those that were not issued due to a financial hold on a student's records, and those that were reprinted immediately after convocation due to corrections.

It is critical that you update your address, phone number and email through Aurora whenever changes occur. Note that any changes made with the Alumni Association are not reflected in your University of Manitoba student records.

If you do not receive your parchment, it is your responsibility to follow up with the Registrar's Office within a twelve-month period. Any requests for

parchments after this time will be processed as replacements; there is a fee charged for replacement parchments.

## Academic Dress

Students are responsible for making arrangements to reserve their academic attire through the University approved supplier. Rental fees apply. Details will be provided via e-mail once Convocation planning begins.

## Convocation Information

Information on Convocation may be found on the Graduation/Convocation website (<http://umanitoba.ca/convocation/>).

## Personal Information

### Mailing Address

In order to receive University mail, it is essential that you to provide the Registrar's Office with your current address. All mail will be directed to the address you provide. You may change your mailing address and phone number by accessing Aurora Student and then selecting Personal Information.

### Change of Name

If you have changed your name since you were first admitted or if the name on your record is incomplete or inaccurate, official evidence of the name change or correction must be submitted to the Registrar's Office along with a completed Request for Change of Name form (<https://umanitoba.ca/registrar/change-your-personal-information/>). The University of Manitoba uses your **full legal name** on its records, transcripts, and graduation documents (a full legal name, for example, includes all names on your birth certificate - first, middle, and last - or on your study permit). Abbreviated names, Anglicized names, or initials should not be used unless they have been proven with appropriate documentation.

## German, B.A. Double Honours

### Degree Requirements

Course	Title	Hours
<b>Years 1-4</b>		
30 credit hours of German (of which at least 18 credit hours must be German courses numbered at the 2000, 3000, or 4000 level) to include: <sup>1</sup>		30
GRMN 1120	Beginning German (A) <sup>2</sup>	
GRMN 2100	Intermediate German (A) <sup>3</sup>	
GRMN 2120 or GRMN 2130	Introduction to German Culture from 1918 to the Present (C) or Introduction to German Culture from the Beginnings to 1918 (C)	
GRMN 2140 or GRMN 2480	Exploring German Literature (B) or Special Topics in German (B)	
GRMN 3200	Deutsche Sprachpraxis 1 (A)	
3 credit hours in German numbered at the 3000 or 4000 level		3
3 credit hours in German numbered at the 4000 level		3
GRMN 4600	Senior Seminar in German Studies (B) <sup>4</sup>	3
GRMN 4570	Honours Thesis in German Studies (B,C)	3

Within the required credit hours in German, 12 credit hours must be from Category B courses and a further 6 credit hours must be from Categories B or C courses

42 credit hours in second Honours field as described in that unit's section of the calendar	42
6 credit hours in ancillary options <sup>5</sup>	6
30 credit hours in free options <sup>6</sup>	30

Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.

<b>Hours</b>	<b>120</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> Students with superior language ability in German, who did not have to complete either GRMN 1120 or GRMN 2100 can replace GRMN 1120 or GRMN 2100 with either 6 credit hours in German courses or with YDSH 1220.
- <sup>2</sup> Students with superior language ability will not be required to complete GRMN 1120 if they complete either GRMN 2100 or GRMN 3200 with a minimum grade of "C".
- <sup>3</sup> Students with superior language ability will not be required to complete GRMN 2100 if they complete GRMN 3200 with a minimum grade of "C".
- <sup>4</sup> With written consent of department head, students may substitute GRMN 4600 with GRMN 4200.
- <sup>5</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding German courses in the Single Honours, and excluding German and the second Honours field courses in the Double Honours).
- <sup>6</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including German courses).

#### Notes:

- Honours courses: all 4000 level courses.
- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

#### Other:

German courses are arranged into categories as follows:

- Category A: Language courses
- Category B: Literature, Culture and Applied Linguistics courses conducted in German
- Category C: Literature, Culture and Applied Linguistics courses conducted in English

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the

Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## German, B.A. General Degree Requirements

Course	Title	Hours
<b>Years 1-3</b>		
30 credit hours of German to include: <sup>1</sup>		30
GRMN 1120	Beginning German (A) <sup>2</sup>	
GRMN 2100	Intermediate German (A) <sup>3</sup>	
GRMN 3200	Deutsche Sprachpraxis 1 (A)	
At least one of:		
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	
or		
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	
or		
GRMN 2140	Exploring German Literature (B)	
Within the required credit hours in German, 3 credit hours must be from Category B courses and a further 3 credit hours must be from Categories B or C courses		
18 credit hours from your Minor area of study as described in that unit's section of the calendar		18
30 credit hours from outside of your Major and Minor areas of study		30
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>90</b>

- <sup>1</sup> Students with superior language ability in German, who did not have to complete either GRMN 1120 or GRMN 2100 can replace GRMN 1120 or GRMN 2100 with either 6 credit hours in German courses or with YDSH 1220.

- <sup>2</sup> Students with superior language ability will not be required to complete GRMN 1120 if they complete either GRMN 2100 or GRMN 3200 with a minimum grade of "C".
- <sup>3</sup> Students with superior language ability will not be required to complete GRMN 2100 if they complete GRMN 3200 with a minimum grade of "C".

**Other:**

German courses are arranged into categories as follows:

- Category A: Language courses
- Category B: Literature, Culture and Applied Linguistics courses conducted in German
- Category C: Literature, Culture and Applied Linguistics courses conducted in English

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. General Degree**

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## German Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in German		6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours in German		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

## Polish Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Polish (POL) courses		6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours in Polish (POL) courses		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

# Russian, B.A. General

## Degree Requirements

Course	Title	Hours
<b>Years 1-3</b>		
30 credit hours of Russian to include:		30
RUSN 1300 or RUSN 1330	Introductory Russian <sup>1</sup> or Introductory Russian 2	
RUSN 2810 or RUSN 2820	Intermediate Russian <sup>2</sup> or Intermediate Russian 2	
6 credit hours from: <sup>3</sup>		
RUSN 3100	Advanced Russian Grammar and Conversation	
RUSN 3110	Advanced Russian Through Film	
RUSN 3220	Selected Topics in Russian	
In addition to the above required courses, students must complete the balance of credit hours by taking courses in Russian (RUSN) or Slavic Studies (SLAV) or courses selected from List A		
18 credit hours from your Minor area of study as described in that unit's section of the calendar		18
30 credit hours from outside of your Major and Minor areas of study		30
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> With written consent from the department head, students with superior language ability can substitute RUSN 1300 or RUSN 1330 with RUSN 2810 or RUSN 2820.

<sup>2</sup> With written consent from the department head, students with superior language ability can substitute RUSN 2810 or RUSN 2820 with other 2000 or 3000 level Russian courses.

<sup>3</sup> With written consent from the department head, other 3000 level Russian language courses may be approved for credit.

### List A: Courses Acceptable for Russian Credit

With written consent from the department head, courses offered by other departments may be approved for credit.

#### Faculty of Arts

Course	Title	Hours
<b>History</b>		
HIST 2660	History of the Soviet Union (E)	3
HIST 2840	A History of Russia to 1917 (E)	3

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see

Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

- At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
  - At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
  - Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.
- Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.
- Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
  - At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
  - A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
  - At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
  - At least 30 credit hours must be numbered at or above the 2000 level.



10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Russian Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Russian (RUSN) courses		6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
6 credit hours in Russian (RUSN) or Slavic Studies (SLAV) courses		6
6 credit hours in Russian (RUSN) or Slavic Studies (SLAV) courses or courses selected from List A		6
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

#### List A: Courses Acceptable for Russian Credit

With written consent from the department head, courses offered by other departments may be approved for credit.

#### Faculty of Arts

Course	Title	Hours
<b>History</b>		
HIST 2660	History of the Soviet Union (E)	3
HIST 2840	A History of Russia to 1917 (E)	3

## Ukrainian, B.A. General Degree Requirements

Course	Title	Hours
<b>Years 1-3</b>		
30 credit hours of Ukrainian to include:		30
UKRN 1310 or UKRN 1320	Introductory Ukrainian <sup>1</sup> or Introductory Ukrainian 2	
UKRN 2720 or UKRN 2730	Intermediate Ukrainian <sup>2</sup> or Intermediate Ukrainian 2	
UKRN 3952	Advanced Ukrainian Conversational Practice <sup>3</sup>	
UKRN 3962	Advanced Ukrainian Through Short Stories <sup>3</sup>	
In addition to the above required courses, students must complete the balance of credit hours by taking Ukrainian (UKRN) or Slavic Studies (SLAV) courses or up to a maximum of 6 credit hours selected from List A		
18 credit hours from your Minor area of study as described in that unit's section of the calendar		18
30 credit hours from outside of your Major and Minor areas of study		30
12 credit hours of open electives		12

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	90
<b>Total Hours</b>	<b>90</b>

- <sup>1</sup> With written consent from the department head, students with superior language ability can substitute UKRN 1310 or UKRN 1320 with UKRN 2720 or UKRN 2730.
- <sup>2</sup> With written consent from the department head, students with superior language ability can substitute UKRN 2720 or UKRN 2730 with other 2000 or 3000 level Ukrainian courses.
- <sup>3</sup> With written consent from the department head, other 3000 level Ukrainian language courses may be approved for credit.

#### List A: Courses Acceptable for Ukrainian Credit

Course	Title	Hours
ECON 2510	The Economy of Ukraine	3
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
POLS 3720	Politics, Government and Society in Ukraine	3

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

- A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
- The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**
- At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor*

*in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Ukrainian Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Ukrainian (UKRN) courses		6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours in Ukrainian (UKRN) or Slavic Studies (SLAV) courses or up to a maximum of 6 credit hours selected from courses on List A		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

### List A - Courses Acceptable for Ukrainian Credit

Course	Title	Hours
ECON 2510	The Economy of Ukraine	3
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
POLS 3720	Politics, Government and Society in Ukraine	3

## Global Political Economy

**Program Coordinator:** Mark Hudson

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### Program Information

Global Political Economy (GPE) is an interdisciplinary program offered through five departments: History, Sociology and Criminology, Economics, Anthropology, and Political Studies. The program draws on multiple disciplinary perspectives to develop critical understanding of complex, contemporary global events and issues, and to build the research, analytical, and communication skills necessary to address them. Faculty from each participating discipline collaborate to create Major, Advanced Major, and Honours degree programs focused on analyzing changes in global political and economic relations, and linking them with local issues, cultures, and political economies.

### Major Program

For entry to the General Major, the prerequisite is a grade of "C" or better in the following: both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220; and 6 credit hours from GPE 1700 (or GEOG 1700), HIST 1370, HIST 1380, HIST 2730, HIST 2732, HIST 2734.

For entry to the Single Advanced Major, the prerequisite is a grade of "C" or better in the following: both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220; and 6 credit hours from GPE 1700 (or GEOG 1700), HIST 1370, HIST 1380, HIST 2730, HIST 2732, HIST 2734, POLS 2602.

### Honours Program

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

For entry to Honours, the prerequisite is a grade of "B" or better in the following: both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220; and 6 credit hours from GPE 1700 (or GEOG 1700), HIST 1370, HIST 1380, HIST 2730, HIST 2732, HIST 2734, POLS 2602.

**Note:** Students who declare and complete a GPE Major will not be required to complete a separate field for a Minor for purposes of satisfying degree requirements. Students in the GPE programs may choose to declare a Minor; however, no course can be used to satisfy both a Major program requirement and a Minor requirement.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Global Political Economy, B.A. General (p. 341)	3	90	
Global Political Economy, B.A. Single Advanced Major (p. 339)	4	120	
Global Political Economy, B.A. Single Honours (p. 338)	4	120	

## Global Political Economy, B.A. Single Honours

Course	Title	Hours
<b>Year 1</b>		
6 credit hours from the following:		6
HIST 1370	Modern World History: 1500-1800 (M)	
HIST 1380	Modern World History: 1800-Present (M)	
HIST 2730	Modern World History, 1914-1945: The 30 Years' Crisis (M)	
HIST 2732	Modern World History, 1945-1992: The Age of Three Worlds (M)	
HIST 2734	Modern World History, 1980-Present: New World Order? (M)	
Select one of the following pairs of Introductory Economics courses:		6
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
GPE/GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3
POLS 2602	Introduction to Comparative Politics	3
12 credit hours of open electives <sup>1,2</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ANTH 2000	Culture, Society, and Power <sup>1</sup>	3
ECON 2540	Political Economy 1: Production and Distribution	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
GPE 2700	Perspectives on Global Political Economy	3
Select one of the following pairs of courses: <sup>2</sup>		6
Both of:		
SOC 2292 & SOC 2294	Understanding Social Research and Understanding Social Statistics	
or both of:		
ANTH 3930 & STAT 1000	Ethnographic Research Methods and Basic Statistical Analysis 1	

3 credit hours from List A	3
9 credit hours of open electives <sup>1,2,3</sup>	9
<b>Hours</b>	<b>30</b>

### Year 3

Select one of the following:		3
ANTH 3320	Women in Cross-Cultural Perspective	
SOC 3350	Feminism and Sociological Theory <sup>2</sup>	
SOC 3810	Sociological Perspectives on Gender and Sexuality <sup>2</sup>	
GPE 3700	A Survey of Global Political Economy	3
POLS 3250 or ANTH 3750	International Political Economy or Anthropological Perspectives on Globalization and the World-System	3
POLS 3270	Theories of the Capitalist World Order	3
Select one of the following:		3
SOC 3380	Power, Politics and the Welfare State	
SOC 3838	Ecology and Society	
SOC 3840	Community and Social Reconstruction	
SOC 3890	Power and Inequality in Comparative Perspective	

3 credit hours from List A	3
12 credit hours of open electives	12
<b>Hours</b>	<b>30</b>

### Year 4

GPE 4700	Studies in Global Political Economy	6
9 credit hours of 4000 level credit from the following subject fields: GPE, ECON, POLS, HIST, ANTH, SOC, or courses from other departments with permission of the Program Coordinator.		9
3 credit hours from List A		3
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		

<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Students are advised to take ANTH 1220 or ANTH 1520 as an elective in Year 1 as it is the prerequisite for some upper level Anthropology courses. Otherwise, students will require written consent from the Anthropology Department Head prior to registration.

<sup>2</sup> Students are advised to take SOC 1000 as an elective in Year 1 as it is the prerequisite for upper level Sociology courses.

<sup>3</sup> Students are advised to take POLS 2502 as an elective in Year 2 as it is the prerequisite for upper level Political Studies courses. Otherwise, students will require written consent from the Political Studies Department Head prior to registration.

## List A

### Faculty of Arts

Course	Title	Hours
<b>Anthropology</b>		
ANTH 2530	Anthropology of Political Systems	3
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3750	Anthropological Perspectives on Globalization and the World-System	3
<b>Economics</b>		
ECON 2630	An Introduction to the World's Economies	6
<b>History</b>		
HIST 1370	Modern World History: 1500-1800 (M)	3
HIST 1380	Modern World History: 1800-Present (M)	3
HIST 2670	History of Capitalism (M)	3
HIST 2680	A History of Socialism from the French Revolution to the Present (M)	3
HIST 2730	Modern World History, 1914-1945: The 30 Years' Crisis (M)	3
HIST 2732	Modern World History, 1945-1992: The Age of Three Worlds (M)	3
HIST 2734	Modern World History, 1980-Present: New World Order? (M)	3
HIST 3580	Topics in Recent World History (M) <sup>1</sup>	3
Acceptable for credit only when the topic is "Global Economic Crises in World History, 1929-Present" <sup>1</sup>		
<b>Political Studies</b>		
POLS 2502	Introduction to World Affairs	3
POLS 3250	International Political Economy	3
POLS 3810	Introduction to Marxism	3
<b>Sociology and Criminology</b>		
SOC 2240	Sociology of Globalization	3
SOC 3350	Feminism and Sociological Theory	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3838	Ecology and Society	3
SOC 3840	Community and Social Reconstruction	3
SOC 3890	Power and Inequality in Comparative Perspective	3

<sup>1</sup> Acceptable for credit only when the topic is "Global Economic Crises in World History, 1929-Present".

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)

2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Global Political Economy, B.A. Single Advanced Major

### Single Advanced Major

Course	Title	Hours
<b>Year 1</b>		
6 credit hours from the following:		6
HIST 1370	Modern World History: 1500-1800 (M)	
HIST 1380	Modern World History: 1800-Present (M)	
HIST 2730	Modern World History, 1914-1945: The 30 Years' Crisis (M)	
HIST 2732	Modern World History, 1945-1992: The Age of Three Worlds (M)	
HIST 2734	Modern World History, 1980-Present: New World Order? (M)	
Select one of the following pairs of Introductory Economics courses:		6
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
GPE/GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3
POLS 2602	Introduction to Comparative Politics	3
12 credit hours of open electives <sup>1,2</sup>		12
		<b>Hours</b>
		<b>30</b>

### Year 2

ANTH 2000	Culture, Society, and Power <sup>1</sup>	3
ECON 2540	Political Economy 1: Production and Distribution	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
GPE 2700	Perspectives on Global Political Economy	3
Select one of the following pairs of courses: <sup>2</sup>		6
Both of		

SOC 2292 & SOC 2294	Understanding Social Research and Understanding Social Statistics	
or both of:		
ANTH 3930 & STAT 1000	Ethnographic Research Methods and Basic Statistical Analysis 1	
3 credit hours from List A		3
9 credit hours of open electives <sup>1,2,3</sup>		9
<b>Hours</b>		<b>30</b>

**Year 3**

Three credit hours selected from:		3
ANTH 3320	Women in Cross-Cultural Perspective <sup>1</sup>	
SOC 3350	Feminism and Sociological Theory <sup>2</sup>	
SOC 3810	Sociological Perspectives on Gender and Sexuality <sup>2</sup>	
GPE 3700	A Survey of Global Political Economy	3
POLS 3250 or ANTH 3750	International Political Economy <sup>3</sup> or Anthropological Perspectives on Globalization and the World-System	3
POLS 3270	Theories of the Capitalist World Order <sup>3</sup>	3
Select one of the following: <sup>2</sup>		3
SOC 3380	Power, Politics and the Welfare State	
SOC 3838	Ecology and Society	
SOC 3840	Community and Social Reconstruction	
SOC 3890	Power and Inequality in Comparative Perspective	
3 credit hours from List A		3
12 credit hours of open electives		12
<b>Hours</b>		<b>30</b>

**Year 4**

GPE 4700	Studies in Global Political Economy	6
3 credit hours from List A		3
21 credit hours of open electives		21
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are advised to take ANTH 1220 or ANTH 1520 as an elective in Year 1 as it is the prerequisite for some upper level Anthropology courses. Otherwise, students will require written consent from the Anthropology Department Head prior to registration.

<sup>2</sup> Students are advised to take SOC 1000 as an elective in Year 1 as it is the prerequisite for upper level Sociology courses. Otherwise, students will require written consent from the Sociology and Criminology Department Head prior to registration.

<sup>3</sup> Students are advised to take POLS 2502 as an elective in Year 2 as it is the prerequisite for upper level Political Studies courses. Otherwise, students will require written consent from the Political Studies Department Head prior to registration.

**List A****Faculty of Arts**

Course	Title	Hours
<b>Anthropology</b>		
ANTH 2530	Anthropology of Political Systems	3
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3750	Anthropological Perspectives on Globalization and the World-System	3
<b>Economics</b>		
ECON 2630	An Introduction to the World's Economies	6
<b>History</b>		
HIST 1370	Modern World History: 1500-1800 (M)	3
HIST 1380	Modern World History: 1800-Present (M)	3
HIST 2670	History of Capitalism (M)	3
HIST 2680	A History of Socialism from the French Revolution to the Present (M)	3
HIST 2730	Modern World History, 1914-1945: The 30 Years' Crisis (M)	3
HIST 2732	Modern World History, 1945-1992: The Age of Three Worlds (M)	3
HIST 2734	Modern World History, 1980-Present: New World Order? (M)	3
HIST 3580	Topics in Recent World History (M) <sup>1</sup>	3
Acceptable for credit only when the topic is "Global Economic Crises in World History, 1929-Present" <sup>1</sup>		
<b>Political Studies</b>		
POLS 2502	Introduction to World Affairs	3
POLS 3250	International Political Economy	3
POLS 3810	Introduction to Marxism	3
<b>Sociology and Criminology</b>		
SOC 2240	Sociology of Globalization	3
SOC 3350	Feminism and Sociological Theory	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3838	Ecology and Society	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3840	Community and Social Reconstruction	3
SOC 3890	Power and Inequality in Comparative Perspective	3

<sup>1</sup> Acceptable for credit only when the topic is "Global Economic Crises in World History, 1929-Present".

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. Advanced Degree**

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of

courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities),

or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.

9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Global Political Economy, B.A. General Degree Requirements <sup>1</sup>

Course	Title	Hours
Year 1		
6 credit hours from the following:		6
HIST 1370	Modern World History: 1500-1800 (M)	
HIST 1380	Modern World History: 1800-Present (M)	
HIST 2730	Modern World History, 1914-1945: The 30 Years' Crisis (M)	
HIST 2732	Modern World History, 1945-1992: The Age of Three Worlds (M)	
HIST 2734	Modern World History, 1980-Present: New World Order? (M)	
Select one of the following sets of Introductory Economics courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
GPE/GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3
15 credit hours of open electives <sup>1,2,3</sup>		15
		<b>Hours</b>
		<b>30</b>
Year 2		
ANTH 2000	Culture, Society, and Power <sup>2</sup>	3
ECON 2540	Political Economy 1: Production and Distribution	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
GPE 2700	Perspectives on Global Political Economy	3
Select one of the following:		6
Both of:		
SOC 2292 & SOC 2294	Understanding Social Research and Understanding Social Statistics <sup>3</sup>	
or both of:		
ANTH 3930 & STAT 1000	Ethnographic Research Methods and Basic Statistical Analysis 1	

12 credit hours of open electives <sup>1,4</sup>	12
<b>Hours</b>	<b>30</b>
<b>Year 3</b>	
Select one of the following:	3
ANTH 3320 Women in Cross-Cultural Perspective <sup>2</sup>	
SOC 3350 Feminism and Sociological Theory <sup>3</sup>	
SOC 3810 Sociological Perspectives on Gender and Sexuality <sup>3</sup>	
GPE 3700 A Survey of Global Political Economy	3
POLS 3250 International Political Economy <sup>4</sup>	3
or ANTH 3750 or Anthropological Perspectives on Globalization and the World-System	
POLS 3270 Theories of the Capitalist World Order <sup>4</sup>	3
Select one of the following: <sup>3</sup>	3
SOC 3380 Power, Politics and the Welfare State	
SOC 3838 Ecology and Society	
SOC 3840 Community and Social Reconstruction	
SOC 3890 Power and Inequality in Comparative Perspective	
15 credit hours of open electives <sup>1</sup>	15
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>90</b>

<sup>1</sup> Students in the General Major are very strongly advised to include in their elective courses a minimum of 6 credit hours from the following list (if not already taken in the core requirements): ANTH 2530, ANTH 3750, ECON 2630, HIST 1370, HIST 1380, HIST 2670, HIST 2680, HIST 2730, HIST 2732, HIST 2734, POLS 2502, POLS 2602, POLS 3250, POLS 3810, SOC 3380, SOC 3838, SOC 3840, SOC 3890.

<sup>2</sup> Students are advised to take ANTH 1220 or ANTH 1520 as an elective in Year 1 as it is the prerequisite for some upper level Anthropology courses. Otherwise, students will require written consent from the Anthropology Department Head prior to registration.

<sup>3</sup> Students are advised to take SOC 1000 as an elective in Year 1 as it is the prerequisite for upper level Sociology courses. Otherwise, students will require written consent from the Sociology and Criminology Department Head prior to registration.

<sup>4</sup> Students are advised to take POLS 2502 as an elective in Year 2 as it is the prerequisite for upper level Political Studies courses. Otherwise, students will require written consent from the Political Studies Department Head prior to registration.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

- At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.
- Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.
- Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
- At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 30 credit hours must be numbered at or above the 2000 level.
- Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

# History

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## Program Information

The study of history provides essential background for many disciplines and professions where research analysis, communications skills and an understanding of how past events influence the present are important. The department includes specialists in intellectual, cultural, social, medieval, Aboriginal, women's, and international history. A particular area of departmental specialization is Canadian and western Canadian history.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in the first six credit hours of History.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

When selecting 2000-level courses in Year 2, students should anticipate their future interests.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in the first six credit hours of History.

## Honours Program

For entry to the Honours program, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

In addition, students are to have a grade point average of 3.0 or better in all History courses completed before admission.

To continue in the Honours program a "B" average, with minimum grades of "B" in all 3000 and 4000-level History courses, must be maintained. Normally, students who fail to maintain a minimum grade of "B" in all 3000 and 4000-level courses will be required to withdraw from the Honours program.

It is recommended that students complete HIST 4400 or HIST 4580 in Year 4 if they intend to do graduate work.

## Cooperative Education Options

Students interested in alternating employment terms and academic terms as part of the Single Advanced Major and Honours programs in History may apply to enter the Co-operative Education option upon completion of their second year in the program (min. 48 credit hours completed). The course and grade requirements for entry to this option are the same as those required for entry to the regular four-year Advanced Degree and Honours Degree programs respectively, as indicated in the charts below. Students should refer to the general faculty regulations for Cooperative Options (p. 224).

## Other

At most, 12 credit hours at the 1000-level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours Degree credit.

Courses CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 offered by the Department of Classics count for credit towards a General Major, Single Advanced Major, Double Advanced Major, Minor (Concentration), Single Honours or Double Honours in History.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
History, B.A. Double Advanced Major (p. 350)	4	120	
History, B.A. Double Honours (p. 346)	4	120	
History, B.A. General (p. 351)	3	90	
History, B.A. Single Advanced Major (p. 347)	4	120	Yes
History, B.A. Single Honours (p. 344)	4	120	Yes
History Minor (Concentration) (p. 353)		18	



# History, B.A. Single Honours

## Degree Requirements

(including Co-operative Option if selected)

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in History courses numbered at the 1000 or 2000 level <sup>1</sup>		6
24 credit hours in ancillary options <sup>2</sup>		24
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
18 credit hours in History courses numbered at or above the 2000 level <sup>1</sup>		18
12 credit hours in free options <sup>3</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
HIST 3990	Seminar in Selected History Topics (G)	6
6 credit hours in History courses numbered at or above the 3000 level <sup>1</sup>		6
18 credit hours in free options <sup>3</sup>		18
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
24 credit hours in History courses numbered at the 4000 level <sup>1</sup>		24
6 credit hours in free options <sup>3</sup>		6
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Honours students must choose a minimum of 6 credit hours from three different defined areas of historical study.

<sup>2</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding History courses).

<sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including History courses). It is recommended students register for additional History courses at the 2000 level or higher. Students electing the co-op stream substitute 3 credit hours of free options with three 1 credit hour work placement courses normally spread over the final two years of their program.

### Co-operative Education option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will count toward the free option credit required in this program:		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

### Notes:

- At most, 12 credit hours at the 1000-level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours Degree credit
- Courses CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 offered by the Department of Classics count for credit towards a General Major, Single Advanced Major, Double Advanced Major, Minor (Concentration), Single Honours or Double Honours in History.
- Students, particularly those intending to proceed to a graduate program, are encouraged to study a second language during the course of their Honours program.

### Areas:

- A: The Americas
- B: Asian
- C: Canadian
- D: Ancient and Medieval
- E: European
- G: General
- M: Modern World
- R: Africa and the Middle East

### Groups:

- Numbered at the 1000 level: Introductory
- Numbered at the 2000 level: General
- Numbered at the 3000 level: Special
- Numbered at the 4000 level: Honours

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science

(p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

## Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

### Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option

must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## History, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in History courses numbered at the 1000 or 2000 level <sup>1</sup>		6
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>2</sup>		6
12 credit hours in free options <sup>3</sup>		12
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
18 credit hours in History courses numbered at the 2000 or 3000 level <sup>1</sup>		18
12 credit hours in History courses numbered at the 4000 level <sup>1</sup>		12
HIST 3990	Seminar in Selected History Topics (G)	6
36 credit hours from second Honours subject field as described in that unit's section of the calendar		36
18 credit hours in free options <sup>3</sup>		18
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Honours students must choose a minimum of 6 credit hours from three different defined areas of historical study.

<sup>2</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding History courses and courses from the second Honours field).

<sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including History courses). It is recommended students register for additional History courses at the 2000 level or higher.

#### Notes:

- At most, 12 credit hours at the 1000-level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours Degree credit
- Courses CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 offered by the Department of Classics count for credit towards a General

Major, Single Advanced Major, Double Advanced Major, Minor (Concentration), Single Honours or Double Honours in History.

- Students, particularly those intending to proceed to a graduate program, are encouraged to study a second language during the course of their Honours program.
- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

**History courses are arranged into groups and areas of study as follows:**

**Areas:**

- A: The Americas
- B: Asian
- C: Canadian
- D: Ancient and Medieval
- E: European
- G: General
- M: Modern World
- R: Africa and the Middle East

**Groups:**

- Numbered at the 1000 level: Introductory
- Numbered at the 2000 level: General
- Numbered at the 3000 level: Special
- Numbered at the 4000 level: Honours

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science

(p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## History, B.A. Single Advanced Major Degree Requirements (including Co-operative Education Option if selected)

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in History courses numbered at the 1000 or 2000 level <sup>1</sup>		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
18 credit hours in History courses numbered at or above the 2000 level <sup>1</sup>		18
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
6 credit hours from outside your Major and Minor areas of study.		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
Select one of the following options: <sup>1</sup>		18
18 credit hours in History courses numbered at or above the 3000 level		
or		
12 credit hours in History courses numbered at the 3000 level and 6 credit hours in History courses numbered at the 2000 level		
or		
12 credit hours in History courses numbered at the 3000 level and 6 credit hours in History courses numbered at the 4000 level		
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
6 credit hours from outside your Major and Minor areas of study.		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
6 credit hours in History courses numbered at the 4000 level <sup>1</sup>		6
12 credit hours from outside your Major and Minor areas of study.		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Within the 48 credit hours of required History coursework, students must choose a minimum of 6 credit hours from three different defined areas of historical study.

**Co-operative Education Option**

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will replace three credit hours of elective credit in year 4		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

**Notes:**

- At most, 12 credit hours at the 1000-level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours Degree credit
- Courses CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 offered by the Department of Classics count for credit towards a General Major, Single Advanced Major, Double Advanced Major, Minor (Concentration), Single Honours or Double Honours in History.

**Areas:**

- A: The Americas
- B: Asian
- C: Canadian
- D: Ancient and Medieval
- E: European
- G: General
- M: Modern World
- R: Africa and the Middle East

**Groups:**

- Numbered at the 1000 level: Introductory
- Numbered at the 2000 level: General
- Numbered at the 3000 level: Special
- Numbered at the 4000 level: Honours

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. Advanced Degree**

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.

10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

### Academic Regulations

#### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

### Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered

by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

### Continuation in the Co-operative Education Option

#### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

#### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

#### Employment Term Requirements

##### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

##### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

##### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students

with instructions regarding the content and format requirements of the employment reports.

### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

### Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one,

three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## History, B.A. Double Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in History courses numbered at the 1000 or 2000 level <sup>1</sup>		6
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
15 credit hours in History courses numbered at or above the 2000 level <sup>1</sup>		15
12 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		12
3 credit hours from outside both Advanced Major subject fields		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
Select one of the following options: <sup>1</sup>		15
15 credit hours in History courses numbered at or above the 3000 level		
9 credit hours in History courses numbered at the 3000 level and 6 credit hours in History courses numbered at the 2000 level		
9 credit hours in History courses numbered at the 3000 level and 6 credit hours in History courses numbered at the 4000 level		
12 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		12
3 credit hours from outside both Advanced Major subject fields		3
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
6 credit hours in History courses numbered at the 4000 level <sup>1</sup>		6
12 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		12
12 credit hours from outside both Advanced Major subject fields		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Within the 42 credit hours of required History coursework, students must choose a minimum of 6 credit hours from three different defined areas of historical study.

#### Notes:

- At most, 12 credit hours at the 1000-level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours Degree credit
- Courses CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 offered by the Department of Classics count for credit towards a General Major, Single Advanced Major, Double Advanced Major, Minor (Concentration), Single Honours or Double Honours in History.

#### Areas:

- A: The Americas
- B: Asian
- C: Canadian
- D: Ancient and Medieval
- E: European
- G: General
- M: Modern World
- R: Africa and the Middle East

#### Groups:

- Numbered at the 1000 level: Introductory
- Numbered at the 2000 level: General
- Numbered at the 3000 level: Special
- Numbered at the 4000 level: Honours

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with

the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## History, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in History courses numbered at the 1000 or 2000 level <sup>1</sup>		6



6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
18 credit hours from outside of your Major and Minor areas of study	18
<b>Hours</b>	<b>30</b>
<b>Year 2</b>	
12 credit hours in History courses numbered at or above the 2000 level <sup>1</sup>	12
6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
6 credit hours from outside your Major and Minor areas of study	6
6 credit hours of open electives	6
<b>Hours</b>	<b>30</b>
<b>Year 3</b>	
6 credit hours in History courses numbered at or above the 2000 level <sup>1</sup>	6
6 credit hours in History courses numbered at or above the 3000 level <sup>1</sup>	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
6 credit hours from outside your Major and Minor areas of study	6
6 credit hours of open electives	6
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>90</b>

<sup>1</sup> Within the 30 credit hours of required History coursework, students must choose a minimum of 6 credit hours from three different defined areas of historical study.

#### Notes:

- At most, 12 credit hours at the 1000-level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours Degree credit
- Courses CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 offered by the Department of Classics count for credit towards a General Major, Single Advanced Major, Double Advanced Major, Minor (Concentration), Single Honours or Double Honours in History.

History courses are arranged into groups and areas of study as follows:

#### Areas:

- A: The Americas
- B: Asian
- C: Canadian
- D: Ancient and Medieval
- E: European
- G: General
- M: Modern World
- R: Africa and the Middle East

#### Groups:

- Numbered at the 1000 level: Introductory
- Numbered at the 2000 level: General

- Numbered at the 3000 level: Special
- Numbered at the 4000 level: Honours

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
2. The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:
  2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
  3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
  4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## History Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in History courses numbered at the 1000 or 2000 level		6
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
6 credit hours in History courses numbered at or above the 2000 level		6
<b>Hours</b>		<b>6</b>
<b>Year 3</b>		
6 credit hours in History courses numbered at or above the 2000 level		6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>18</b>

#### Note:

- Courses CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 offered by the Department of Classics count for credit towards a General Major, Single Advanced Major, Double Advanced Major, Minor (Concentration), Single Honours or Double Honours in History.

## Icelandic Studies

**Head:** Peter Buchan

**Campus Address/General Office:** 357 University College

**Telephone:** 204 474 8487

**Email Address:** um\_icelandic@umanitoba.ca

**Website:**

umanitoba.ca/icelandic (<http://umanitoba.ca/icelandic/>)

### Program Information

The department offers a study of a cultural heritage that crosses centuries, oceans and continents, which includes courses in Icelandic language and literature and the poetics of immigration. The study of Icelandic prepares students for opportunities in research, teaching, translation, writing, interpretation and publishing.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

#### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in either ICEL 1200 (6) or ICEL 2200 (6).

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

#### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in ICEL 1400 and ICEL 1410, or ICEL 1200 or ICEL 2200.

#### Honours Program

The Honours program is not currently offered.

For information on reciprocal recognition of credit for Scandinavian/Icelandic courses given by the University of Alberta and the University of Manitoba, see the department (<https://umanitoba.ca/icelandic/>).

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Icelandic, B.A. Double Honours (p. 354)	4	120	
Icelandic, B.A. General (p. 355)	3	90	
Icelandic, B.A. Single Honours (p. 353)	4	120	
Icelandic Minor (Concentration) (p. 356)		18	

## Icelandic, B.A. Single Honours

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ICEL 1200	Introduction to Icelandic <sup>1</sup>	6

24 credit hours of ancillary options <sup>2</sup>		24
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ICEL 2200	Intermediate Icelandic 1	6
ICEL 2220	Modern Icelandic Literature in Translation	3
ICEL 2420	Poetics of Immigration in Icelandic-Canadian Literature	3

ICEL 2430	Translation of Cultures in Icelandic-Canadian Literature	3
3 credit hours of courses selected from: Classics, English, French, German, History, Philosophy or Russian, to be approved by the department head		3
12 credit hours of free options <sup>3</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
ICEL 2310	An Introduction to Old Icelandic Language and Literature	6
ICEL 3400	Old Icelandic Literature	6
6 credit hours of courses selected from: Classics, English, French, German, History, Philosophy or Russian, to be approved by the department head		6
12 credit hours of free options <sup>3</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
ICEL 4420	History of the Icelandic Language	3
ICEL 4440	The Icelanders in Canada	3
ICEL 4460	Special Topics	3
3 credit hours in Icelandic courses numbered at the 3000 level		3
6 credit hours of courses selected from: Classics, English, French, German, History, Philosophy or Russian, to be approved by the department head		6
12 credit hours of free options <sup>3</sup>		12
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students with superior language ability will not be required to complete ICEL 1200 upon successful completion of a written test administered by the department.

<sup>2</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Icelandic courses).

<sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Icelandic courses).

**Note:**

Honours courses: ICEL 2310, ICEL 2420, ICEL 2430, ICEL 3400 and all 4000 level courses.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the

Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Icelandic, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ICEL 1200	Introduction to Icelandic <sup>1</sup>	6
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>2</sup>		6
12 credit hours in free options <sup>3</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ICEL 2200	Intermediate Icelandic 1	6
ICEL 2220	Modern Icelandic Literature in Translation	3
ICEL 2420	Poetics of Immigration in Icelandic-Canadian Literature	3
ICEL 2430	Translation of Cultures in Icelandic-Canadian Literature	3
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
3 credit hours in free options <sup>3</sup>		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
ICEL 2310	An Introduction to Old Icelandic Language and Literature	6
ICEL 3400	Old Icelandic Literature	6
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>3</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
ICEL 4420	History of the Icelandic Language	3
ICEL 4440	The Icelanders in Canada	3
ICEL 4460	Special Topics	3

12 credit hours in second Honours Field as described in that unit's section of the calendar	12
9 credit hours in free options <sup>3</sup>	9

Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.

<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> Students with superior language ability will not be required to complete ICEL 1200 upon successful completion of a written test administered by the department.
- <sup>2</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Icelandic courses).
- <sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Icelandic courses).

**Note:**

- Honours courses: ICEL 2310, ICEL 2420, ICEL 2430, ICEL 3400 and all 4000 level courses.
- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Icelandic, B.A. General

### Degree Requirements

#### General Major (Option 1)

Course	Title	Hours
<b>Year 1</b>		
ICEL 1200	Introduction to Icelandic <sup>1</sup>	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ICEL 2200	Intermediate Icelandic 1	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside your Major and Minor areas of study		6
12 credit hours of open electives		12
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
18 credit hours in Icelandic courses numbered at the 2000, 3000, or 4000 level		18
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside your Major and Minor areas of study		6
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>90</b>

- <sup>1</sup> Students with superior language ability will not be required to complete ICEL 1200 upon successful completion of a written test administered by the department.

#### General Major (Option 2)

Course	Title	Hours
<b>Year 1</b>		
ICEL 2200	Intermediate Icelandic 1	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
24 credit hours in Icelandic courses numbered at the 2000, 3000, or 4000 level		24
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside your Major and Minor areas of study		12
12 credit hours of open electives		12

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	60
<b>Total Hours</b>	<b>90</b>

While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework

successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Icelandic Minor (Concentration) Minor Requirements

### Option 1

Course	Title	Hours
<b>Year 1</b>		
ICEL 1200	Introduction to Icelandic <sup>1</sup>	6
		<b>Hours</b>
		<b>6</b>
<b>Year 2</b>		
ICEL 2200	Intermediate Icelandic 1	6
		<b>Hours</b>
		<b>6</b>
<b>Year 3</b>		
6 credit hours in Icelandic		6
		<b>Hours</b>
		<b>6</b>
		<b>Total Hours</b>
		<b>18</b>

- <sup>1</sup> Students with superior language ability will not be required to complete ICEL 1200 upon successful completion of a written test administered by the department.

### Option 2

Course	Title	Hours
<b>Year 1</b>		
Select either both of:		6
ICEL 1400 & ICEL 1410	Introduction to Contemporary Culture in Iceland and Introduction to Culture in Medieval Iceland	
or		
ICEL 1200	Introduction to Icelandic	
		<b>Hours</b>
		<b>6</b>
<b>Years 2-3</b>		
12 credit hours in Icelandic		12
		<b>Hours</b>
		<b>12</b>
		<b>Total Hours</b>
		<b>18</b>

# Indigenous Studies

**Head:** Niigaan Sinclair

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## Indigenous Studies Program Information

Courses in this department examine the history, art, literature, governance, languages, and the philosophical and religious traditions of Canada's original inhabitants. Other courses explore North American legal, political, and health care systems in relation to Indigenous (First Nations, Metis, and Inuit) people. Indigenous and non-Indigenous students may specialize in either Indigenous studies or Indigenous languages, Anishinaabemowin (Ojibwe) and Cree.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in INDG 1200 or "C" or better in both INDG 1220 and INDG 1240.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Anishinaabemowin (Ojibwe) and Cree Language Focus Areas (General Major Degree only)

Students may elect to take courses that, in combination, make up a focus area in either the Anishinaabemowin (Ojibwe) or Cree languages. The required courses for these focus areas will be completed as part of the General Major Degree requirements.

### Minor (Concentration) Program

#### 1. Indigenous Studies

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in one of INDG 1200 or "C" or better in both INDG 1220 and INDG 1240.

#### 2. Indigenous Languages

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both INDG 1250 and INDG 1260; or "C" or better in

both INDG 1270 and INDG 1280; or "C" or better in [both of INDG 2252 and INDG 2254] or [both INDG 2272 and INDG 2274].

### Other

Students will be permitted to register for a Major in Indigenous Studies and a Minor in Indigenous Languages. Students may not complete both a Major and Minor in Indigenous Studies. Students Majoring in Indigenous Studies (no language concentration) who choose to complete an Indigenous Language Minor will be required to complete 18 credit hours of Indigenous Language courses in addition to the six credit hours of Indigenous Language required in the General Major program.

Likewise, students may not complete both the General Major Degree with an Indigenous Language Focus [Anishinaabemowin (Ojibwe) / Cree] and an Indigenous Language Minor.

Before registering for approved cross-listed courses, students should consult the Calendar or the departments regarding prerequisites for specific courses.

## Indigenous Governance Stream

Students interested in pursuing a Single Advanced Major in Indigenous Governance are required to take a Minor in Business. The requirements for both are set out below. For course descriptions, including any prerequisites and/ or restrictions see the appropriate departmental listing in this *Calendar*. The conditions for entry, continuation and graduation requirements may be found in Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Advanced Major, Indigenous Governance Stream, the prerequisite is a grade of "C" or better in INDG 1200 or a "C" or better in both INDG 1220 and INDG 1240.

### Required Minor Program

For entry to the required Minor in Business for students who wish the Indigenous Governance Stream, the prerequisite is 6 credit hours from ACC 1100, GMGT 2060, HRIR 2440 or MKT 2210 with a grade of "C" or better in each.

For information on this program contact the Department of Indigenous Studies

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Indigenous Governance, B.A. Single Advanced Major (p. 358)	4	120	
Indigenous Languages Minor (Concentration) (p. 363)		18	
Indigenous Studies, B.A. Double Advanced Major (p. 360)	4	120	
Indigenous Studies, B.A. General (p. 362)	3	90	
Indigenous Studies, B.A. Single Advanced Major (p. 359)	4	120	
Indigenous Studies Minor (Concentration) (p. 364)		18	

# Indigenous Governance, B.A. Single Advanced Major

## Degree Requirements

### Indigenous Governance Stream

Course	Title	Hours
<b>Years 1-4</b>		
Select either:		6
INDG 1200	Indigenous Peoples in Canada	
or both of:		
INDG 1220 & INDG 1240	Indigenous Peoples in Canada, Part 1 and Indigenous Peoples in Canada, Part 2	
Select one of:		3
ECON 1010	Introduction to Microeconomic Principles	
ECON 1210	Introduction to Canadian Economic Issues and Policies	
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies	
INDG 2110	Introduction to Indigenous Community Development	3
POLS 2702	Introduction to Canadian Politics	3
POLS 2802	Introduction to Indigenous Politics	3
STAT 1000	Basic Statistical Analysis 1	3
12 credit hours from the following Political Governance courses:		12
INDG 2220	Indigenous Societies and the Political Process	
INDG 3280	Indigenous Peoples and the Canadian Justice System	
INDG 3310	Canadian Law and Indigenous Peoples	
INDG 3370	Political Development in the North	
INDG 4200	First Nations' Government	
POLS 3872	Indigenous Governance	
12 credit hours from the following Indigenous Business and Economics courses:		12
INDG 3120	Exploring Indigenous Economic Perspectives	
INDG 3160	Fundraising for Indigenous Organizations	
INDG 3350	Indigenous Organizations	
INDG 4320	Indigenous Economic Leadership	
6 credit hours from the following Traditional Knowledge courses:		6
INDG 2030	Working with Indigenous Elders	
INDG 3330	Indigenous People, Science and the Environment	
INDG 4220	Environment, Economy and Indigenous Peoples	
INDG 4230	Traditional Knowledge and Indigenous Studies Research	
Required Minor in Business for those students in a declared Indigenous Governance Stream: <sup>1</sup>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2060	Management and Organizational Theory	3
HRIR 2440	Human Resource Management	3
MKT 2210	Fundamentals of Marketing	3

6 credit hours from the following Business courses to complete the Required Business Minor:<sup>1</sup> 6

ACC 1110	Introductory Managerial Accounting
ENTR 2010	Managing the Smaller Business
ENTR 2020	Starting a New Business
GMGT 2010	Business Communications
GMGT 3300	Business Law
LEAD 2010	Learning to Lead
FIN 2200	Corporate Finance
HRIR 4410	Staffing and Management Development
FIN 3470	Course no longer offered
MIS 2000	Information Systems for Management

42 credit hours from outside of your Major and Minor areas of study 42

9 credit hours of open electives 9

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	120
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Students must ensure that all course prerequisites are met when selecting courses for the Minor.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.  
  
A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities) , or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Indigenous Studies, B.A. Single Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select either:		6
INDG 1200	Indigenous Peoples in Canada	
or both of:		
INDG 1220 & INDG 1240	Indigenous Peoples in Canada, Part 1 and Indigenous Peoples in Canada, Part 2	

6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
18 credit hours from outside of your Major and Minor areas of study	18

**Hours 30**

### Year 2

INDG 2530 Introduction to Indigenous Theory	3
12 credit hours in courses offered by Indigenous Studies numbered at the 2000 level or above <sup>1</sup>	12
6 credit hours of Indigenous Language courses offered by Indigenous Studies <sup>2</sup>	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
3 credit hours from outside of your Major and Minor areas of study	3

**Hours 30**

### Year 3

12 credit hours in courses offered by Indigenous Studies numbered at the 3000 level or above	12
6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
12 credit hours from outside of your Major and Minor areas of study	12

**Hours 30**

### Year 4

INDG 4230 or INDG 4290 Traditional Knowledge and Indigenous Studies Research or Independent Research	3
6 credit hours in courses offered by Indigenous Studies numbered at the 4000 level	6
9 credit hours from outside of your Major and Minor areas of study	9
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	

**Hours 30**

**Total Hours 120**

<sup>1</sup> Students may substitute up to six credit hours from the list of approved courses in lieu of Indigenous Studies courses.

<sup>2</sup> The following courses count as Indigenous Language courses: INDG 1250, INDG 1260, INDG 1270, INDG 1280, the former NATV 2250, INDG 2252, INDG 2254, INDG 2272, INDG 2274, INDG 2300, INDG 2310, INDG 3180, INDG 3190, INDG 3222, INDG 3224, and INDG 3300. Students may take a placement exam to place into advanced Indigenous Language courses.

### List of Approved Courses in Indigenous Studies

Approved courses from other faculties/schools for partial fulfilment of the Major and Minor in Indigenous Studies are given below.

Course	Title	Hours
<b>School of Art</b>		
FAAH 2090	Art of the North American Aboriginal Peoples	3
FAAH 3430	Inuit Art	3



**History Department**

HIST 1390	History of Colonial Canada: 1500-1885 (C)	3
HIST 1440	History of Canada (C)	6
HIST 2010	Indigenous History in Canada (C)	6
HIST 4010	Imperialism, Decolonization and Neo-Colonialism, 1700 to the Present (M)	6
HIST 4120	History of Aboriginal Rights (C)	6

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. Advanced Degree**

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Indigenous Studies, B.A. Double Advanced Major

Course	Title	Hours
<b>Year 1</b>		
Select either:		6
INDG 1200	Indigenous Peoples in Canada	
or both of:		
INDG 1220 & INDG 1240	Indigenous Peoples in Canada, Part 1 and Indigenous Peoples in Canada, Part 2	
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
INDG 2530	Introduction to Indigenous Theory	3
9 credit hours in courses offered by Indigenous Studies numbered at the 2000 level or above <sup>1</sup>		9
6 credit hours of Indigenous Language courses offered by Indigenous Studies <sup>2</sup>		6
9 credit hours in courses offered by Indigenous Studies numbered at the 3000 level or above		9
INDG 4230 or INDG 4290	Traditional Knowledge and Indigenous Studies Research or Independent Research	3

6 credit hours in courses offered by Indigenous Studies numbered at the 4000 level	6
36 credit hours from second Advanced Major subject field as described in that unit's section of the calendar	36
18 credit hours from outside both Advanced Major subject fields	18
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

- Students may substitute up to six credit hours from the list of approved courses in lieu of Indigenous Studies courses.
- The following courses count as Indigenous Language courses: INDG 1250, INDG 1260, INDG 1270, INDG 1280, or the former NATV 2250, INDG 2252, INDG 2254, INDG 2272, INDG 2274, INDG 2300, INDG 2310, INDG 3180, INDG 3190, INDG 3222, INDG 3224, and INDG 3300. Students may take a placement exam to place into advanced Indigenous Language courses.

### List of Approved Courses in Indigenous Studies

Approved courses from other faculties/schools for partial fulfilment of the Major and Minor in Indigenous Studies are given below

Course	Title	Hours
School of Art		
FAAH 2090	Art of the North American Aboriginal Peoples	3
FAAH 3430	Inuit Art	3
Department of History		
HIST 1390	History of Colonial Canada: 1500-1885 (C)	3
HIST 1440	History of Canada (C)	6
HIST 2010	Indigenous History in Canada (C)	6
HIST 4010	Imperialism, Decolonization and Neo-Colonialism, 1700 to the Present (M)	6
HIST 4120	History of Aboriginal Rights (C)	6

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

- A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.

- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

- Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
- A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 42 credit hours numbered at or above the 2000 level.
- Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

# Indigenous Studies, B.A. General

## Degree Requirements

### Indigenous Studies General Major (Option 1) <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
Select either:		6
INDG 1200	Indigenous Peoples in Canada	
or both of:		
INDG 1220 & INDG 1240	Indigenous Peoples in Canada, Part 1 and Indigenous Peoples in Canada, Part 2	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
INDG 2530	Introduction to Indigenous Theory	3
6 credit hours of Indigenous Language courses offered by Indigenous Studies <sup>1</sup>		6
9 credit hours of Indigenous Studies at the 2000 level or above <sup>2</sup>		9
6 credit hours of Indigenous Studies at the 3000 level or above		6
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> The following courses count as Indigenous Language courses: INDG 1250, INDG 1260, INDG 1270, INDG 1280, or the former NATV 2250, INDG 2252, INDG 2254, INDG 2272, INDG 2274, INDG 2300, INDG 2310, INDG 3180, INDG 3190, INDG 3222, INDG 3224, AND INDG 3300. Students may take a placement exam to place into advanced Indigenous Language courses.

<sup>2</sup> Students may substitute up to 12 credit hours from the list of approved courses in lieu of Indigenous Studies but must have six credit hours in Indigenous Studies or Indigenous Languages courses offered by Indigenous Studies numbered at the 3000 level or above.

### Indigenous Studies General Major Anishinaabemowin (Ojibwe) Language Focus (Option 2)

Course	Title	Hours
<b>Year 1</b>		
Select either:		6
INDG 1200	Indigenous Peoples in Canada	
or both of:		
INDG 1220 & INDG 1240	Indigenous Peoples in Canada, Part 1 and Indigenous Peoples in Canada, Part 2	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6

18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
INDG 1270	Introductory Anishinaabemowin (Ojibwe) 1	3
INDG 1280	Introductory Anishinaabemowin (Ojibwe) 2	3
INDG 2272	Intermediate Anishinaabemowin (Ojibwe) 1	3
INDG 2274	Intermediate Anishinaabemowin (Ojibwe) 2	3
INDG 2530	Introduction to Indigenous Theory	3
INDG 3180	Advanced Anishinaabemowin (Ojibwe) 1	3
INDG 3190	Advanced Anisinaabemowin (Ojibwe) 2	3
3 credit hours of Indigenous Studies at the 3000 level or above		3
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

### Indigenous Studies General Major Cree Language Focus (Option 3)

Course	Title	Hours
<b>Year 1</b>		
Select either:		6
INDG 1200	Indigenous Peoples in Canada	
or both of:		
INDG 1220 & INDG 1240	Indigenous Peoples in Canada, Part 1 and Indigenous Peoples in Canada, Part 2	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
INDG 1250	Introductory Cree 1	3
INDG 1260	Introductory Cree 2	3
INDG 2252	Intermediate Cree 1 <sup>1</sup>	3
INDG 2254	Intermediate Cree 2 <sup>1</sup>	3
INDG 2530	Introduction to Indigenous Theory	3
INDG 3224	Structure of the Cree Language	3
INDG 3300	Indigenous Language Planning and Development	3
3 credit hours of Indigenous Studies at the 3000 level or above		3
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of open electives		12

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	60
<b>Total Hours</b>	<b>90</b>

<sup>1</sup> The former NATV 2250 can be used in place of INDG 2252 and INDG 2254.

## List of Approved Courses in Indigenous Studies

Approved courses from other faculties/schools for partial fulfilment of the Major and Minor in Indigenous Studies are given below.

Course	Title	Hours
<b>School of Art</b>		
FAAH 2090	Art of the North American Aboriginal Peoples	3
FAAH 3430	Inuit Art	3
<b>History Department</b>		
HIST 1390	History of Colonial Canada: 1500-1885 (C)	3
HIST 1440	History of Canada (C)	6
HIST 2010	Indigenous History in Canada (C)	6
HIST 4010	Imperialism, Decolonization and Neo-Colonialism, 1700 to the Present (M)	6
HIST 4120	History of Aboriginal Rights (C)	6

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed

to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Indigenous Languages Minor (Concentration)

### Minor Requirements

#### Indigenous Languages Minor (Concentration) (Option 1)

Course	Title	Hours
<b>Year 1</b>		
Both of:		6
INDG 1250 & INDG 1260	Introductory Cree 1 and Introductory Cree 2	
or both of:		
INDG 1270 & INDG 1280	Introductory Anishinaabemowin (Ojibwe) 1 and Introductory Anishinaabemowin (Ojibwe) 2	
		<b>6</b>
<b>Year 2</b>		
Select either both of:		6
INDG 2252 & INDG 2254	Intermediate Cree 1 and Intermediate Cree 2 <sup>2</sup>	
or both of:		

INDG 2272 & INDG 2274	Intermediate Anishinaabemowin (Ojibwe) 1 and Intermediate Anishinaabemowin (Ojibwe) 2	
	<b>Hours</b>	<b>6</b>
<b>Year 3</b>		
Select either:		
6 credit hours in Indigenous languages <sup>3</sup>		6
or		
6 credit hours of approved courses in Indigenous Studies <sup>4,5</sup>		6
	<b>Hours</b>	<b>6</b>
	<b>Total Hours</b>	<b>18</b>

<sup>1</sup> Students who wish to declare a Major or a Minor should consult with the department head.

<sup>2</sup> The former NATV 2250 can be used in place of INDG 2252 and INDG 2254.

<sup>3</sup> The following courses count as Indigenous Language courses: INDG 1250, INDG 1260, INDG 1270, INDG 1280, the former NATV 2250, INDG 2252, INDG 2254, INDG 2272, INDG 2274, INDG 2300, INDG 2310, INDG 3180, INDG 3190, INDG 3222, INDG 3224, and INDG 3300. Students may take a placement exam to place into advanced Indigenous Language courses.

<sup>4</sup> No more than 12 credit hours may be taken from INDG 1200, INDG 1220, INDG 1240, INDG 1250, INDG 1260, INDG 1270, INDG 1280, the former NATV 2250, INDG 2252, INDG 2254, INDG 2272, INDG 2274.

<sup>5</sup> Six credit hours may be from related linguistics courses approved by the department.

## Indigenous Languages Minor (Concentration) (Option 2)

<b>Course</b>	<b>Title</b>	<b>Hours</b>
<b>Year 1</b>		
Select either both of:		
INDG 2252 & INDG 2254		6
Intermediate Cree 1 and Intermediate Cree 2		
or both of:		
INDG 2272 & INDG 2274		6
Intermediate Anishinaabemowin (Ojibwe) 1 and Intermediate Anishinaabemowin (Ojibwe) 2		
	<b>Hours</b>	<b>6</b>
<b>Year 2</b>		
INDG 3222 or INDG 3224		3
Structure of Anishinaabemowin (Ojibwe) Language or Structure of the Cree Language		
INDG 3300		3
Indigenous Language Planning and Development		
	<b>Hours</b>	<b>6</b>
<b>Year 3</b>		
Select either:		
6 credit hours in Indigenous languages <sup>2</sup>		6
or		
6 credit hours of approved courses in Indigenous Studies <sup>3,4</sup>		6
	<b>Hours</b>	<b>6</b>
	<b>Total Hours</b>	<b>18</b>

<sup>1</sup> Students who wish to declare a Major or a Minor should consult with the department head.

<sup>2</sup> The following courses count as Indigenous Language courses: INDG 1250, INDG 1260, INDG 1270, INDG 1280, the former NATV 2250, INDG 2252, INDG 2254, INDG 2272, INDG 2274, INDG 2300, INDG 2310, INDG 3180, INDG 3190, INDG 3222, INDG 3224, and INDG 3300. Students may take a placement exam to place into advanced Indigenous Language courses.

<sup>3</sup> No more than 12 credit hours may be taken from INDG 1200, INDG 1220, INDG 1240, INDG 1250, INDG 1260, INDG 1270, INDG 1280, the former NATV 2250, INDG 2252, INDG 2254, INDG 2272, INDG 2274.

<sup>4</sup> Six credit hours may be from related linguistics courses approved by the department.

## Indigenous Studies Minor (Concentration)

### Minor Requirements

<b>Course</b>	<b>Title</b>	<b>Hours</b>
<b>Year 1</b>		
Select either:		
INDG 1200		6
Indigenous Peoples in Canada		
or both of:		
INDG 1220 & INDG 1240		6
Indigenous Peoples in Canada, Part 1 and Indigenous Peoples in Canada, Part 2		
	<b>Hours</b>	<b>6</b>
<b>Years 2-3</b>		
Select 12 credit hours in courses offered by Indigenous Studies numbered at the 2000 level or above <sup>1</sup>		12
	<b>Hours</b>	<b>12</b>
	<b>Total Hours</b>	<b>18</b>

<sup>1</sup> Students may substitute up to six credit hours from the list of approved courses in lieu of Indigenous Studies courses.

### List of Approved Courses in Indigenous Studies

Approved courses from other faculties/schools for partial fulfilment of the Major and Minor in Indigenous Studies are given below.

<b>Course</b>	<b>Title</b>	<b>Hours</b>
<b>School of Art</b>		
FAAH 2090	Art of the North American Aboriginal Peoples	3
FAAH 3430	Inuit Art	3
<b>History Department</b>		
HIST 1390	History of Colonial Canada: 1500-1885 (C)	3
HIST 1440	History of Canada (C)	6
HIST 2010	Indigenous History in Canada (C)	6
HIST 4010	Imperialism, Decolonization and Neo-Colonialism, 1700 to the Present (M)	6
HIST 4120	History of Aboriginal Rights (C)	6

## Interdisciplinary Courses

The Faculty of Arts offers a number of interdisciplinary courses designed by a course committee consisting of members of a number of departments. Interdisciplinary courses are free options, and a student may register for more than one.

### **ARTS 1110 Introduction to University 3 cr**

A seminar course designed to help students make the transition to university by imparting the knowledge, skills, and attitudes requisite for success in university study. Each section limited to 30 students. Open only to students who have completed fewer than 60 credit hours of course work. Students may not hold credit for both ARTS 1110 and ARTS 1111.

**Equiv To:** ARTS 1111

**Attributes:** Recommended Intro Courses, Written English Requirement

### **ARTS 1160 Leadership: An Interdisciplinary Approach 3 cr**

This course provides an introduction to the key issues and concerns of leadership and leadership studies, focusing on the central question of "what is leadership." Students will examine the philosophical and historical foundations of leadership theory and practice, along with the more contemporary (and often more theoretical) reflections on both leadership practices and the varied disciplines that study them. This course will satisfy the Faculty of Arts Social Science requirement. Students may not hold credit for both ARTS 1160 and LEAD 2010.

**Mutually Exclusive:** LEAD 2010

**Attributes:** Social Science, Recommended Intro Courses

### **ARTS 2020 Introduction to Health Humanities 3 cr**

This interdisciplinary course is aimed at students interested in the health professions who are looking to gain awareness of the critical ways in which humanities disciplines can help to attune future health professionals to a number of critical and complicated issues that they will encounter in their practices. These issues include the problem of defining health, bioethical questions (abortion, physician assisted suicide, genetic testing, etc.), and relationships between patients and health professionals. This course will make use of a number of important disciplinary practices from the humanities and social sciences to attune students to these issues and give them the resources for handling them better in professional health care contexts.

**Attributes:** Humanities

### **ARTS 3010 Arts Co-operative Option 1 1 cr**

Work assignments in business, industry, or government for students admitted to the Arts Co-operative Option. Required submission of a written report covering the work completed during the work term. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Arts Co-operative Option Coordinator and the Faculty of Arts.

### **ARTS 3020 Arts Co-operative Option 2 1 cr**

Work assignments in business, industry, or government for students admitted to the Arts Co-operative Option. Required submission of a written report covering the work completed during the work term. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ARTS 3010 and written consent of the Arts Co-operative Option Coordinator and the Faculty of Arts.

### **ARTS 3030 Arts Co-operative Option 3 1 cr**

Work assignments in business, industry, or government for students admitted to the Arts Co-operative Option. Required submission of a written report covering the work completed during the work term. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ARTS 3020 and written consent of the Arts Co-operative Option Coordinator and the Faculty of Arts.

## Judaic Studies

**Program Coordinator:** Haskel Greenfield

**General Office:** 328 Fletcher Argue

**Telephone:** 204 474 6691

**E-mail:** Judaic\_Studies@umanitoba.ca

**Website:** [umanitoba.ca/judaic\\_studies](http://umanitoba.ca/judaic_studies/) ([http://umanitoba.ca/judaic\\_studies/](http://umanitoba.ca/judaic_studies/))

### Program Information

The Judaic Studies Program promotes the study of Jewish civilization, of Jewish religious expressions and traditions, and of Jewish cultural, social, linguistic, and political formations and movements in all their variety. It supports teaching and research on Jewish life and Judaism from the Biblical period to the twenty-first century, in all parts of the world where Jews have lived. Judaic Studies approaches these subjects from all disciplinary angles and scholarly perspectives, and equally welcomes Jewish and non-Jewish scholars and students. The program includes the official non-English languages of Israel (Hebrew and Arabic).

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

Effective the 1989-1990 Regular Session, the **General Major** and **Single Advanced Major** in Judaic Studies **will not be offered until further notice**.

### Minor (Concentration) Program

#### A) Judaic Studies

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in the first six credit hours of Judaic Studies and/or List A courses.

#### B) Yiddish

Effective with the 1989-1990 Regular Session, the Minor (Concentration) in Yiddish will not be offered until further notice.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Judaic Studies Minor (Concentration) (p. 366)		18	

## Judaic Studies, B.A. Single Advanced

Not Currently Offered

### Degree Requirements

Course	Title	Hours
<b>Years 1-4</b>		
Select 12 credit hours in Language and Literature from the following:		12
Hebrew <sup>1</sup>		
Yiddish		
Arabic <sup>2</sup>		
Select 12 credit hours in Judaic Civilization		12
Select 24 credit hours in Judaic Studies		24
<b>Hours</b>		<b>48</b>
<b>Total Hours</b>		<b>48</b>

<sup>1</sup> A language-placement interview is required before registration. Normally, elementary Hebrew day school graduates begin with HEB 1260 while secondary Hebrew day school graduates begin with language courses numbered at the 2000 or 3000 level.

<sup>2</sup> A language-placement interview is required before registration.

## Judaic Studies, B.A. General

Not Currently Offered

### Degree Requirements

Course	Title	Hours
<b>Years 1-4</b>		
Select 6 credit hours in Language and Literature from the following:		6

Hebrew <sup>1</sup>		
Yiddish		
Arabic <sup>2</sup>		
Select 6 credit hours in Judaic Civilization	6	
Select 18 credit hours in Judaic Studies	18	
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> A language-placement interview is required before registration. Normally, elementary Hebrew day school graduates begin with HEB 1260 while secondary Hebrew day school graduates begin with language courses numbered at the 2000 or 3000 level.

<sup>2</sup> A language-placement interview is required before registration.

## Judaic Studies Minor (Concentration)

### Minor Requirements

#### Minor (Concentration) Judaic Studies

Course	Title	Hours
<b>Years 1-2</b>		
18 credit hours in Judaic Studies and/or List A		18
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>18</b>

#### Minor (Concentration) Yiddish (Not Currently Offered)

Course	Title	Hours
<b>Year 1</b>		
YDSH 1220	Yiddish	6
<b>Hours</b>		<b>6</b>

<b>Year 2</b>		
YDSH 2320	Yiddish Literature and Language	6
	<b>Hours</b>	<b>6</b>
<b>Year 3</b>		
6 credit hours in Hebrew Language and Literature or Judaic Civilization		6
	<b>Hours</b>	<b>6</b>
	<b>Total Hours</b>	<b>18</b>

### List A: Courses Acceptable for Judaic Studies Credit

With written consent of the program coordinator courses not on this list may be taken for credit if they include sufficient Judaic Studies content.

Course	Title	Hours
<b>Anthropology</b>		
ANTH 2650	Archaeology of the Ancient Near East	3
<b>Classics</b>		
CLAS 3260	Hellenistic Civilization: History and Archaeology	3
GRK 2810	Prose Writings of the Hellenistic and Greco-Roman Periods	3
<b>German and Slavic Studies</b>		
GRMN 3260	Representations of the Holocaust (B)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
<b>History</b>		
HIST 2240	History of Antisemitism and the Holocaust (E)	6
HIST 2250	Social History of the Jews: Antiquity to Present (G)	6
HIST 3062	German and German-Jewish History, 1618 to the Present (E)	6
HIST 4500	Jewish and European History and Historiography (E)	6
<b>Political Studies</b>		
POLS 3340	Middle East Politics	3
POLS 3342	Arab-Israeli Conflict	3
<b>Religion</b>		
RLGN 1120	Biblical Hebrew	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2162	Great Jewish Books	3
RLGN 2770	Contemporary Judaism	3
RLGN 3280	Hasidism	3
RLGN 3400	Zionism: Religious Perspectives	3
RLGN 3800	Selected Old Testament Literature and Themes	6
RLGN 3810	The Talmud	3
RLGN 3824	Kabbalah	3
RLGN 3830	The Bible as Story	3
RLGN 4300	Advanced Topics in Judaism	3

## Labour Studies

**Program Coordinator:** David Camfield

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## Program Information

This interdisciplinary program examines the social, economic and political realities of work. We critically examine the way work is organized, rights and power in the workplace and the political economy of labour. We explore issues including workplace health and safety, the law of work, the past, present and future of the labour movement and how the global economy affects our daily lives. Using theoretical and practical approaches, we examine the forces that shape working people's lives and our responses to them.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in one of LABR 1260 or LABR 1290.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Advanced Major Co-operative Education Option

Students interested in alternating employment terms and academic terms as part of the Advanced Major program in Labour Studies may apply to enter the Co-operative Education option upon completion of their second year in the program (min. 48 credit hours complete). The course and grade requirements for entry to this option are the same as those required for entry to the regular four-year Advanced Degree program. Students should refer to the general faculty regulations for Cooperative Options. (p. 224)

### Minor (Concentration) Program

For entry to the Minor, the prerequisite is a grade of "C" or better in one of LABR 1260 or LABR 1290.

### Micro-Diploma in Workplace Health and Safety

The Labour Studies program offers a Micro Diploma in Workplace Health and Safety. Students who successfully complete: LABR 3050 Issues in Occupational Health and Safety and Worker's Compensation; and LABR 3060 Workplace Health and Safety; and LABR 3070 Labour Relations and Occupational Health and Safety Law will qualify for this credential.

Faculty of Arts students may use courses completed in the Micro Diploma toward the completion of their Bachelor of Arts Degree and alternatively, courses that are used for degree completion can also be used to satisfy the Micro Diploma. This program is also open to students in good standing from other University of Manitoba Faculties and Schools whose academic requirements and regulations for their programs allow for entry to this program. Students from other Faculties



or Schools interested in the Workplace Safety and Health Micro Diploma should confirm with their home unit how these courses may be used toward their degree program. Students with potentially sufficient preparation through workplace experience or other relevant preparation for admission to the courses, but lacking the formal prerequisite course, may contact the Labour Studies Coordinator to seek written permission to register in LABR 3050, LABR 3060 and LABR 3070.

Students with potentially sufficient preparation through workplace experience or other relevant preparation for admission to the courses, but lacking the formal prerequisite courses, may contact the Labour Studies Coordinator to seek written permission to register in LABR 3050, LABR 3060 and LABR 3070.

#### Micro Diploma Admission Requirements:

Students with fewer than 24 credit hours of Post-Secondary course work completed seeking admission to the Micro Diploma in Workplace Health and Safety:

- must be proficient in English (visit <http://umanitoba.ca/student/admissions/international/english/index.html> (<https://umanitoba.ca/admissions/undergraduate/requirements/english-language-proficiency/>));

AND, EITHER:

- must have graduated from high school with at least 5 full credits at the Grade 12 level in courses designated S, G, or U and must have achieved a minimum average of 70% over the following, with no less than 60% in each of:
  - English 40S
  - Mathematics 40S
  - Two academic 40S courses;

OR,

- must meet the Mature Applicant Category Criteria that follows:
  - 21 years of age or older by September 30 for classes starting in September, January 31 for classes starting in January, May 1 for classes starting in May, and July 1 for classes starting in July

- Must not meet the regular academic requirements of the applicable program, must have limited experience at college or university (fewer than 24 credit hours), and must be a Canadian citizen or Permanent Resident.

Students with 24 or more credit hours of Post-Secondary course work completed seeking admission to the Micro Diploma in Workplace Health and Safety:

- must have completed a minimum of 24 credit hours of coursework at a recognized college or university with a minimum cumulative grade point average (CGPA) of 2.0 (C) or better;

OR

- must be admitted on the Dean's recommendation. [Students who have completed the minimum 24 credit hours of coursework, and do not meet the minimum 2.0 CGPA, may be considered on an individual basis for admission on the Recommendation of the Dean. A minimum 2.0 grade point average (GPA) on the best 24 credit hours of coursework that would be acceptable for credit (transferable) in the Bachelor of Arts General degree Program is required to receive consideration for admission on the Dean's recommendation].

Students currently enrolled in a degree program at the University of Manitoba who seek admission to the Micro Diploma in Workplace Health and Safety must be in good academic standing within their current program of study.

## All Programs

Courses used towards a Labour Studies Major or Minor (Concentration) may not be used towards a Major/Minor (Concentration) or Honours in the second field.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Labour Studies, B.A. General (p. 372)	3	90	
Labour Studies, B.A. Single Advanced Major (p. 368)	4	120	Yes
Labour Studies Minor (Concentration) (p. 374)		18	

### Micro Credentials:

Micro - Diploma in Workplace Health and Safety (p. 374)

## Labour Studies, B.A. Single Advanced Major

### Degree Requirements

(including Co-operative option if selected)

Course	Title	Hours
<b>Year 1</b>		
LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3

6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
18 credit hours from outside of your Major and Minor areas of study	18
<b>Hours</b>	<b>30</b>
<b>Years 2-4</b>	
LABR 2100 The Political Economy of Labour	3
LABR 2300 Workers, Employers and the State	3
12 credit hours of LABR courses at the 2000, 3000 or 4000 level	12
6 credit hours of LABR courses at the 3000 level	6
18 credit hours from LABR courses and/or the list of electives below	18
12 credit hours from your Minor area of study as described in that unit's section of the calendar	12
24 credit hours from outside your Major and Minor areas of study	24
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

### Co-operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will replace three credit hours of elective credit in years 2-4		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

### List of Electives

The following courses may be selected to fulfill the requirements for a degree in Labour Studies (see the table above for details). Other courses might be chosen for this purpose, in accordance with students' individual interests, but require advance permission from the Labour Studies coordinator. Students are responsible for ensuring that all prerequisites have been met.

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 2510	Anthropology of Economic Systems	3
ANTH 3750	Anthropological Perspectives on Globalization and the World-System	3
Economics:		
ECON 2350	Community Economic Development	3
ECON 2362	Economics of Gender	3
ECON 2540	Political Economy 1: Production and Distribution	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
ECON 3362	Labour Economics 1	3

ECON 3364	Labour Economics 2	3
History:		
HIST 2282	Inventing Canada (C)	3
HIST 2286	Modern Canada (C)	3
HIST 2288	History of Social Movements in Canada (C)	3
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
HIST 2670	History of Capitalism (M)	3
HIST 2671	Histoire du capitalisme (T)	3
HIST 2680	A History of Socialism from the French Revolution to the Present (M)	3
HIST 2732	Modern World History, 1945-1992: The Age of Three Worlds (M)	3
HIST 2734	Modern World History, 1980-Present: New World Order? (M)	3
HIST 3052	Canada since the 1960s (C)	3
HIST 3054	Canada and the United States (C)	3
HIST 3212	Global Sweatshops, Global Struggles (M)	3
HIST 3576	History of Women, Gender and Sexuality in Canada (C)	3
HIST 3730	A History of Western Canada (C)	6
HIST 3800	History of Winnipeg (C)	3
HIST 4890	Canadian Social History (C)	6
Indigenous Studies:		
INDG 3170	Indigenous Peoples and Racism in Canada	3
Philosophy:		
PHIL 2290	Ethics and Society	6
PHIL 2830	Business Ethics	3
Political Studies:		
POLS 3470	Canadian Public Management	3
POLS 3810	Introduction to Marxism	3
POLS 3940	Canadian Public Policy	3
POLS 4370	Comparative Public Administration	3
Sociology:		
SOC 2292	Understanding Social Research	3
SOC 2294	Understanding Social Statistics	3
SOC 3371	Sociologie du travail	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3471	Sociologie politique	3
SOC 3820	Qualitative and Historical Methods in Sociology	3
SOC 3871	Inégalités sociales	3
SOC 3890	Power and Inequality in Comparative Perspective	3
Women's and Gender Studies:		
WOMN 2500	Race, Class and Sexuality	3
WOMN 3100	Sex Work in Contemporary Canadian Culture	3
WOMN 3550	Feminist Community Organizing: Theories and Practices	3
<b>I.H. Asper School of Business (Faculty of Management)</b>		
Business Administration:		
GMGT 2060	Management and Organizational Theory	3
GMGT 2070	Introduction to Organizational Behaviour	3
GMGT 3030		3
GMGT 4210	Seminar in Management and Capitalism	3

HRIR 2440	Human Resource Management	3
HRIR 3430	Selected Topics in Industrial Relations	3
HRIR 3450	Labour and Employment Relations	3
HRIR 4420	Compensation	3
HRIR 4480	Collective Bargaining and Administration	3
HRIR 4520	Comparative Industrial Relations and Human Resource Management	3

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities) , or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious  
304 Tier Building  
arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.

- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

## Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

#### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

#### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

#### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

#### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

### Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## Labour Studies, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>

### Years 2-3

LABR 2100	The Political Economy of Labour	3
LABR 2300	Workers, Employers and the State	3
6 credit hours of LABR courses at the 2000 or 3000 level		6
6 credit hours of LABR courses at the 3000 level		6
6 credit hours from LABR courses and/or the list of electives below		6
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

### List of Electives

The following courses may be selected to fulfill the requirements for a degree in Labour Studies (see the table above for details). Other courses might be chosen for this purpose, in accordance with students' individual interests, but require advance permission from the Labour Studies coordinator. Students are responsible for ensuring that all prerequisites have been met.

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 2510	Anthropology of Economic Systems	3
ANTH 3750	Anthropological Perspectives on Globalization and the World-System	3
Economics:		
ECON 2350	Community Economic Development	3
ECON 2362	Economics of Gender	3
ECON 2540	Political Economy 1: Production and Distribution	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
ECON 3362	Labour Economics 1	3
ECON 3364	Labour Economics 2	3
History:		
HIST 2282	Inventing Canada (C)	3
HIST 2286	Modern Canada (C)	3
HIST 2288	History of Social Movements in Canada (C)	3
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
HIST 2670	History of Capitalism (M)	3
HIST 2671	Histoire du capitalisme (T)	3
HIST 2680	A History of Socialism from the French Revolution to the Present (M)	3
HIST 2732	Modern World History, 1945-1992: The Age of Three Worlds (M)	3
HIST 2734	Modern World History, 1980-Present: New World Order? (M)	3
HIST 3052	Canada since the 1960s (C)	3

HIST 3054	Canada and the United States (C)	3
HIST 3212	Global Sweatshops, Global Struggles (M)	3
HIST 3576	History of Women, Gender and Sexuality in Canada (C)	3
HIST 3730	A History of Western Canada (C)	6
HIST 3800	History of Winnipeg (C)	3
HIST 4890	Canadian Social History (C)	6
Indigenous Studies:		
INDG 3170	Indigenous Peoples and Racism in Canada	3
Philosophy:		
PHIL 2290	Ethics and Society	6
PHIL 2830	Business Ethics	3
Political Studies:		
POLS 3470	Canadian Public Management	3
POLS 3810	Introduction to Marxism	3
POLS 3940	Canadian Public Policy	3
POLS 4370	Comparative Public Administration	3
Sociology:		
SOC 2292	Understanding Social Research	3
SOC 2294	Understanding Social Statistics	3
SOC 3371	Sociologie du travail	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3471	Sociologie politique	3
SOC 3820	Qualitative and Historical Methods in Sociology	3
SOC 3871	Inégalités sociales	3
SOC 3890	Power and Inequality in Comparative Perspective	3
Women's and Gender Studies:		
WOMN 2500	Race, Class and Sexuality	3
WOMN 3100	Sex Work in Contemporary Canadian Culture	3
WOMN 3550	Feminist Community Organizing: Theories and Practices	3

#### I.H. Asper School of Business (Faculty of Management)

##### Business Administration:

GMGT 2060	Management and Organizational Theory	3
GMGT 2070	Introduction to Organizational Behaviour	3
GMGT 3030		3
GMGT 4210	Seminar in Management and Capitalism	3
HRIR 2440	Human Resource Management	3
HRIR 3430	Selected Topics in Industrial Relations	3
HRIR 3450	Labour and Employment Relations	3
HRIR 4420	Compensation	3
HRIR 4480	Collective Bargaining and Administration	3
HRIR 4520	Comparative Industrial Relations and Human Resource Management	3

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a

"C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

- At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.  
  
Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.
- Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
- At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 30 credit hours must be numbered at or above the 2000 level.

10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Labour Studies Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
LABR 2100	The Political Economy of Labour	3
LABR 2300	Workers, Employers and the State	3
6 credit hours of LABR courses at the 2000 or 3000 level		6
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

## Micro Diploma in Workplace Health and Safety

### Micro-Diploma Requirements

The Labour Studies program offers a Micro Diploma in Workplace Health and Safety. Students who successfully complete the following courses will qualify for this credential.

Course	Title	Hours
LABR 3050	Issues in Occupational Health and Safety and Workers' Compensation	3
LABR 3060	Workplace Health and Safety	3
LABR 3070	Labour Relations and Occupational Health and Safety Law	3

Faculty of Arts students may use courses completed in the Micro Diploma toward the completion of their Bachelor of Arts Degree and alternatively, courses that are used for degree completion can also be used to satisfy the Micro Diploma. This program is also open to students in good standing from other University of Manitoba Faculties and Schools whose academic requirements and regulations for their programs allow for entry to this program. Students from other Faculties or Schools interested in the Workplace Safety and Health Micro Diploma should confirm with their home unit how these courses may be used toward their degree program.

Students with potentially sufficient preparation through workplace experience or other relevant preparation for admission to the courses, but lacking the formal prerequisite course, may contact the Labour Studies Coordinator to seek written permission to register in LABR 3050, LABR 3060 and LABR 3070.

## Latin American Studies

**Program Coordinator:** Maria Inés Martínez  
**Program Office:** 424 Fletcher Argue Building  
**Telephone:** 204 474 9311  
**E-mail:** [Marines.Martinez@umanitoba.ca](mailto:Marines.Martinez@umanitoba.ca)

### Program Information

Through varied courses students may explore the cultural, political, historical, economic, and social structures and dynamics of Latin America. This interdisciplinary Minor includes courses from different departments and allows students to gain a deeper understanding of the subject field without being restricted to one discipline. Students are encouraged to participate in international exchange programs in Latin America which may also count toward the Minor.

### Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Latin American Studies Minor (Concentration) (p. 375)		18	

## Latin American Studies Minor (Concentration)

### Minor Requirements

For entry to the Minor (Concentration) in Latin American Studies, the prerequisite is a grade of "C" or better in six credit hours from the approved list.

A Minor (Concentration) in Latin American Studies consists of at least 18 credit hours from a **minimum of two different departments chosen from the following list.**

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 2690	Peoples and Cultures of Contemporary Latin America	3
French, Spanish and Italian:		
SPAN 2200	Spanish American Culture and Civilization	3
SPAN 2210	Voices and Images of Latin America	3
SPAN 2570	Special Studies (Acceptable for credit only when course content is on Latin American studies) <sup>1</sup>	3
SPAN 3080	Contemporary Latin American Novel	3
SPAN 3270	Special Studies (Acceptable for credit only when course content is on Latin American studies) <sup>1</sup>	3
SPAN 3300	Cinema and Literature	3
SPAN 3320	Testimony and Human Rights in Latin America	3
SPAN 3780	Short Fiction in Spanish	3
SPAN 3790	Latin American Cinema and Society	3
History:		
HIST 2140	Colonial Latin America (A)	3
HIST 2150	Independent Latin America (A)	3
HIST 2900	Topics in Social History (G) (Acceptable for credit only when course content is on Latin American studies) <sup>1</sup>	6
HIST 3020	South America since 1945 (A)	3
HIST 3110	Topics in History 1 (G) (Acceptable for credit only when course content is on Latin American studies) <sup>1</sup>	3
HIST 3740	Topics in Latin American History (A)	3
HIST 3750	Indigenous Peoples in Modern Latin America (A)	3
HIST 4000	Topics in History (G) (Acceptable for credit only when course content is on Latin American studies) <sup>1</sup>	3
HIST 4150	The Social History of the Latin American State (A)	6
HIST 4870	Contemporary Latin America (A)	6

<sup>1</sup> Written consent of program coordinator required to use course in the Minor (Concentration).

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

For course descriptions, see departmental listings.

## Linguistics

**Head:** Nicole Rosen

**Campus Address/General Office:** 534 Fletcher Argue Building

**Telephone:** 204 474 9596

**Email Address:** linguistics@umanitoba.ca

**Website:** umanitoba.ca/linguistics (<http://umanitoba.ca/linguistics/>)

### Program Information

The linguistics approach to language is based on the analysis of sound, the structure of words and sentences, and the meanings they transmit. But it also has to deal with the way sounds change, words come and go, and meanings shift. Linguistics is the humanities discipline that is closest to being a science in the generally accepted sense of the word. Partly because human language, the subject of linguistics, is almost entirely acquired subconsciously, it is a massive and intricate structure that is free to develop in accordance with natural rather than with consciously determined social laws.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in LING 1010 or the former LING 1200 or written consent of the department head.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in LING 1010 or the former LING 1200 or written consent of the department head.

### Honours Program

For entry to the Honours program see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced, and Honours Degree Programs.

### Co-operative Education Option

Students interested in alternating employment terms and academic terms as part of the Single Advanced Major or the Single Honours programs may apply to enter the Co-operative Education option upon completion of their second year in the program (min. 48 credit hours total). The course and grade requirements for entry to these options are the same as those required for entry to the regular four-year Single Advanced Major and Single Honours programs, respectively. Students should refer to the general faculty regulations for Cooperative Options for more information.

### Other

In addition to its core concentration in Linguistic Theory and Analysis and such other areas of study as Applied Linguistics, Verbal Arts, etc., Linguistics also offers:

A pre-professional concentration in Applied Linguistic Science, which will be of special interest to students planning a career in speech/language pathology; contact department general office for information; and



A program in American Sign Language/English Interpretation is offered jointly with Red River College. This program is currently undergoing revisions; interested students should contact the department general office for information.

Students intending to Major in Linguistics are strongly encouraged to undertake the in-depth study of a second language.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Linguistics, B.A. Double Advanced Major (p. 382)	4	120	
Linguistics, B.A. Double Honours (p. 378)	4	120	
Linguistics, B.A. General (p. 383)	3	90	
Linguistics, B.A. Single Advanced Major (p. 379)	4	120	Yes
Linguistics, B.A. Single Honours (p. 376)	4	120	Yes
Linguistics Minor (Concentration) (p. 384)		18	
Program for Deaf Studies and the American Sign Language (p. 384)	3	93	

## Linguistics, B.A. Single Honours

### Degree Requirements

(including Co-operative Education Option if selected)

Course	Title	Hours
<b>Year 1</b>		
LING 1000	Introduction to Linguistics	3
LING 1010	Introduction to Linguistics 2: Language in Context	3
24 credit hours in ancillary options		24
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
LING 2100	Phonetics and Phonology	3
LING 2400	Morphology and Syntax	3
3 credit hours in Linguistics courses numbered at or above the 1000 level		3
12 credit hours in Linguistics courses numbered at or above the 2000 level		12
9 credit hours in free options		9
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
15 credit hours in Linguistics courses numbered at or above the 3000 level		15
15 credit hours in free options		15
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
12 credit hours in Linguistics courses numbered at the 4000 level		12
18 credit hours in free options		18
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

### Co-Operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will count toward the free options credit required in this program.		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.

- Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
- Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to

maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

## Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

**Grading of Work Terms**

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

**Unsatisfactory Performance**

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

**Schedule and Sequence**

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

**Withdrawal from the Co-operative Education Option**

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator

will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

**Graduation Requirements of the Co-operative Education Option**

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

**Linguistics, B.A. Double Honours Degree Requirements**

Course	Title	Hours
<b>Year 1</b>		
LING 1000	Introduction to Linguistics	3
LING 1010	Introduction to Linguistics 2: Language in Context	3
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options		6
12 credit hours in free options		12
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
LING 2100	Phonetics and Phonology	3
LING 2400	Morphology and Syntax	3
3 credit hours in Linguistics courses numbered at or above the 1000 level		3
6 credit hours in Linguistics courses numbered at or above the 2000 level		6
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
3 credit hours in free options		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
12 credit hours in Linguistics courses numbered at or above the 3000 level		12
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
9 credit hours in Linguistics courses numbered at the 4000 level		9

12 credit hours in second Honours Field as described in that unit's section of the calendar	12
9 credit hours in free options	9
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

**Note:**

- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Linguistics, B.A. Single Advanced Major

### Degree Requirements

(including Co-operative Education Option if selected)

Course	Title	Hours
<b>Year 1</b>		
LING 1000	Introduction to Linguistics	3

LING 1010	Introduction to Linguistics 2: Language in Context	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>

**Year 2**

LING 2100	Phonetics and Phonology	3
LING 2400	Morphology and Syntax	3
3 credit hours in Linguistics courses numbered at or above the 1000 level		3
12 credit hours in Linguistics courses numbered at or above the 2000 level		12
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
3 credit hours from outside of your Major and Minor areas of study		3
<b>Hours</b>		<b>30</b>

**Year 3**

15 credit hours in Linguistics courses numbered at or above the 3000 level		15
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
9 credit hours from outside of your Major and Minor areas of study		9
<b>Hours</b>		<b>30</b>

**Year 4**

6 credit hours in Linguistics courses numbered at the 4000 level		6
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of free options		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

**Co-operative Education Option**

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will count toward the free options required in this program.		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious  
304 Tier Building  
arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

## Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

## Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

# Linguistics, B.A. Double Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
LING 1000	Introduction to Linguistics	3
LING 1010	Introduction to Linguistics 2: Language in Context	3
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
LING 2100	Phonetics and Phonology	3
LING 2400	Morphology and Syntax	3
3 credit hours in Linguistics courses numbered at or above the 1000 level		3
9 credit hours in Linguistics courses numbered at or above the 2000 level		9
12 credit hours in Linguistics courses numbered at or above the 3000 level		12
6 credit hours in Linguistics courses numbered at the 4000 level		6
36 credit hours from second Advanced Major subject field as described in that unit's section of the calendar		36
18 credit hours from outside both Advanced Major subject fields		18

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	90
<b>Total Hours</b>	<b>120</b>

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

- Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor.

A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Linguistics, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
LING 1000	Introduction to Linguistics	3
LING 1010	Introduction to Linguistics 2: Language in Context	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
LING 2100	Phonetics and Phonology	3
LING 2400	Morphology and Syntax	3
3 credit hours in Linguistics courses numbered at or above the 1000 level		3
9 credit hours in Linguistics courses numbered at or above the 2000 level		9
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside of your Major and Minor areas of study		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
6 credit hours in Linguistics courses numbered at or above the 3000 level		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6

6 credit hours from outside of your Major and Minor areas of study 6

12 credit hours of open electives 12

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	30
<b>Total Hours</b>	<b>90</b>

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

- A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
- The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**
- At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
  - At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
  - Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

- Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.



6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Linguistics Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
LING 1000	Introduction to Linguistics	3
LING 1010	Introduction to Linguistics 2: Language in Context	3
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours in Linguistics courses numbered at or above the 2000 level		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

## Program for Deaf Studies and the American Sign Language

### Program in Linguistics and American Sign Language/English Interpretation Taught Jointly with Red River College Leading to a B.A. General Degree

Students who wish to pursue this program must seek separate admission to both the University of Manitoba and Red River College. As this program is currently undergoing revisions, interested students should contact the Department of Linguistics for further information.

Students must successfully complete all requirements for Deaf Studies and the American Sign Language/English Interpretation Program at Red River College only. Specific courses (42 credit hours) completed in this program will be considered acceptable for university degree credit, will satisfy a humanities requirement and will become the declared Minor for purposes of the degree. For the purposes of satisfying the distribution requirement, completion of the Deaf Studies Certificate will qualify as six hours in a field and completion of the Joint ASL Program will qualify as six hours in a field.

## Degree Requirements

A program in American Sign Language/English Interpretation is offered jointly with Red River College.

**This program is currently undergoing revisions; interested students should contact the department general office for information.**

### Deaf Studies Program (prerequisite) - RRC

Course	Title	Hours
Students receive 6 credit hours for ASL 1, ASL 2, and ASL 3		
American Sign Language 1		6
American Sign Language 2		
American Sign Language 3		
Deaf Culture		3
Deaf History		3
Cross-cultural Interaction (no U of M credit)		
<b>Total Hours</b>		<b>12</b>

### Deaf Studies Program (prerequisite) - U of M

Course	Title	Hours
LING 1200	course no longer offered	6
ANTH 1220	Cultural Anthropology	3
	or ANTH 1520 Critical Cultural Anthropology	
Science <sup>1</sup>		3
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> In the Deaf Studies Certificate Program (RRC) and in Year 1 of the Joint Linguistics (U of M) and ASL (RRC) Program students must complete a 3 credit hour Science course for a total of 6 credit hours of Science. A minimum of 3 credit hours of the Science courses must be in mathematics, statistics, or physics. Students seeking a second degree are not required to complete a mathematics, statistics, or physics course.

Following successful completion of this prerequisite year, a Certificate in Deaf Studies is awarded by Red River College and selection for continuation for the joint degree program is made by RRC and the Linguistics department.

### Linguistics (U of M) and American Sign Language/English Interpretation (RRC)

Course	Title	Hours
<b>Year 1</b>		
<b>RRC:</b>		
Cross-language Processing in Interpretation		3
Language Processing in Interpretation-English		3
Language Processing in Interpretation-ASL		3
English Comprehension and Expression		3
<b>U of M:</b>		
LING 2200	Course no longer offered	6
LING 2460	Course no longer offered	3
LING 2740	Interpretation Theory	3
ENGL XXXX	English	6
Science <sup>1</sup>		3
<b>Hours</b>		<b>33</b>

**Year 2****RRC:**

Advanced ASL	3
Interpretation Lab 1	6
Ethics 1	3
Ethics 2	3
Interpretation Settings 1 (no UM credit)	
Interpretation Settings 2 (no UM credit)	

**U of M:**

LING 3300	Course no longer offered	6
LING XXXX	Linguistics Elective	3
<b>Hours</b>		<b>24</b>

**Year 3****RRC:**

Interpretation Lab 2	3
Practicum (no U of M credit)	
Practicum Seminar (no U of M credit)	

**U of M:**

LING 3840	Course no longer offered	3
UM Electives (non linguistics courses) <sup>2</sup>		6
<b>Hours</b>		<b>12</b>

**Total Hours** **69**

<sup>1</sup> In the Deaf Studies Certificate Program (RRC) and in Year 1 of the Joint Linguistics (U of M) and ASL (RRC) Program students must complete a 3 credit hour Science course for a total of 6 credit hours of Science. A minimum of 3 credit hours of the Science courses must be in mathematics, statistics, or physics. Students seeking a second degree are not required to complete a mathematics, statistics, or physics course.

<sup>2</sup> Before selecting the 6 credit hours of electives, contact the General Office to ensure the selection satisfies the subject field requirement.

## Medieval and Early Modern Studies

**Program Advisor:** Roisin Cossar

**Program Office:** 454 Fletcher Argue Building

**Telephone:** 204 474 8885

### Program Information

The millennium from the end of the Roman empire to the Renaissance is the formative period of European civilization. The Middle Ages and the Dark Ages were periods of human drama full of change and growth and a struggle to regain a civilized way of life. The Age of Chivalry with its crusades, the flowering of the arts and architecture, and the emergence of new philosophical concepts and ideologies found culmination in the Renaissance. For those interested in the pre-modern world, this program permits a broad approach to the subject.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

The following entries contain information which is not contained in: Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in HIST 2390 or HIST 2420, and 6 credit hours in Greek (GRK) or Latin (LATN) courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in HIST 2390 or HIST 2420.

### Other

Students should note that courses used towards the Major(s) or Minor (Concentration) in this area may not be used for Major, Minor (Concentration) or Honours in a second field.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Medieval and Early Modern Studies, B.A. General (p. 387)	3	90	
Medieval and Early Modern Studies, B.A. Single Advanced Major (p. 385)	4	120	
Medieval and Early Modern Studies Minor (Concentration) (p. 389)		18	

## Medieval and Early Modern Studies, B.A. Single Advanced Major

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Greek (GRK) or Latin (LATN) courses		6

HIST 2390 or HIST 2420	Early Modern Europe, 1450-1789 (E) or The Medieval World (D)	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours from outside of your Major and Minor areas of study		12
<b>Hours</b>		<b>30</b>

**Years 2-4**

6 credit hours from Group 1 courses listed below	6
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6 credit hours from Group 2 courses listed below	6
9 credit hours from Group 1 or Group 2 courses listed below	9
9 additional credit hours in Greek (GRK) or Latin (LATN) courses	9
6 credit hours from a modern language (any language offered by the Faculty of Arts outside of courses offered in Greek and Latin)	6
12 credit hours from your Minor area of study as described in that unit's section of the calendar	12
30 credit hours from outside of your Major and Minor areas of study	30
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

**Notes:**

- Students may not use individual courses to satisfy both Major and Minor (Concentration) requirements.
- Students are strongly encouraged to complete introductory courses from subject areas from the Group 1 and Group 2 listings in order to satisfy possible prerequisites for courses they may select in Years 2, 3 and 4.

**Group 1: History, Philosophy and Religions**

See the departmental Calendar section for full course descriptions. With written consent of the program coordinator courses not on this list may be used to satisfy the Group 1 requirement.

Course	Title	Hours
<b>Classics</b>		
CLAS 1280	Introduction to Ancient Roman Culture	3
CLAS 2170	Roman History: The Roman Empire, 30 BC-AD 337	3
CLAS 3270	The World of Late Antiquity: History and Archaeology	3
<b>History</b>		
HIST 2180	The History of Catholicism to 1540 (G)	3
HIST 3138	History of Medieval Italy, 1300-1500 (D)	3
HIST 3550	Popular Culture, Crime and Punishment in England, 1550-1850 (E)	3
HIST 4040	The Later Middle Ages (D)	6
HIST 4050	England in the Long Eighteenth Century (E)	6
<b>Religion</b>		
RLGN 2114	Monks, Mystics and Manuscripts in Medieval Christianity	3
RLGN 3194	Islamic Philosophy	3
RLGN 3230	Gender, the Body, and Sexuality in Early Christianity	3
RLGN 3824	Kabbalah	3
RLGN 4282	Advanced Studies in Medieval Christianity	3

**Group 2: Literatures, Art and Languages**

See the departmental Calendar section for full course descriptions. With written consent of the program coordinator courses not on this list may be used to satisfy the Group 2 requirement.

Course	Title	Hours
<b>Faculty of Arts</b>		
<b>Classics:</b>		
LATN 2800	Readings in Medieval or Renaissance Latin	3
<b>English, Film, and Theatre:</b>		
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3180	Studies in Renaissance Literature	3
<b>French, Spanish and Italian:</b>		
FREN 3500	Littérature du 17e siècle (B)	3
SPAN 3670	Poetry and Novel of the Golden Age	3
SPAN 3680	Drama of the Golden Age	3
<b>Icelandic:</b>		
ICEL 1410	Introduction to Culture in Medieval Iceland	3
ICEL 2310	An Introduction to Old Icelandic Language and Literature	6
ICEL 3320	Old Norse Mythology	3
ICEL 3330	Icelandic Sagas in Translation	3
ICEL 3400	Old Icelandic Literature	6
ICEL 4420	History of the Icelandic Language	3
<b>School of Art</b>		
FAAH 1030	Introduction to Art 1A	3
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. Advanced Degree**

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.

10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Medieval and Early Modern Studies, B.A. General

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Greek (GRK) or Latin (LATN) courses		6
HIST 2390 or HIST 2420	Early Modern Europe, 1450-1789 (E) or The Medieval World (D)	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours from outside of your Major and Minor areas of study		12
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
6 credit hours from Group 1 courses listed below		6
6 credit hours from Group 2 courses listed below		6
6 credit hours from Group 1 or Group 2 courses listed below		6
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
18 credit hours from outside of your Major and Minor areas of study		18
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

#### Notes:

- Students may not use individual courses to satisfy both Major and Minor (Concentration) requirements.
- Students are strongly encouraged to complete introductory courses from subject areas from the Group 1 and Group 2 listings in order to satisfy possible prerequisites for courses they may select in Years 2, 3 and 4.

### Group 1: History, Philosophy and Religions

See the departmental Calendar section for full course descriptions. With written consent of the program coordinator courses not on this list may be used to satisfy the Group 1 requirement.

Course	Title	Hours
<b>Classics</b>		
CLAS 1280	Introduction to Ancient Roman Culture	3
CLAS 2170	Roman History: The Roman Empire, 30 BC-AD 337	3
CLAS 3270	The World of Late Antiquity: History and Archaeology	3
<b>History</b>		
HIST 2180	The History of Catholicism to 1540 (G)	3
HIST 3138	History of Medieval Italy, 1300-1500 (D)	3

HIST 3550	Popular Culture, Crime and Punishment in England, 1550-1850 (E)	3
HIST 4040	The Later Middle Ages (D)	6
HIST 4050	England in the Long Eighteenth Century (E)	6
<b>Religion</b>		
RLGN 2114	Monks, Mystics and Manuscripts in Medieval Christianity	3
RLGN 3194	Islamic Philosophy	3
RLGN 3230	Gender, the Body, and Sexuality in Early Christianity	3
RLGN 3824	Kabbalah	3
RLGN 4282	Advanced Studies in Medieval Christianity	3

## Group 2: Literatures, Art and Languages

See the departmental Calendar section for full course descriptions. With written consent of the program coordinator courses not on this list may be used to satisfy the Group 2 requirement.

Course	Title	Hours
<b>Faculty of Arts</b>		
Classics:		
LATN 2800	Readings in Medieval or Renaissance Latin	3
English, Film, and Theatre:		
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3180	Studies in Renaissance Literature	3
French, Spanish and Italian:		
FREN 3500	Littérature du 17e siècle (B)	3
SPAN 3670	Poetry and Novel of the Golden Age	3
SPAN 3680	Drama of the Golden Age	3
Icelandic:		
ICEL 1410	Introduction to Culture in Medieval Iceland	3
ICEL 2310	An Introduction to Old Icelandic Language and Literature	6
ICEL 3320	Old Norse Mythology	3
ICEL 3330	Icelandic Sagas in Translation	3
ICEL 3400	Old Icelandic Literature	6
ICEL 4420	History of the Icelandic Language	3
<b>School of Art</b>		
FAAH 1030	Introduction to Art 1A	3
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
- The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**
2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
  3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
  4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.
- Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.
5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
  6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
  7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.

8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Medieval and Early Modern Studies Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
HIST 2390 or HIST 2420	Early Modern Europe, 1450-1789 (E) or The Medieval World (D)	6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours to be selected from Group 1 or Group 2 courses below, Greek (GRK) courses, or Latin (LATN) courses <sup>1</sup>		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> If Latin (LATN) or Greek (GRK) courses are selected to satisfy the Minor (Concentration) requirements, a minimum of 6 credit hours must be selected from either LATN or GRK.

#### Notes:

- Students may not use individual courses to satisfy both Major and Minor (Concentration) requirements.
- Students are strongly encouraged to complete introductory courses from subject areas from the Group 1 and Group 2 listings in order to satisfy possible prerequisites for courses they may select in Years 2, 3 and 4.

### Group 1: History, Philosophy and Religions

See the departmental Calendar section for full course descriptions. With written consent of the program coordinator courses not on this list may be used to satisfy the Group 1 requirement.

Course	Title	Hours
<b>Classics</b>		
CLAS 1280	Introduction to Ancient Roman Culture	3
CLAS 2170	Roman History: The Roman Empire, 30 BC-AD 337	3
CLAS 3270	The World of Late Antiquity: History and Archaeology	3
<b>History</b>		
HIST 2180	The History of Catholicism to 1540 (G)	3
HIST 3138	History of Medieval Italy, 1300-1500 (D)	3
HIST 3550	Popular Culture, Crime and Punishment in England, 1550-1850 (E)	3
HIST 4040	The Later Middle Ages (D)	6
HIST 4050	England in the Long Eighteenth Century (E)	6
<b>Religion</b>		

RLGN 2114	Monks, Mystics and Manuscripts in Medieval Christianity	3
RLGN 3194	Islamic Philosophy	3
RLGN 3230	Gender, the Body, and Sexuality in Early Christianity	3
RLGN 3824	Kabbalah	3
RLGN 4282	Advanced Studies in Medieval Christianity	3

### Group 2: Literatures, Art and Languages

See the departmental Calendar section for full course descriptions. With written consent of the program coordinator courses not on this list may be used to satisfy the Group 2 requirement.

Course	Title	Hours
<b>Faculty of Arts</b>		
<b>Classics:</b>		
LATN 2800	Readings in Medieval or Renaissance Latin	3
<b>English, Film, and Theatre:</b>		
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3180	Studies in Renaissance Literature	3
<b>French, Spanish and Italian:</b>		
FREN 3500	Littérature du 17e siècle (B)	3
SPAN 3670	Poetry and Novel of the Golden Age	3
SPAN 3680	Drama of the Golden Age	3
<b>Icelandic:</b>		
ICEL 1410	Introduction to Culture in Medieval Iceland	3
ICEL 2310	An Introduction to Old Icelandic Language and Literature	6
ICEL 3320	Old Norse Mythology	3
ICEL 3330	Icelandic Sagas in Translation	3
ICEL 3400	Old Icelandic Literature	6
ICEL 4420	History of the Icelandic Language	3
<b>School of Art</b>		
FAAH 1030	Introduction to Art 1A	3
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3

# Philosophy

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## Program Information

Philosophy is composed of several areas of study: these include logic, metaphysics, ethics, political philosophy, philosophy of science, philosophy of language, and aesthetics. Philosophers use the tools of rigorous logic and clear conceptual analysis. Their goal is to understand things such as the nature of reason, the physical universe, right and wrong, the human mind, and sometimes even the meaning of life. There are good arguments and bad arguments. Training in philosophy will help the student not only consider these important questions but also to improve his or her clarity of expression and ability to think critically.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Philosophy, B.A. Double Advanced Major (p. 394)	4	120	
Philosophy, B.A. Double Honours (p. 391)	4	120	
Philosophy, B.A. General (p. 395)	3	90	
Philosophy, B.A. Single Advanced Major (p. 392)	4	120	
Philosophy, B.A. Single Honours (p. 390)	4	120	
Philosophy Minor (Concentration) (p. 397)		18	

## Philosophy, B.A. Single Honours

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours of PHIL at or above the 1000 level		6
24 credit hours of ancillary options		24
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
PHIL 1300	Introduction to Logic	3
51 credit hours of PHIL at or above the 2000 level that includes:		51
12 credit hours from History of Philosophy courses listed below		
9 credit hours from Metaphysics and Epistemology courses listed below		
9 credit hours from Value Theory courses listed below		
21 additional credit hours of PHIL		

## Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours in Philosophy.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

The General Major may consist entirely of courses numbered beyond the 1000 level.

## Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours in Philosophy.

The Minor (Concentration) may consist entirely of courses numbered beyond the 1000 level.

## Honours Program

For entry to the Honours program, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

## Programs

Of the PHIL course listed above, a minimum of 12 credit hours must be taken at the 4000 level, and an additional 9 credit hours must be taken at or above the 3000 level.

36 credit hours of free options	36
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

## History of Philosophy Courses

Course	Title	Hours
PHIL 2300	Political Philosophy	6
PHIL 2612	A Philosophical History of Science	3
PHIL 2630	Continental Rationalism	3
PHIL 2640	British Empiricism	3
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3

PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2790	Moral Philosophy	6
PHIL 3580	Kant	3
PHIL 4520	Historical Topics	3

## Metaphysics and Epistemology Courses

Course	Title	Hours
PHIL 2140	Theory of Knowledge	3
PHIL 2150	Mind and Body	3
PHIL 2160	Fundamentals of the Philosophy of Language	3
PHIL 2200	Intermediate Logic	3
PHIL 2580	Metaphysics	3
PHIL 2612	A Philosophical History of Science	3
PHIL 2614	Philosophy of Science	3
PHIL 2770	Philosophy of Art	6
PHIL 3630	Contemporary Epistemology	3
PHIL 3650	Contemporary Metaphysics	3
PHIL 4490	Philosophy of Mind	3
PHIL 4510	Philosophy of Language	3
PHIL 4630	Symbolic Logic	3

## Value Theory Courses

Course	Title	Hours
PHIL 2190	Philosophy and Sexuality	3
PHIL 2300	Political Philosophy	6
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2730	Fundamentals of the Philosophy of Religion	3
PHIL 2770	Philosophy of Art	6
PHIL 2790	Moral Philosophy	6
PHIL 2800	Contemporary Political Philosophy	3
PHIL 2840	The Ethics of War and Peace	3
PHIL 2860	Philosophy of Law	3
PHIL 2870	Philosophy and Law	3
PHIL 3430	Problems in Legal Philosophy	3
PHIL 3440	Problems in Social and Political Philosophy	3
PHIL 3760	Topics in Moral Theory	3

Note: Courses that appear in more than one distribution lists can count towards only one area in satisfying program requirements.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the

Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Philosophy, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours of PHIL at or above the 1000 level		6
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options		6
12 credit hours in free options		12
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
PHIL 1300	Introduction to Logic	3
33 credit hours of PHIL at or above the 2000 level that includes:		33
12 credit hours from History of Philosophy courses listed below		
9 credit hours from Metaphysics and Epistemology courses listed below		
9 credit hours from Value Theory courses listed below		
3 additional credit hours of PHIL		
Of the PHIL course listed below, a minimum of 12 credit hours must be taken at the 4000 level, and an additional 3 credit hours must be taken at or above the 3000 level.		
36 credit hours from second Honours field as described in that unit's section of the calendar		36
18 credit hours in free options		18
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

Note:

- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an



additional 3 credit hours of required course work in their Double Honours programs.

## History of Philosophy Courses

Course	Title	Hours
PHIL 2300	Political Philosophy	6
PHIL 2612	A Philosophical History of Science	3
PHIL 2630	Continental Rationalism	3
PHIL 2640	British Empiricism	3
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2790	Moral Philosophy	6
PHIL 3580	Kant	3
PHIL 4520	Historical Topics	3

## Metaphysics and Epistemology Courses

Course	Title	Hours
PHIL 2140	Theory of Knowledge	3
PHIL 2150	Mind and Body	3
PHIL 2160	Fundamentals of the Philosophy of Language	3
PHIL 2200	Intermediate Logic	3
PHIL 2580	Metaphysics	3
PHIL 2612	A Philosophical History of Science	3
PHIL 2614	Philosophy of Science	3
PHIL 2770	Philosophy of Art	6
PHIL 3630	Contemporary Epistemology	3
PHIL 3650	Contemporary Metaphysics	3
PHIL 4490	Philosophy of Mind	3
PHIL 4510	Philosophy of Language	3
PHIL 4630	Symbolic Logic	3

## Value Theory Courses

Course	Title	Hours
PHIL 2190	Philosophy and Sexuality	3
PHIL 2300	Political Philosophy	6
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2730	Fundamentals of the Philosophy of Religion	3
PHIL 2770	Philosophy of Art	6
PHIL 2790	Moral Philosophy	6
PHIL 2800	Contemporary Political Philosophy	3
PHIL 2840	The Ethics of War and Peace	3
PHIL 2860	Philosophy of Law	3
PHIL 2870	Philosophy and Law	3
PHIL 3430	Problems in Legal Philosophy	3
PHIL 3440	Problems in Social and Political Philosophy	3
PHIL 3760	Topics in Moral Theory	3

Note: Courses that appear in more than one distribution lists can count towards only one area in satisfying program requirements.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and**

**Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Philosophy, B.A. Single Advanced Major

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours of PHIL at or above the 1000 level		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
PHIL 1300	Introduction to Logic	3
39 credit hours of PHIL at or above the 2000 level that include:		39
12 credit hours from History of Philosophy courses listed below		
9 credit hours from Metaphysics and Epistemology courses listed below		
9 credit hours from Value Theory courses listed below		
9 additional credit hours of PHIL		

Of the PHIL courses listed above, a minimum of 12 credit hours must be taken at or above the 3000 level

12 credit hours from your Minor area of study as described in that unit's section of the calendar.

24 credit hours from outside your Major and Minor areas of study.	24
12 credit hours of open electives	12

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

## History of Philosophy Courses

Course	Title	Hours
PHIL 2300	Political Philosophy	6
PHIL 2612	A Philosophical History of Science	3
PHIL 2630	Continental Rationalism	3
PHIL 2640	British Empiricism	3
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2790	Moral Philosophy	6
PHIL 3580	Kant	3
PHIL 4520	Historical Topics	3

## Metaphysics and Epistemology Courses

Course	Title	Hours
PHIL 2140	Theory of Knowledge	3
PHIL 2150	Mind and Body	3
PHIL 2160	Fundamentals of the Philosophy of Language	3
PHIL 2200	Intermediate Logic	3
PHIL 2580	Metaphysics	3
PHIL 2612	A Philosophical History of Science	3
PHIL 2614	Philosophy of Science	3
PHIL 2770	Philosophy of Art	6
PHIL 3630	Contemporary Epistemology	3
PHIL 3650	Contemporary Metaphysics	3
PHIL 4490	Philosophy of Mind	3
PHIL 4510	Philosophy of Language	3
PHIL 4630	Symbolic Logic	3

## Value Theory Courses

Course	Title	Hours
PHIL 2190	Philosophy and Sexuality	3
PHIL 2300	Political Philosophy	6
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2730	Fundamentals of the Philosophy of Religion	3
PHIL 2770	Philosophy of Art	6
PHIL 2790	Moral Philosophy	6
PHIL 2800	Contemporary Political Philosophy	3
PHIL 2840	The Ethics of War and Peace	3
PHIL 2860	Philosophy of Law	3
PHIL 2870	Philosophy and Law	3
PHIL 3430	Problems in Legal Philosophy	3

PHIL 3440	Problems in Social and Political Philosophy	3
PHIL 3760	Topics in Moral Theory	3

Note: Courses that appear in more than one distribution lists can count towards only one area in satisfying program requirements.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

- Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor.

A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Philosophy, B.A. Double Advanced Major

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours of PHIL at or above the 1000 level		6
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside both Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>

#### Years 2-4

PHIL 1300	Introduction to Logic	3
33 credit hours of PHIL at or above the 2000 level that include:		33
12 credit hours from History of Philosophy courses listed below		
9 credit hours from Metaphysics and Epistemology courses listed below		
9 credit hours from Value Theory courses listed below		
3 additional credit hours of PHIL		
Of the PHIL courses listed above, a minimum of 12 credit hours must be taken at or above the 3000 level		
36 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		36
18 credit hours from outside both Advanced Major subject fields		18

Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation

Hours	90
Total Hours	120

### History of Philosophy Courses

Course	Title	Hours
PHIL 2300	Political Philosophy	6
PHIL 2612	A Philosophical History of Science	3
PHIL 2630	Continental Rationalism	3
PHIL 2640	British Empiricism	3
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2790	Moral Philosophy	6
PHIL 3580	Kant	3
PHIL 4520	Historical Topics	3

### Metaphysics and Epistemology Courses

Course	Title	Hours
PHIL 2140	Theory of Knowledge	3
PHIL 2150	Mind and Body	3
PHIL 2160	Fundamentals of the Philosophy of Language	3
PHIL 2200	Intermediate Logic	3
PHIL 2580	Metaphysics	3
PHIL 2612	A Philosophical History of Science	3
PHIL 2614	Philosophy of Science	3
PHIL 2770	Philosophy of Art	6
PHIL 3630	Contemporary Epistemology	3
PHIL 3650	Contemporary Metaphysics	3
PHIL 4490	Philosophy of Mind	3
PHIL 4510	Philosophy of Language	3
PHIL 4630	Symbolic Logic	3

### Value Theory Courses

Course	Title	Hours
PHIL 2190	Philosophy and Sexuality	3
PHIL 2300	Political Philosophy	6
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2730	Fundamentals of the Philosophy of Religion	3
PHIL 2770	Philosophy of Art	6
PHIL 2790	Moral Philosophy	6
PHIL 2800	Contemporary Political Philosophy	3
PHIL 2840	The Ethics of War and Peace	3
PHIL 2860	Philosophy of Law	3
PHIL 2870	Philosophy and Law	3
PHIL 3430	Problems in Legal Philosophy	3
PHIL 3440	Problems in Social and Political Philosophy	3
PHIL 3760	Topics in Moral Theory	3

Note: Courses that appear in more than one distribution lists can count towards only one area in satisfying program requirements.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement.

Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.

6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Philosophy, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours of PHIL at or above the 1000 level		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
3 credit hours of PHIL at or above the 1000 level		3
6 credit hours from History of Philosophy courses listed below		6
15 credit hours of PHIL at or above the 2000 level		15
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

### History of Philosophy Courses

Course	Title	Hours
PHIL 2300	Political Philosophy	6
PHIL 2612	A Philosophical History of Science	3
PHIL 2630	Continental Rationalism	3
PHIL 2640	British Empiricism	3
PHIL 2650	Plato	3

PHIL 2660	Aristotle	3
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2790	Moral Philosophy	6
PHIL 3580	Kant	3
PHIL 4520	Historical Topics	3

## Metaphysics and Epistemology Courses

Course	Title	Hours
PHIL 2140	Theory of Knowledge	3
PHIL 2150	Mind and Body	3
PHIL 2160	Fundamentals of the Philosophy of Language	3
PHIL 2200	Intermediate Logic	3
PHIL 2580	Metaphysics	3
PHIL 2612	A Philosophical History of Science	3
PHIL 2614	Philosophy of Science	3
PHIL 2770	Philosophy of Art	6
PHIL 3630	Contemporary Epistemology	3
PHIL 3650	Contemporary Metaphysics	3
PHIL 4490	Philosophy of Mind	3
PHIL 4510	Philosophy of Language	3
PHIL 4630	Symbolic Logic	3

## Value Theory Courses

Course	Title	Hours
PHIL 2190	Philosophy and Sexuality	3
PHIL 2300	Political Philosophy	6
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2730	Fundamentals of the Philosophy of Religion	3
PHIL 2770	Philosophy of Art	6
PHIL 2790	Moral Philosophy	6
PHIL 2800	Contemporary Political Philosophy	3
PHIL 2840	The Ethics of War and Peace	3
PHIL 2860	Philosophy of Law	3
PHIL 2870	Philosophy and Law	3
PHIL 3430	Problems in Legal Philosophy	3
PHIL 3440	Problems in Social and Political Philosophy	3
PHIL 3760	Topics in Moral Theory	3

Note: Courses that appear in more than one distribution lists can count towards only one area in satisfying program requirements.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Philosophy Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours of PHIL at or above the 1000 level		6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
3 credit hours of PHIL at or above the 1000 level		3
9 credit hours of PHIL at or above the 2000 level		9
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

## Political Studies

**Head:** Dr. Andrea Rounce

**Campus Address/General Office:** 532 Fletcher Argue

**Telephone:** 204 474 9733

**Email Address:** Political.Studies@umanitoba.ca

**Website:** [umanitoba.ca/political\\_studies](https://umanitoba.ca/political_studies/) ([https://umanitoba.ca/political\\_studies/](https://umanitoba.ca/political_studies/))

### Program Information

Political Studies examines the dynamics of human interaction in which individuals and groups compete to achieve their goals. The study of politics involves a consideration of the interactions between the individual, the state, government, public affairs and public policy. Political Studies examines the dynamics of these interactions in the context of competing visions, values and interests, particularly in the pursuit of varying public goals, including the quest for political power and the control of government. Politics is thus both a study of conflict between competing interests and a study of how these competing interests achieve compromise and cooperation.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours in Political Studies.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

A maximum of six credit hours in Political Studies courses numbered at the 1000 level may be used towards the 30 credit hours for a General Major or the 48 credit hours for a Single Advanced Major.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours in Political Studies.

A maximum of six credit hours in Political Studies courses numbered at the 1000 level may be used toward the 18 credit hours for a Minor.

### Honours Program

For entry to the Honours program, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

Honours in Political Studies may be taken in combination with the program of Central and East European Studies (p. 251).

### Co-operative Education Options

Students interested in alternating employment terms and academic terms as part of the Single Advanced Major and Single Honours programs in Political Studies may apply to enter the Co-operative Education option upon completion of their second year in the program (min. 48 credit hours complete). The course and grade requirements for entry to this option are the same as those required for entry to the Single Advanced Major and Single Honours programs respectively, as indicated above. Students should refer to the general faculty regulations for Cooperative Options.

(<https://catalog.umanitoba.ca/undergraduate-studies/arts/political-studies/undergraduate-studies/arts/#cooperativeeducationtext>)

## Other

Combinations of courses for the Major, Minor and Honours programs, other than those listed above may be permitted by written consent of the department head. Similarly, Honours courses may be taken by students in

the General or Advanced Major programs with the written consent of the department head.

Honours courses are open to Honours students and other advanced undergraduate students with written consent of instructor or department head.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Political Studies, B.A. Double Honours (p. 400)	4	120	
Political Studies, B.A. General (p. 404)	3	90	
Political Studies, B.A. Single Advanced Major (p. 401)	4	120	Yes
Political Studies, B.A. Single Honours (p. 398)	4	120	Yes
Political Studies Minor (Concentration) (p. 405)		18	

## Political Studies, B.A. Single Honours

### Degree Requirements

(including Co-operative Option if selected)

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Political Studies courses numbered at or above the 1000 level		6
24 credit hours of ancillary options <sup>1</sup>		24
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
21 credit hours in Political Studies courses numbered at the 2000 level		21
9 credit hours of free options <sup>2</sup>		9
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
POLS 3950	Research Methods in the Study of Politics	3
21 credit hours in Political Studies courses numbered at the 3000 level <sup>3</sup>		21
6 credit hours of free options <sup>2</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
3 credit hours in Political Studies courses numbered at or above the 3000 level <sup>3</sup>		3
18 credit hours in Political Studies courses numbered at the 4000 level		18
9 credit hours of free options <sup>2</sup>		9
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

### Co-operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will count toward the ancillary credit required in this program:		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Political Studies courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Political Studies courses).

<sup>3</sup> A student in Single or Double Honours may, with written permission of the department head, substitute: six credit hours in Honours courses numbered at the 4000-level in place of six credit hours numbered at the 3000-level.

Within the courses required above, a student must include at least six credit hours in political theory (POLS 2302, POLS 3310, POLS 3320, POLS 3350, POLS 3360, POLS 3370, POLS 3380, POLS 4310, POLS 4320 (course not offered)). Students who enrolled in a program in Political Studies prior to Fall 2019 may use the aforementioned courses to satisfy the requirement for six credit hours in political theory.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilius

304 Tier Building

arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.

- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

### Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

### Continuation in the Co-operative Education Option

#### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.



The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

#### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

#### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

#### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

#### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

### Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## Political Studies, B.A. Double Honours

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Political Studies courses numbered at or above the 1000 level		6
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>1</sup>		6

12 credit hours in free options <sup>3</sup>	12
<b>Hours</b>	<b>30</b>
<b>Year 2</b>	
12 credit hours in Political Studies courses numbered at the 2000 level	12
12 credit hours in second Honours Field as described in that unit's section of the calendar	12
6 credit hours in free options <sup>3</sup>	6
<b>Hours</b>	<b>30</b>
<b>Year 3</b>	
12 credit hours in Political Studies courses numbered at the 3000 level <sup>2</sup>	12
12 credit hours in second Honours Field as described in that unit's section of the calendar	12
6 credit hours in free options <sup>3</sup>	6
<b>Hours</b>	<b>30</b>
<b>Year 4</b>	
12 credit hours in Political Studies courses numbered at the 4000 level	12
12 credit hours in second Honours Field as described in that unit's section of the calendar	12
6 credit hours in free options <sup>3</sup>	6
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.	
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Political Studies courses).

<sup>2</sup> A student in Single or Double Honours may, with written permission of the department head, substitute: six credit hours in Honours courses numbered at the 4000-level in place of six credit hours numbered at the 3000-level.

<sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Political Studies courses).

#### Notes:

- Within the courses required above, a student must include at least six credit hours in political theory (POLS 2302, POLS 3310, POLS 3320, POLS 3350, POLS 3360, POLS 3370, POLS 3380, POLS 4310, POLS 4320 (course not offered). Students who enrolled in a program in Political Studies prior to Fall 2019 may use the aforementioned courses to satisfy the requirement for six credit hours in political theory.
- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Political Studies, B.A. Single Advanced Major Degree Requirements (including Co-operative option if selected)

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Political Studies courses numbered at or above the 1000 level		6
6 credit hours from your Minor area of Study		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
30 credit hours in Political Studies courses numbered at or above the 2000 level		30
12 credit hours in Political Studies courses numbered at or above the 3000 level		12
12 credit hours from your Minor area of Study as described in that unit's section of the calendar		12
24 credit hours from outside of your Major and Minor areas of study		24
12 credit hours of open electives		12

Refer to the information directly below this list for other important degree requirements you will need to complete prior to graduation

<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

### Co-operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will replace three credit hours in Political Studies at or above the 3000 level.		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who

declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
 

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities) , or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious  
304 Tier Building  
arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace

to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

## Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

#### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

#### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

#### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

#### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in

the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

### Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## Political Studies, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Political Studies courses numbered at or above the 1000 level		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
18 credit hours in Political Studies courses numbered at or above the 2000 level		18
6 credit hours in Political Studies courses numbered at or above the 3000 level		6
12 credit hours from your Minor area of Study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of elective credit		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a

minimum “C” average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a “Double Minor.” No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Political Studies Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Political Studies courses numbered at or above the 1000 level		6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
12 credit hours in Political Studies courses numbered at or above the 2000 level		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

## Psychology

**Head:** Dan Bailis

**Campus Address/General Office:** P404 Duff Roblin Building

**Telephone:** 204 474 9338

**Email Address:** psychughead@umanitoba.ca

**Website:** [umanitoba.ca/psychology](http://umanitoba.ca/psychology/) (<http://umanitoba.ca/psychology/>)

### Program Information

Psychology is a discipline that examines questions concerning behaviour and mental processes. Cognitive processes such as perceiving, learning, remembering, thinking, talking, and social interactions as well as the biological basis for behaviour and human development are among the issues explored. Psychology on the one hand helps us understand human and animal behaviour, but on the other also provides insights that can help and benefit individuals and society. A degree program is also offered in the Faculty of Science.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in PSYC 1200 or a grade of “C” or better in both PSYC 1211 and PSYC 1221.

A minimum “C” average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Single Advanced Major Co-operative Option

Entry and continuance in the Single Advanced Major Co-operative Option require completion of PSYC 2260 with a grade of “C” or better, and a cumulative GPA of 3.00 or higher. Students who fail to maintain the cumulative GPA of 3.00 while enrolled in the Co-operative Option will be required to withdraw from the option and revert to the Single Advanced Major or General Major program.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in PSYC 1200 or a grade of “C” or better in both PSYC 1211 and PSYC 1221, or written consent of the department head.

### Honours Program

For entry to the Honours program, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Psychology, B.A. Double Honours (p. 407)	4	96	
Psychology, B.A. General (p. 410)	3	90	
Psychology, B.A. Single Advanced Major (p. 408)	4	120	Yes
Psychology, B.A. Single Honours (p. 406)	4	120	
Psychology Minor (Concentration) (p. 412)		18	

## Psychology, B.A. Single Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
PSYC 1200	Introduction to Psychology	6
or both of:		
PSYC 1211 & PSYC 1221	Introduction à la psychologie I and Introduction à la psychologie II	
24 credit hours of ancillary options <sup>2</sup>		24
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology	3
6 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours from each of two different lettered menu categories) <sup>1</sup>		6
6 credit hours of ancillary options <sup>2</sup>		6
12 credit hours of free options <sup>3</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
PSYC 3200	Thinking Critically About Psychological Research	3
PSYC 3340	Design and Analysis for Psychological Experiments	3
PSYC 3630	Psychological Measurement and Assessment	3
9 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours each of at least two different lettered menu courses not taken in Year 2)		9
3 credit hours in Psychology courses numbered at the 4000 level or one of:		3
PSYC 3520	Independent Research in Psychology 1	
PSYC 3560	Supervised Field Study in Psychology	
PSYC 3590	Independent Research in Psychology 2	
9 credit hours of free options <sup>3</sup>		9
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
PSYC 4520	Honours Research Seminar	6
6 credit hours in Psychology courses numbered at the 4000 level		6

9 credit hours in Psychology courses numbered at the 2000 or 3000 level, including any remaining menu category 9

9 credit hours of free options<sup>3</sup> 9

Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.

<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Lettered menu categories are as follows:  
 Category A: Personality/Social PSYC 2490, PSYC 2530, PSYC 2540  
 Category B: Developmental PSYC 2290  
 Category C: Learning PSYC 2440, PSYC 2470  
 Category D: Cognitive PSYC 2480  
 Category E: Biological PSYC 2360

<sup>2</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Psychology courses).

<sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Psychology courses).

### Note:

Honours courses: PSYC 3340 and all 4000 level courses.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

- The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
- In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.

- Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
- Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.

Hours	30
<b>Total Hours</b>	<b>120</b>

- Lettered menu categories are as follows:  
Category A: Personality/Social PSYC 2490 PSYC 2530, PSYC 2540  
Category B: Developmental PSYC 2290  
Category C: Learning PSYC 2440, PSYC 2470  
Category D: Cognitive PSYC 2480  
Category E: Biological PSYC 2360
- Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Psychology courses).
- Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Psychology courses).
- Students hoping to pursue graduate studies should also consider adding an additional 4000 level course, or PSYC 3520 or PSYC 3560 or PSYC 3590 as a free option in Year 4.

**Note:**

- Honours courses: PSYC 3340 and all 4000 level courses.
- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

- The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
- In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
- Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
- Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three

## Psychology, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
PSYC 1200	Introduction to Psychology	6
or both of:		
PSYC 1211 & PSYC 1221	Introduction à la psychologie I and Introduction à la psychologie II	
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>2</sup>		6
12 credit hours in free options <sup>3</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology	3
6 credit hours in Psychology courses numbered at the 2000 level (3 hours from each of two different lettered menu categories) <sup>1</sup>		6
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>3</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
PSYC 3200	Thinking Critically About Psychological Research	3
PSYC 3340	Design and Analysis for Psychological Experiments	3
PSYC 3630	Psychological Measurement and Assessment	3
3 credit hours in Psychology courses numbered at the 2000 level (3 hours from one of the remaining different lettered menu categories) <sup>1</sup>		3
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>3</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
PSYC 4520	Honours Research Seminar	6
6 credit hours in Psychology courses numbered at the 4000 level		6
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>3,4</sup>		6



credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Psychology, B.A. Single Advanced Major

### Degree Requirements

(incl. Co-operative Education option if selected)

Course	Title	Hours
<b>Year 1</b>		
Select either:		6
PSYC 1200	Introduction to Psychology	
or both of:		
PSYC 1211 & PSYC 1221	Introduction à la psychologie I and Introduction à la psychologie II	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology	3
6 additional credit hours in Psychology courses numbered at the 2000 level (3 hours from each of two different lettered menu categories) <sup>1</sup>		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours from outside of your Major and Minor areas of study		12
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
12 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours from each of two different lettered menu courses not taken in Year 2) <sup>1</sup>		12
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside of your Major and Minor areas of study		6
6 credit hours of free options		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
18 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours from any remaining lettered menu category) <sup>1</sup>		18
6 credit hours from outside of your Major and Minor areas of study		6
6 credit hours of free options		6
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

### Co-operative Education Option

Course	Title	Hours
<b>Years 3-4</b>		
If the Co-operative Education Option is selected, time to completion will be extended by 12 months and the following three, 1 credit hour work term courses will replace three credit hours of 2000 or 3000 level Psychology courses required in year 4		
ARTS 3010	Arts Co-operative Option 1	1
ARTS 3020	Arts Co-operative Option 2	1
ARTS 3030	Arts Co-operative Option 3	1
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

- <sup>1</sup> Lettered menu categories are as follows:  
 Category A: Personality/Social PSYC 2490, PSYC 2530, PSYC 2540  
 Category B: Developmental PSYC 2290  
 Category C: Learning PSYC 2440, PSYC 2470  
 Category D: Cognitive PSYC 2480  
 Category E: Biological PSYC 2360

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

- A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.
- The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**
- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who

declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities) , or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Co-operative Education in the Faculty of Arts

### Co-operative Education Office

Co-op Coordinator: Laura Basilious  
304 Tier Building  
arts.coop@umanitoba.ca (arts.coop@umanitoba.ca)

### Co-operative Education in the Faculty of Arts

Co-operative Education is available to students in any of the Bachelor of Arts Advanced or Bachelor of Arts Honours degree programs whose department offers Co-operative Education as an option. Co-op is an arrangement in which students spend alternating in academic terms and employment.

There are several advantages to Co-operative Education, including but not limited to the following:

Applying theoretical knowledge gained in the classroom to real life, working situations and applying knowledge gained in the workplace

to the theory being taught in class. Both the academic and practical experiences are enriched by the other.

- Students who complete Co-op are successful at exploring and selecting areas of specialization within their chosen field of study.
- Enhanced professional development through networking, participation in conferences and workshops, acquisition of foundational skills around strategies for seeking and obtaining employment.
- Students earn competitive wages and thus have the opportunity to defray the costs of their education by participating in Co-operative Education.

## Academic Regulations

### Applying to the Co-operative Education Program

Students must check with the Faculty of Arts Co-op Coordinator for information regarding application deadlines and start dates. Students will be notified of their provisional acceptance to the program by September each year.

Acceptance to the program is dependent upon the student receiving a job placement. Employers will select the student they wish to employ and students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative option. The department reserves the right to identify and select the best qualified candidates.

Applicants will be interviewed and approved by the Co-op staff and departmental faculty advisors. Final acceptance to the program will be confirmed in writing by the Co-op Office.

International Students planning to complete courses or programs that require work placement must obtain a valid work permit, in addition to maintaining a valid study permit. Please contact the International Centre for further information on the requirements that need to be met in order to apply for Co-op Option work placement.

### Entrance to the Co-operative Education Option

To enter a Faculty of Arts Co-op program, a student must be eligible to enter the specific Advanced Degree or Honours Degree Program offered by the department offering a Co-op program. Departments may also stipulate additional requirements for entering the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding entering the Bachelor of Arts Advanced and Honours degrees, including any related Co-operative Education options.

The Co-operative Education option is not available to students pursuing the three-year Bachelor of Arts General Degree or Bachelor of Arts Integrated Studies Degree.

The normal point of entry to a Faculty of Arts Co-op program is following the completion of second year. Students must have completed at least 48 credit hours in order to be eligible to enter Arts Co-op.

Students are required to complete an application form, available in the Faculty of Arts Co-op Coordinator's office. Students are also required to register in the appropriate Co-op courses and pay the applicable course and administrative fees prior to beginning their work placement. Normally, no portion of the administration fee will be refunded.

## Continuation in the Co-operative Education Option

### Academic Term Requirements

All performance regulations governing Faculty of Arts degree programs apply to students in programs with Co-operative Education options. Departments may also stipulate additional requirements for continuing in the Co-op option related to their program. Please refer to Faculty Regulations (p. 211) and the specific departmental calendar entry for information regarding continuing in the Bachelor of Arts Advanced and Honours degrees, including the related Co-op options.

The coursework requirements of the different Co-operative education options are equivalent to the coursework requirements outlined in each Advanced or Honours degree program offering Co-op as an option.

Each work term is assigned one (1) credit hour. The combination of the minimum 3 employment terms is equal to one 3 credit hour course for use toward the Bachelor of Arts degree.

### Course Load Expectations

It is recommended that students in a Co-op option maintain full time status (min. 9 credit hours per academic term) when not completing a work term placement.

### Employment Term Requirements

#### Number and Length of Terms

All Co-operative Options will include a minimum of 12 months spent in employment terms with a Department and Faculty approved employer. Normally each employment term will be completed with a single employer.

#### Limits on Coursework While Completing a Work Term

While completing a work term, students are not permitted to take more than one course at a time.

#### Grading of Work Terms

Co-operative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the student's department and the Faculty of Arts Co-op Coordinator.

Co-operative Option work term reports are graded as Pass/Fail. In order to remain in the Co-operative Option, students must obtain a grade of "Pass" for each term work report. Each department will provide students with instructions regarding the content and format requirements of the employment reports.

#### Unsatisfactory Performance

Indications of unsatisfactory performance by a student in an employment term will be thoroughly investigated by the student's department and the Faculty of Arts Co-op Coordinator. If the investigation finds that benefits from further professional training are questionable, the student may be required to withdraw from the Co-operative Option. The student would then be eligible to enter the regular Advanced or Honours program, provided the student meets the minimum academic requirements of the target program.

#### Schedule and Sequence

The Co-operative option consists of both academic terms and work terms. The sequence of academic terms and work terms will be variable to suit the needs of each department. In order to satisfy course and program requirements, timetables may differ from the regular program. Except where stipulated by specific Faculty and Departmental regulations related to the different Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in

the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education option. Students must be aware of terms when required courses may or may not be offered and plan their timetables accordingly.

Students are expected to follow the academic/employment term sequence defined by their department, from entry to completion.

### Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements set out by the department offering Co-operative Education;
- Failure to maintain the minimum academic requirements of the Faculty of Arts degree they are pursuing (Advanced or Honours);
- Unsatisfactory performance in the workplace during an employment term; or,
- Any violation of the University of Manitoba Academic Integrity regulations, in any course.

Students who wish to withdraw voluntarily from the Co-op Program may do so in writing to the Faculty of Arts Co-op Coordinator prior to:

- participating in the recruitment period (applications and/or interviews);
- accepting a position for a work term placement;
- the VW deadline for the term in question.

A student who selects, or is required, to withdraw after participating in the recruitment period or after accepting a position with an employer for a work term placement without written approval of the Co-op Coordinator will have the following notation placed on their transcript: "Required to Withdraw from the Co-operative Education Option"

## Graduation Requirements of the Co-operative Education Option

The Bachelor of Arts Advanced and Honours degrees are comprised of 120 credit hours. Students who intend to complete the Co-op Option must also successfully complete a minimum of three, four-month work term placements. Each work term is assigned one (1) credit hour. The combination of the minimum three employment terms is equal to one, three credit hour course for use toward the requirements of the Bachelor of Arts degree.

Work-term credit hours may only be used toward programs offering a Co-operative Education Option.

Except where stipulated by specific Faculty and Departmental regulations related to the various Co-operative Education options, students working toward the completion of Co-op will be evaluated and assessed in the same manner as regular students and all rules and regulations of the Faculty of Arts continue to apply to students in the Co-operative Education Option.

## Psychology, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
Select either:		6

PSYC 1200	Introduction to Psychology	
or both of:		
PSYC 1211 & PSYC 1221	Introduction à la psychologie I and Introduction à la psychologie II	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology	3
6 additional credit hours in Psychology courses numbered at the 2000 level (3 hours from each of two different lettered menu categories) <sup>1</sup>		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside your Major and Minor areas of study		6
6 credit hours of open electives		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
12 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours from each of two different lettered menu courses not taken in Year 2) <sup>1</sup>		12
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside your Major and Minor areas of study		6
6 credit hours of open electives		6
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> Lettered menu categories are as follows:  
 Category A: Personality/Social PSYC 2490, PSYC 2530, PSYC 2540  
 Category B: Developmental PSYC 2290  
 Category C: Learning PSYC 2440, PSYC 2470  
 Category D: Cognitive PSYC 2480  
 Category E: Biological PSYC 2360

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social

Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.
 

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.
5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Psychology Minor (Concentration)

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
Select either:		6
PSYC 1200	Introduction to Psychology	
or both of:		
PSYC 1211 & PSYC 1221	Introduction à la psychologie I and Introduction à la psychologie II	
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
6 credit hours in Psychology courses numbered at the 2000 or 3000 level		6
<b>Hours</b>		<b>6</b>
<b>Year 3</b>		
6 credit hours in Psychology courses numbered at the 2000 or 3000 level		6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>18</b>

## Religion

**Head:** Kenneth MacKendrick

**Campus Address/General Office:** 331 Fletcher Argue Building

**Telephone:** 204 474 6277

**Email Address:** religion@umanitoba.ca

**Website:** [umanitoba.ca/religion](http://umanitoba.ca/religion/) (<http://umanitoba.ca/religion/>)

### Program Information

We are a world religions department. Our approach is interdisciplinary and engages a wide range of human activity commonly deemed “religious,” seeking to understand how religions function, how religious discourse evolves, why certain religious perspectives gain prominence and how they are contested. We research and teach about a range of religions, past and present, from around the world, investigating the languages, ethical systems, practices, organizations, and institutions within which such religions are defined, refined, rejected, or renewed. Given the diversity of this study, such theoretical and methodological questions are viewed as central to the coherence of our courses, programs, and fields.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in six credit hours in Religion.

A minimum “C” average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in six credit hours in Religion.

### Honours Program

For entry to the Honours program, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Other

In addition to courses numbered at the 1000-level, the Department of Religion offers a number of upper-level courses for which there are prerequisites; see course descriptions. (p. )

It is not necessary for students to enter the offerings in Religion by way of courses numbered at the 1000-level. Students in any year or program may register for any course in Religion provided they satisfy course and program prerequisites. With written permission of the department head students may take courses numbered at the 4000-level.

In cooperation with St. Paul’s College, the Department of Religion offers an arrangement of courses with special emphasis in Catholic studies as an option for students intending to Major or Minor in Religion. This special emphasis involves completing course RLGN 2850 and selecting relevant courses offered in the Faculty of Arts and the School of Art. Contact the Department of Religion prior to registration in order to select appropriate courses.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Religion, B.A., Double Advanced Major (p. 417)	4	120	
Religion, B.A. Double Honours (p. 414)	4	96	
Religion, B.A. General (p. 419)	3	90	
Religion, B.A. Single Advanced Major (p. 415)	4	120	
Religion, B.A. Single Honours (p. 413)	4	120	
Religion Minor (Concentration) (p. 420)		18	

## Religion, B.A. Single Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Religion courses		6
24 credit hours of ancillary options <sup>1</sup>		24
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
18 credit hours in Religion courses numbered at or above the 2000 level		18
12 credit hours of free options <sup>2</sup>		12
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
15 credit hours in Religion courses numbered at or above the 3000 level		15
15 credit hours of free options <sup>2</sup>		15
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
RLGN 4310	Method and Theory: History of the Study of Religion	3
RLGN 4320	Theoretical Approaches to the Study of Religion	3
12 credit hours in Religion courses numbered at the 4000 level		12
12 credit hours of free options <sup>2</sup>		12
Within the Religion courses required above (years 1-4), students must complete courses from at least three religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism. Refer to the lists below for courses that satisfy each of the religious tradition categories.		
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Religion courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Religion courses).

### Notes:

- Honours courses: all 4000 level courses.

## Religious Traditions

Within the Religion courses required above, students must complete courses from at least three religious tradition categories: Buddhism, Christianity, Hinduism, Islam, Judaism

Religious Traditions are categorized as follows:

### Buddhism

Course	Title	Hours
RLGN 2020	Introduction to Buddhism	3
RLGN 3150	Buddhism in East Asia	3
RLGN 3152	Buddhism in the West	3
RLGN 3162	Buddhist Philosophy	3
RLGN 3260	Indian Buddhism	3
RLGN 3266	Readings in Buddhist Texts	3
RLGN 4100	Advanced Studies in Buddhism	3

### Christianity

Course	Title	Hours
RLGN 1350	The History of Eastern Christianity	6
RLGN 2036	Introduction to Christianity	3
RLGN 2040	Early Modern Christianity in a Global Context	3
RLGN 2052	Conservative Christianity in the United States	3
RLGN 2114	Monks, Mystics and Manuscripts in Medieval Christianity	3
RLGN 2170	Introduction to the New Testament	3
RLGN 2520	Eastern Christianity in North America	3
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 2840	The Second Vatican Council	3
RLGN 2850	Contemporary Issues in Roman Catholicism	3
RLGN 3230	Gender, the Body, and Sexuality in Early Christianity	3
RLGN 3870	The Thought of Bernard Lonergan	3
RLGN 4280	Advanced Studies in Early Christianity	3
RLGN 4282	Advanced Studies in Medieval Christianity	3

**Hinduism**

Course	Title	Hours
RLGN 2010	Introduction to Hinduism	3
RLGN 3210	Indian Philosophy	3
RLGN 4060	The Yoga Tradition	3
RLGN 4190	Advanced Studies in Hinduism	3

**Islam**

Course	Title	Hours
RLGN 2100	Approaches to the Qur'an	3
RLGN 2778	Introduction to Islam	3
RLGN 2790	Contemporary Islam	3
RLGN 3190	Images of the Prophet Muhammad: Classical and Contemporary Perspectives	3
RLGN 3194	Islamic Philosophy	3
RLGN 4180	Advanced Studies in Islam	3

**Judaism**

Course	Title	Hours
RLGN 1120	Biblical Hebrew	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2162	Great Jewish Books	3
RLGN 2770	Contemporary Judaism	3
RLGN 3280	Hasidism	3
RLGN 3800	Selected Old Testament Literature and Themes	6
RLGN 3810	The Talmud	3
RLGN 3824	Kabbalah	3

While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).

4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Religion, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Religion courses		6
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>1</sup>		6
12 credit hours in free options <sup>2</sup>		12
<b>Hours</b>		<b>30</b>
<b>Years 1-4</b>		
Within the Religion courses required in this program, students must complete courses from at least three religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism. Refer to the lists below for courses that satisfy each of the religious tradition categories.		
<b>Hours</b>		<b>0</b>
<b>Year 2</b>		
12 credit hours in Religion courses numbered at the 2000 level		12
12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>2</sup>		6
<b>Hours</b>		<b>30</b>
<b>Years 3-4</b>		
9 credit hours in Religion courses numbered at or above the 3000 level		9
9 credit hours in Religion courses numbered at the 4000 level		9
RLGN 4310	Method and Theory: History of the Study of Religion	3
RLGN 4320	Theoretical Approaches to the Study of Religion	3
24 credit hours in second Honours field as described in that unit's section of the calendar.		24
12 credit hours in free options <sup>2</sup>		12
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Religion and second Honours field courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Religion courses).

**Notes:**

- Honours courses: all 4000 level courses
- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

## Religious Traditions

Within the Religion courses required above, students must complete courses from at least three religious tradition categories: Buddhism, Christianity, Hinduism, Islam, Judaism

Religious Traditions are categorized as follows:

### Buddhism

Course	Title	Hours
RLGN 2020	Introduction to Buddhism	3
RLGN 3150	Buddhism in East Asia	3
RLGN 3152	Buddhism in the West	3
RLGN 3162	Buddhist Philosophy	3
RLGN 3260	Indian Buddhism	3
RLGN 3266	Readings in Buddhist Texts	3
RLGN 4100	Advanced Studies in Buddhism	3

### Christianity

Course	Title	Hours
RLGN 1350	The History of Eastern Christianity	6
RLGN 2036	Introduction to Christianity	3
RLGN 2040	Early Modern Christianity in a Global Context	3
RLGN 2052	Conservative Christianity in the United States	3
RLGN 2114	Monks, Mystics and Manuscripts in Medieval Christianity	3
RLGN 2170	Introduction to the New Testament	3
RLGN 2520	Eastern Christianity in North America	3
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 2840	The Second Vatican Council	3
RLGN 2850	Contemporary Issues in Roman Catholicism	3
RLGN 3230	Gender, the Body, and Sexuality in Early Christianity	3
RLGN 3870	The Thought of Bernard Lonergan	3
RLGN 4280	Advanced Studies in Early Christianity	3
RLGN 4282	Advanced Studies in Medieval Christianity	3

### Hinduism

Course	Title	Hours
RLGN 2010	Introduction to Hinduism	3
RLGN 3210	Indian Philosophy	3
RLGN 4060	The Yoga Tradition	3
RLGN 4190	Advanced Studies in Hinduism	3

### Islam

Course	Title	Hours
RLGN 2100	Approaches to the Qur'an	3
RLGN 2778	Introduction to Islam	3
RLGN 2790	Contemporary Islam	3
RLGN 3190	Images of the Prophet Muhammad: Classical and Contemporary Perspectives	3

RLGN 3194	Islamic Philosophy	3
RLGN 4180	Advanced Studies in Islam	3

### Judaism

Course	Title	Hours
RLGN 1120	Biblical Hebrew	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2162	Great Jewish Books	3
RLGN 2770	Contemporary Judaism	3
RLGN 3280	Hasidism	3
RLGN 3800	Selected Old Testament Literature and Themes	6
RLGN 3810	The Talmud	3
RLGN 3824	Kabbalah	3

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Religion, B.A. Single Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Religion courses at or above the 1000 level		6



6 credit hours from your Minor area of study as described in that unit's section of the calendar.	6
18 credit hours from outside of your Major and Minor areas of study	18
<b>Hours</b>	<b>30</b>
<b>Years 2-4</b>	
6 credit hours in Religion courses at or above the 1000 level	6
24 credit hours in Religion courses at or above the 2000 level	24
12 credit hours in Religion courses numbered at the 4000 level	12
Within the Religion courses required above, students must complete courses from at least three religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism. Refer to the lists below for courses that satisfy each of the religious tradition categories.	
12 credit hours from your Minor area of study as described in that unit's section of the calendar.	12
24 credit hours from outside your Major and Minor areas of study.	24
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

## Religious Traditions

Within the Religion courses required above, students must complete courses from at least three religious tradition categories: Buddhism, Christianity, Hinduism, Islam, Judaism

Religious Traditions are categorized as follows:

### Buddhism

Course	Title	Hours
RLGN 2020	Introduction to Buddhism	3
RLGN 3150	Buddhism in East Asia	3
RLGN 3152	Buddhism in the West	3
RLGN 3162	Buddhist Philosophy	3
RLGN 3260	Indian Buddhism	3
RLGN 3266	Readings in Buddhist Texts	3
RLGN 4100	Advanced Studies in Buddhism	3

### Christianity

Course	Title	Hours
RLGN 1350	The History of Eastern Christianity	6
RLGN 2036	Introduction to Christianity	3
RLGN 2040	Early Modern Christianity in a Global Context	3
RLGN 2052	Conservative Christianity in the United States	3
RLGN 2114	Monks, Mystics and Manuscripts in Medieval Christianity	3
RLGN 2170	Introduction to the New Testament	3
RLGN 2520	Eastern Christianity in North America	3
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 2840	The Second Vatican Council	3
RLGN 2850	Contemporary Issues in Roman Catholicism	3
RLGN 3230	Gender, the Body, and Sexuality in Early Christianity	3
RLGN 3870	The Thought of Bernard Lonergan	3

RLGN 4280	Advanced Studies in Early Christianity	3
RLGN 4282	Advanced Studies in Medieval Christianity	3

### Hinduism

Course	Title	Hours
RLGN 2010	Introduction to Hinduism	3
RLGN 3210	Indian Philosophy	3
RLGN 4060	The Yoga Tradition	3
RLGN 4190	Advanced Studies in Hinduism	3

### Islam

Course	Title	Hours
RLGN 2100	Approaches to the Qur'an	3
RLGN 2778	Introduction to Islam	3
RLGN 2790	Contemporary Islam	3
RLGN 3190	Images of the Prophet Muhammad: Classical and Contemporary Perspectives	3
RLGN 3194	Islamic Philosophy	3
RLGN 4180	Advanced Studies in Islam	3

### Judaism

Course	Title	Hours
RLGN 1120	Biblical Hebrew	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2162	Great Jewish Books	3
RLGN 2770	Contemporary Judaism	3
RLGN 3280	Hasidism	3
RLGN 3800	Selected Old Testament Literature and Themes	6
RLGN 3810	The Talmud	3
RLGN 3824	Kabbalah	3

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.

4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. **Residency Requirement:** A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Religion, B.A., Double Advanced Major

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Religion courses numbered at or above the 1000 level		6
6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		6
18 credit hours from outside of the two Advanced Major subject fields		18
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
6 credit hours in Religion courses numbered at or above the 1000 level		6
24 credits hours in Religion courses numbered at or above the 2000 level		24
6 credit hours in Religion courses numbered at the 4000 level		6
Within the Religion courses required above, students must complete courses from at least three religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism. Refer to the lists below for courses that satisfy each of the religious tradition categories.		
36 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar		36
18 credit hours from outside of the two Advanced Major subject fields		18
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>90</b>
<b>Total Hours</b>		<b>120</b>

### Religious Traditions

Within the Religion courses required above, students must complete courses from at least three religious tradition categories: Buddhism, Christianity, Hinduism, Islam, Judaism

Religious Traditions are categorized as follows:

#### BUDDHISM

Course	Title	Hours
RLGN 2020	Introduction to Buddhism	3
RLGN 3150	Buddhism in East Asia	3
RLGN 3152	Buddhism in the West	3
RLGN 3162	Buddhist Philosophy	3
RLGN 3266	Readings in Buddhist Texts	3
RLGN 4100	Advanced Studies in Buddhism	3

#### Christianity

Course	Title	Hours
RLGN 1350	The History of Eastern Christianity	6
RLGN 2036	Introduction to Christianity	3
RLGN 2040	Early Modern Christianity in a Global Context	3

RLGN 2052	Conservative Christianity in the United States	3
RLGN 2114	Monks, Mystics and Manuscripts in Medieval Christianity	3
RLGN 2170	Introduction to the New Testament	3
RLGN 2520	Eastern Christianity in North America	3
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 2840	The Second Vatican Council	3
RLGN 2850	Contemporary Issues in Roman Catholicism	3
RLGN 3230	Gender, the Body, and Sexuality in Early Christianity	3
RLGN 3870	The Thought of Bernard Lonergan	3
RLGN 4280	Advanced Studies in Early Christianity	3
RLGN 4282	Advanced Studies in Medieval Christianity	3

### Hinduism

Course	Title	Hours
RLGN 2010	Introduction to Hinduism	3
RLGN 3210	Indian Philosophy	3
RLGN 4060	The Yoga Tradition	3
RLGN 4190	Advanced Studies in Hinduism	3

### Islam

Course	Title	Hours
RLGN 2100	Approaches to the Qur'an	3
RLGN 2778	Introduction to Islam	3
RLGN 2790	Contemporary Islam	3
RLGN 3190	Images of the Prophet Muhammad: Classical and Contemporary Perspectives	3
RLGN 3194	Islamic Philosophy	3
RLGN 4180	Advanced Studies in Islam	3

### Judaism

Course	Title	Hours
RLGN 1120	Biblical Hebrew	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2162	Great Jewish Books	3
RLGN 2770	Contemporary Judaism	3
RLGN 3280	Hasidism	3
RLGN 3800	Selected Old Testament Literature and Themes	6
RLGN 3810	The Talmud	3
RLGN 3824	Kabbalah	3

While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.

8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities) , or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Religion, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Religion courses numbered at or above the 1000 level		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
6 credit hours in Religion courses numbered at or above the 1000 level		6
12 credit hours in Religion courses numbered at or above the 2000 level		12
6 credit hours in Religion courses numbered at or above the 3000 level		6
Within the Religion courses required above, students must complete courses from at least two religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism. Refer to the lists below for courses that satisfy each of the religious tradition categories.		
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

### Religious Traditions

Within the Religion courses required above, students must complete courses from at least two religious tradition categories: Buddhism, Christianity, Hinduism, Islam, Judaism

Religious Traditions are categorized as follows:

#### Buddhism

Course	Title	Hours
RLGN 2020	Introduction to Buddhism	3
RLGN 3150	Buddhism in East Asia	3
RLGN 3152	Buddhism in the West	3
RLGN 3162	Buddhist Philosophy	3

RLGN 3260	Indian Buddhism	3
RLGN 3266	Readings in Buddhist Texts	3
RLGN 4100	Advanced Studies in Buddhism	3

#### Christianity

Course	Title	Hours
RLGN 1350	The History of Eastern Christianity	6
RLGN 2036	Introduction to Christianity	3
RLGN 2040	Early Modern Christianity in a Global Context	3
RLGN 2052	Conservative Christianity in the United States	3
RLGN 2114	Monks, Mystics and Manuscripts in Medieval Christianity	3
RLGN 2170	Introduction to the New Testament	3
RLGN 2520	Eastern Christianity in North America	3
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 2840	The Second Vatican Council	3
RLGN 2850	Contemporary Issues in Roman Catholicism	3
RLGN 3230	Gender, the Body, and Sexuality in Early Christianity	3
RLGN 3870	The Thought of Bernard Lonergan	3
RLGN 4280	Advanced Studies in Early Christianity	3
RLGN 4282	Advanced Studies in Medieval Christianity	3

#### Hinduism

Course	Title	Hours
RLGN 2010	Introduction to Hinduism	3
RLGN 3210	Indian Philosophy	3
RLGN 4060	The Yoga Tradition	3
RLGN 4190	Advanced Studies in Hinduism	3

#### Islam

Course	Title	Hours
RLGN 2100	Approaches to the Qur'an	3
RLGN 2778	Introduction to Islam	3
RLGN 2790	Contemporary Islam	3
RLGN 3190	Images of the Prophet Muhammad: Classical and Contemporary Perspectives	3
RLGN 3194	Islamic Philosophy	3
RLGN 4180	Advanced Studies in Islam	3

#### Judaism

Course	Title	Hours
RLGN 1120	Biblical Hebrew	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2162	Great Jewish Books	3
RLGN 2770	Contemporary Judaism	3
RLGN 3280	Hasidism	3
RLGN 3800	Selected Old Testament Literature and Themes	6
RLGN 3810	The Talmud	3
RLGN 3824	Kabbalah	3

While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and

**Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:****Ten Faculty Requirements for Graduating with a B.A. General Degree**

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or

Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.

9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Religion Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours in Religion courses at or above the 1000 level		6
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
6 credit hours in Religion courses at or above the 1000 level		6
6 credit hours in Religion courses at or above the 2000 level		6
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

# Sociology and Criminology

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## Sociology Program Information

Sociology examines the patterns of interaction among individuals and the group activity that emerges from such interaction. A basic premise is that social behaviour, and society itself, cannot be fully understood simply by studying the individuals involved. Sociology has a special interest in all those intermediate forms of association between the family and the state which together comprise much of the basis for social solidarity and cohesion. Whether individuals cooperate, compete, or fight is in large measure determined by forces outside themselves, by social forces that encourage or restrain their behaviour.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in SOC 1000 or a grade of "C" or better in both SOC 1211 and SOC 1221.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in SOC 1000 or a grade of "C" or better in both SOC 1211 and SOC 1221.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Criminology, B.A. General (p. 427)	3	90	
Criminology, B.A. Single Honours (p. 426)	4	120	
Sociology, B.A. Double Honours (p. 422)	4	120	
Sociology, B.A. General (p. 424)	3	90	
Sociology, B.A. Single Advanced Major (p. 423)	4	120	
Sociology, B.A. Single Honours (p. 421)	4	120	
Sociology Minor (Concentration) (p. 425)		18	

## Sociology, B.A. Single Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
SOC 1000	Introduction to Sociology	3

### Honours Program

For entry to the Honours program, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

## Criminology Program Information

Criminology is concerned with the complex social phenomena of crime and criminalization. The criminology program engages students in a systematic study of the nature and extent of crime and criminalization along with the array of agencies and programs designed to prevent, control, and respond to criminal activity over time and place. Attention is given to specific issues related to gender, race, class and crime, youth and crime, violence and victimization, criminal law and procedure, policing and crime prevention, restorative justice, and global criminology. Courses in the criminology program are taught primarily from a sociological perspective, with emphasis placed on research, program development, and policy analysis.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in SOC 1000 or a grade of "C" or better in both SOC 1211 and SOC 1221.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

It is not possible to have a Major in Criminology and a Minor in Sociology.

### Honours Program

For entry to the Honours program, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

## Programs

or both of:		
SOC 1211	Introduction à la microsociologie	
& SOC 1221	and Introduction à la macrosociologie	
27 credit hours of ancillary options <sup>2</sup>		27
		<b>Hours</b>
		<b>30</b>

Year 2		
SOC 2010	Critical Issues in Sociology	3
SOC 2220	Sociological Theoretical Foundations	3
SOC 2292	Understanding Social Research	3
SOC 2294	Understanding Social Statistics	3
9 credit hours in Sociology <sup>1</sup>		9
6 credit hours of ancillary options <sup>2</sup>		6
3 credit hours of free options <sup>3</sup>		3
<b>Hours</b>		<b>30</b>

Year 3		
6 credit hours from:		6
SOC 3310	Theorizing Crime, Law, and Social Justice	
SOC 3330	Origins of Sociological Thought	
SOC 3350	Feminism and Sociological Theory	
SOC 3360	Theories in Social Psychology	
SOC 3380	Power, Politics and the Welfare State	
SOC 3390	Contemporary Sociological Theory	
SOC 3700	Sociology of Law	
12 credit hours in Sociology courses numbered at the 2000 or 3000 level <sup>1</sup>		12
3 credit hours of ancillary options <sup>2</sup>		3
9 credit hours of free options <sup>3</sup>		9
<b>Hours</b>		<b>30</b>

Year 4		
SOC 4450	Honours Seminar	6
SOC 4460	Advanced Sociological Theory	3
SOC 4560	Advanced Sociological Theory	3
SOC 4570	Quantitative Social Analysis	3
SOC 3820 or SOC 4580	Qualitative and Historical Methods in Sociology or Social Research Methods	3
12 credit hours of free options <sup>3</sup>		12
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students who use SOC 1200 (6) or both of SOC 1211 and SOC 1221 to satisfy the year one requirements will be required to complete three (3) fewer credit hours in Sociology courses numbered at the 2000 or 3000 level.

<sup>2</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Sociology courses).

<sup>3</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Sociology courses).

**Note:**

- Honours courses: SOC 2010 and all 4000 level courses.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Sociology, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
SOC 1000	Introduction to Sociology	3
or both of:		
SOC 1211 & SOC 1221	Introduction à la microsociologie and Introduction à la macrosociologie	
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>1</sup>		6
12 credit hours in free options <sup>2</sup>		12
<b>Hours</b>		<b>27</b>

Year 2		
SOC 2010	Critical Issues in Sociology	3
SOC 2220	Sociological Theoretical Foundations	3
SOC 2292	Understanding Social Research	3
SOC 2294	Understanding Social Statistics	3
At least 12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>2</sup>		6
<b>Hours</b>		<b>30</b>

Year 3		
6 credit hours from:		6
SOC 3310	Theorizing Crime, Law, and Social Justice	
SOC 3330	Origins of Sociological Thought	

SOC 3350	Feminism and Sociological Theory	
SOC 3360	Theories in Social Psychology	
SOC 3380	Power, Politics and the Welfare State	
SOC 3390	Contemporary Sociological Theory	
SOC 3700	Sociology of Law	
6 credit hours in Sociology courses numbered at the 2000 or 3000 level <sup>3</sup>		6
At least 12 credit hours in second Honours Field as described in that unit's section of the calendar		12
6 credit hours in free options <sup>2</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
SOC 4450	Honours Seminar	6
SOC 4460	Advanced Sociological Theory	3
SOC 4560	Advanced Sociological Theory	3
SOC 4570	Quantitative Social Analysis	3
SOC 3820 or SOC 4580	Qualitative and Historical Methods in Sociology or Social Research Methods	3
At least 12 credit hours in second Honours Field as described in that unit's section of the calendar		12
3 credit hours in free options <sup>2</sup>		3
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>33</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Sociology or second Honours field courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Sociology courses).

<sup>3</sup> Students who use SOC 1200 (6) or both of SOC 1211 and SOC 1221 to satisfy the year one requirements will be required to complete three (3) fewer credit hours in Sociology courses numbered at the 2000 or 3000 level.

**Note:**

- Honours courses: SOC 2010 and all 4000 level courses.
- If the second Honours field chosen is Economics, students need to be aware that Economics requires an additional 3 credit hours of required course work in their Double Honours program.

**While completing the courses listed above, students in the B.A. Honours Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Four Faculty Requirements for Graduating with a B.A. Honours Degree**

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the

Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Sociology, B.A. Single Advanced Major

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
SOC 1000	Introduction to Sociology	3
or both of:		
SOC 1211 & SOC 1221	Introduction à la microsociologie and Introduction à la macrosociologie	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
21 credit hours from outside of your Major and Minor areas of study		21
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
SOC 2220	Sociological Theoretical Foundations	3
SOC 2292	Understanding Social Research	3
SOC 2294	Understanding Social Statistics	3
6 credit hours in Sociology courses numbered at the 2000 or 3000 level <sup>1</sup>		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
9 credit hours from outside of your Major and Minor areas of study		9
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
6 credit hours from:		6
SOC 3310	Theorizing Crime, Law, and Social Justice	
SOC 3330	Origins of Sociological Thought	
SOC 3350	Feminism and Sociological Theory	
SOC 3360	Theories in Social Psychology	
SOC 3380	Power, Politics and the Welfare State	
SOC 3390	Contemporary Sociological Theory	



SOC 3700	Sociology of Law	
6 credit hours in Sociology numbered at the 2000 or 3000 level <sup>1</sup>		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
6 credit hours from outside of your Major and Minor areas of study		6
6 credit hours of open electives		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
18 credit hours in Sociology courses numbered at the 2000 or 3000 level		18
6 credit hours from outside of your Major and Minor areas of study		6
6 credit hours of open electives		6
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students who use SOC 1200 (6) or both of SOC 1211 and SOC 1221 to satisfy the year one requirements will be required to complete three (3) fewer credit hours in Sociology courses numbered at the 2000 or 3000 level.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
 

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Sociology, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
SOC 1000	Introduction to Sociology	3
or both of:		
SOC 1211 & SOC 1221	Introduction à la microsociologie and Introduction à la macrosociologie	6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6

21 credit hours from outside of your Major and Minor areas of study	21
<b>Hours</b>	<b>30</b>
<b>Years 2-3</b>	
SOC 2220 Sociological Theoretical Foundations	3
SOC 2292 Understanding Social Research	3
SOC 2294 Understanding Social Statistics	3
One of:	3
SOC 3310 Theorizing Crime, Law, and Social Justice	
SOC 3330 Origins of Sociological Thought	
SOC 3350 Feminism and Sociological Theory	
SOC 3360 Theories in Social Psychology	
SOC 3380 Power, Politics and the Welfare State	
SOC 3390 Contemporary Sociological Theory	
SOC 3700 Sociology of Law	
15 credit hours in Sociology courses numbered at the 2000 or 3000 level <sup>1</sup>	15
12 credit hours from your Minor area of study as described in that unit's section of the calendar	12
9 credit hours from outside of your Major and Minor areas of study	9
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>60</b>
<b>Total Hours</b>	<b>90</b>

<sup>1</sup> Students who use SOC 1200 (6) or both of SOC 1211 and SOC 1221 to satisfy the year one requirements will be required to complete three (3) fewer credit hours in Sociology courses numbered at the 2000 or 3000 level.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other

Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.

4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Sociology Minor (Concentration) Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
SOC 1000	Introduction to Sociology	3
or both of:		
SOC 1211 & SOC 1221	Introduction à la microsociologie and Introduction à la macrosociologie	
<b>Hours</b>		<b>3</b>

**Years 2-3**

15 credit hours in Sociology courses numbered at the 2000 or 3000 level<sup>1</sup>

<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>18</b>

<sup>1</sup> Students who use SOC 1200 (6) or both of SOC 1211 and SOC 1221 to satisfy the year one requirements will be required to complete three (3) fewer credit hours in Sociology courses numbered at the 2000 or 3000 level.

## Criminology, B.A. Single Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
SOC 1000	Introduction to Sociology	3
or both of:		
SOC 1211 & SOC 1221	Introduction à la microsociologie and Introduction à la macrosociologie	27
27 credit hours of ancillary options <sup>3</sup>		27
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
SOC 2010	Critical Issues in Sociology	3
SOC 2220	Sociological Theoretical Foundations	3
SOC 2292	Understanding Social Research	3
SOC 2294	Understanding Social Statistics	3
SOC 2510	Criminology	3
SOC 2610	Sociology of Criminal Justice and Corrections	3
9 credit hours in ancillary options <sup>3</sup>		9
3 credit hours of free options <sup>4</sup>		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
3 credit hours of criminology-related theory courses from:		
SOC 3310 or SOC 3700	Theorizing Crime, Law, and Social Justice or Sociology of Law	3
3 credit hours of criminology or sociology-related theory courses from: <sup>2</sup>		
SOC 3310	Theorizing Crime, Law, and Social Justice	
SOC 3330	Origins of Sociological Thought	
SOC 3350	Feminism and Sociological Theory	
SOC 3360	Theories in Social Psychology	
SOC 3380	Power, Politics and the Welfare State	
SOC 3390	Contemporary Sociological Theory	
SOC 3700	Sociology of Law	
15 credit hours from the following: <sup>1,2</sup>		15
SOC 3100	Practicum in Criminological/Sociological Research	
SOC 3310	Theorizing Crime, Law, and Social Justice	
SOC 3400	Policing and Crime Prevention	
SOC 3410	Critical Victimology	
SOC 3660	Sociology of Mental Disorder	
SOC 3700	Sociology of Law	

SOC 3710	Sociology of Criminal Careers	
SOC 3720	The Criminal Law and Its Procedure	
SOC 3740	Selected Topics in Criminology	
SOC 3750	Institutional Responses to Violence in Family and Intimate Relationships	
SOC 3762	Law, Justice, and Indigenous Peoples	
SOC 3790	Women, Crime and Social Justice	
SOC 3830	Youth, Crime, and Society	
SOC 3850	Restorative Justice	
SOC 3860	Genocide, Crime and Society	
SOC 3880	Global Criminology and Criminal Justice	
9 credit hours of free options <sup>4</sup>		9
<b>Hours</b>		<b>30</b>

**Year 4**

SOC 4450	Honours Seminar	6
SOC 4490	Advanced Seminar in Criminology	3
SOC 4570	Quantitative Social Analysis	3
3 credit hours of research methods from:		
SOC 3820 or SOC 4580	Qualitative and Historical Methods in Sociology or Social Research Methods	3
3 credit hours of advanced theory courses from:		
SOC 4460 or SOC 4560	Advanced Sociological Theory or Advanced Sociological Theory	3
12 credit hours of free options <sup>4</sup>		12
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> Students who use SOC 1200 (6) or both of SOC 1211 and SOC 1221 to satisfy the year one requirements will be required to complete three (3) fewer credit hours in Sociology courses numbered at the 2000 or 3000 level.
- <sup>2</sup> These courses can include SOC 3310 or SOC 3700 if not already completed as a criminology or sociology-related theory requirement.
- <sup>3</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Sociology courses).
- <sup>4</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Sociology courses).
- <sup>5</sup> Equivalent courses offered through the Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217)

requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Criminology, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
SOC 1000	Introduction to Sociology	3
or both of:		
SOC 1211 & SOC 1221	Introduction à la microsociologie and Introduction à la macrosociologie	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
21 credit hours from outside of your Major and Minor areas of study		21
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
SOC 2292	Understanding Social Research	3
SOC 2294	Understanding Social Statistics	3
SOC 2510	Criminology	3
SOC 2610	Sociology of Criminal Justice and Corrections	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
9 credit hours from outside of your Major and Minor areas of study		9
3 credit hours of open electives		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
15 credit hours from the following: <sup>1</sup>		15
SOC 3100	Practicum in Criminological/Sociological Research	
SOC 3310	Theorizing Crime, Law, and Social Justice	
SOC 3400	Policing and Crime Prevention	
SOC 3410	Critical Victimology	

SOC 3660	Sociology of Mental Disorder	
SOC 3700	Sociology of Law	
SOC 3710	Sociology of Criminal Careers	
SOC 3720	The Criminal Law and Its Procedure	
SOC 3740	Selected Topics in Criminology	
SOC 3750	Institutional Responses to Violence in Family and Intimate Relationships	
SOC 3762	Law, Justice, and Indigenous Peoples	
SOC 3790	Women, Crime and Social Justice	
SOC 3830	Youth, Crime, and Society	
SOC 3850	Restorative Justice	
SOC 3860	Genocide, Crime and Society	
SOC 3880	Global Criminology and Criminal Justice	
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
9 credit hours of open electives		9
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> Students who use SOC 1200 (6) or both of SOC 1211 and SOC 1221 to satisfy the year one requirements will be required to complete three (3) fewer credit hours in Sociology courses numbered at the 2000 or 3000 level.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
2. **The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**
3. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
4. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>) Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
5. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any

course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Ukrainian Canadian Heritage Studies, B.A. General (p. 430)	3	90	
Ukrainian Canadian Heritage Studies, B.A. Single Advanced (p. 428)	4	120	
Ukrainian Canadian Heritage Studies Minor (p. 432)		18	

## Ukrainian Canadian Heritage Studies, B.A. Single Advanced Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours from List A		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6

## Ukrainian Canadian Heritage Studies

**Program Director:** (Acting) Orest Cap

**Campus Address/General Office:** 207 St. Andrew's College

**Telephone:** 204 474 8907

**Email Address:** [cucs@umanitoba.ca](mailto:cucs@umanitoba.ca)

**Website:** [http://umanitoba.ca/ukrainian\\_canadian\\_studies/](http://umanitoba.ca/ukrainian_canadian_studies/)

### Program Information

Canada is a multicultural nation to which people of Ukrainian origin have made a significant contribution. The study of this community, its past and present, provides a general understanding of the Ukrainian heritage and its role in Canadian society. The program is cross-disciplinary and leads to a Major, Advanced Major, or Minor. In addition to its Canadian focus, the program also examines historical and contemporary issues in Ukraine.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours from List A below.

A minimum "C" average in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours from List A.

## Programs

18 credit hours from outside of your Major and Minor areas of study	18
<b>Hours</b>	<b>30</b>
<b>Years 2-4</b>	
6 credit hours from List A	6
36 credit hours from List B, to include at least 12 credit hours from the 3000 level or higher	36
12 credit hours from your Minor area of study as described in that unit's section of the calendar	12

24 credit hours from outside of your Major and Minor areas of study	24
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

## List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Economics:		
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies	3
German and Slavic Studies:		
UKRN 1230	Language Seminar in Ukraine 1	3
UKRN 1310	Introductory Ukrainian	6
UKRN 2260	Ukrainian Culture Seminar Abroad	3
UKRN 2720	Intermediate Ukrainian	6
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 3952	Advanced Ukrainian Conversational Practice	3
UKRN 3962	Advanced Ukrainian Through Short Stories	3
History:		
HIST 1200	An Introduction to the History of Western Civilization (G)	6
HIST 1350	An Introduction to the History of Western Civilization to 1500 (G)	3
HIST 1360	An Introduction to the History of Western Civilization from 1500 (G)	3
HIST 1400	History of the Canadian Nation since 1867 (C)	3
Political Studies:		
POLS 1502	Introduction to Political Studies	3
POLS 1506	Survey of Political Studies	3
POLS 2502	Introduction to World Affairs	3
POLS 2504	Introduction to International Relations	3
POLS 2702	Introduction to Canadian Politics	3
Religion:		
RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RLGN 1350	The History of Eastern Christianity	6
Sociology and Criminology:		
SOC 1000	Introduction to Sociology	3
<b>Clayton H. Riddell Faculty of Environment, Earth, and Resources</b>		
Geography:		
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
<b>School of Art</b>		
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3

## List B

Course	Title	Hours
<b>Faculty of Arts</b>		
Economics:		
ECON 2510	The Economy of Ukraine	3
German and Slavic Studies:		
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2410	Ukrainian Canadian Cultural Experience	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
History:		
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
HIST 3910	The Ukrainians in Canada (C)	3
Political Studies:		
POLS 3720	Politics, Government and Society in Ukraine	3
Religion:		
RLGN 2520	Eastern Christianity in North America	3
RLGN 2530	Eastern Christianity in the Contemporary World	3
Ukrainian Canadian Heritage Studies:		
UCHS 3100	The Ukrainian Arts in Canada	3
<b>Clayton H. Riddell Faculty of Environment, Earth, and Resources</b>		
Geography:		
GEOG 2570	Geography of Canada (A)	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
<b>School of Art</b>		
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward

the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
 

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Ukrainian Canadian Heritage Studies, B.A. General

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours from List A		6
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
18 credit hours from outside of your Major and Minor areas of study		18
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
24 credit hours from List B taken from each of three different departments, to include at least 6 credit hours from the 3000 level or higher		24
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

### List A

Course	Title	Hours
<b>Faculty of Arts</b>		
<b>Economics:</b>		
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies	3
<b>German and Slavic Studies:</b>		
UKRN 1230	Language Seminar in Ukraine 1	3
UKRN 1310	Introductory Ukrainian	6
UKRN 2260	Ukrainian Culture Seminar Abroad	3
UKRN 2720	Intermediate Ukrainian	6
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 3952	Advanced Ukrainian Conversational Practice	3
UKRN 3962	Advanced Ukrainian Through Short Stories	3
<b>History:</b>		
HIST 1200	An Introduction to the History of Western Civilization (G)	6
HIST 1350	An Introduction to the History of Western Civilization to 1500 (G)	3
HIST 1360	An Introduction to the History of Western Civilization from 1500 (G)	3
HIST 1400	History of the Canadian Nation since 1867 (C)	3
<b>Political Studies:</b>		

POLS 1502	Introduction to Political Studies	3
POLS 1506	Survey of Political Studies	3
POLS 2502	Introduction to World Affairs	3
POLS 2504	Introduction to International Relations	3
POLS 2702	Introduction to Canadian Politics	3

## Religion:

RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RLGN 1350	The History of Eastern Christianity	6

## Sociology and Criminology:

SOC 1000	Introduction to Sociology	3
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**Clayton H. Riddell Faculty of Environment, Earth, and Resources**

## Geography:

GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3

**School of Art**

FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3

**List B**

Course	Title	Hours
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**Faculty of Arts**

## Economics:

ECON 2510	The Economy of Ukraine	3
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## German and Slavic Studies:

UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2410	Ukrainian Canadian Cultural Experience	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3

## History:

HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
HIST 3910	The Ukrainians in Canada (C)	3

## Political Studies:

POLS 3720	Politics, Government and Society in Ukraine	3
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## Religion:

RLGN 2520	Eastern Christianity in North America	3
RLGN 2530	Eastern Christianity in the Contemporary World	3

## Ukrainian Canadian Heritage Studies:

UCHS 3100	The Ukrainian Arts in Canada	3
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**Clayton H. Riddell Faculty of Environment, Earth, and Resources**

## Geography:

GEOG 2570	Geography of Canada (A)	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3

**School of Art**

FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

**Ten Faculty Requirements for Graduating with a B.A. General Degree**

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.
- The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**
2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
  3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
  4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.
 

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.
  5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
  6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
  7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
  8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.



9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Ukrainian Canadian Heritage Studies Minor

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
6 credit hours from List A		6
		<b>6</b>
<b>Years 2-3</b>		
12 credit hours from List B taken from each of two different departments		12
		<b>12</b>
<b>Total Hours</b>		<b>18</b>

### List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Economics:		
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies	3
German and Slavic Studies:		
UKRN 1230	Language Seminar in Ukraine 1	3
UKRN 1310	Introductory Ukrainian	6
UKRN 2260	Ukrainian Culture Seminar Abroad	3
UKRN 2720	Intermediate Ukrainian	6
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 3952	Advanced Ukrainian Conversational Practice	3
UKRN 3962	Advanced Ukrainian Through Short Stories	3
History:		
HIST 1200	An Introduction to the History of Western Civilization (G)	6
HIST 1350	An Introduction to the History of Western Civilization to 1500 (G)	3
HIST 1360	An Introduction to the History of Western Civilization from 1500 (G)	3
HIST 1400	History of the Canadian Nation since 1867 (C)	3
Political Studies:		
POLS 1502	Introduction to Political Studies	3
POLS 1506	Survey of Political Studies	3
POLS 2502	Introduction to World Affairs	3
POLS 2504	Introduction to International Relations	3
POLS 2702	Introduction to Canadian Politics	3
Religion:		
RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3

RLGN 1350	The History of Eastern Christianity	6
Sociology and Criminology:		
SOC 1000	Introduction to Sociology	3
<b>Clayton H. Riddell Faculty of Environment, Earth, and Resources</b>		
Geography:		
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
<b>School of Art</b>		
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3

### List B

Course	Title	Hours
<b>Faculty of Arts</b>		
Economics:		
ECON 2510	The Economy of Ukraine	3
German and Slavic Studies:		
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2410	Ukrainian Canadian Cultural Experience	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
History:		
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3
HIST 3910	The Ukrainians in Canada (C)	3
Political Studies:		
POLS 3720	Politics, Government and Society in Ukraine	3
Religion:		
RLGN 2520	Eastern Christianity in North America	3
RLGN 2530	Eastern Christianity in the Contemporary World	3
Ukrainian Canadian Heritage Studies:		
UCHS 3100	The Ukrainian Arts in Canada	3
<b>Clayton H. Riddell Faculty of Environment, Earth, and Resources</b>		
Geography:		
GEOG 2570	Geography of Canada (A)	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
<b>School of Art</b>		
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3

# Women's and Gender Studies

**Program Coordinator:** Shawna Ferris

**Program Office:** 218 Isbister Building

**Telephone:** 204 474 6984

**E-mail:** [womens\\_gender\\_studies@umanitoba.ca](mailto:womens_gender_studies@umanitoba.ca)

**Website:** [umanitoba.ca/womens\\_gender\\_studies](http://umanitoba.ca/womens_gender_studies) ([http://umanitoba.ca/womens\\_gender\\_studies/](http://umanitoba.ca/womens_gender_studies/))

## Program Information

Fundamental questions of equality and social justice are still very much with us, and as a dynamic interdisciplinary program, we explore both current and historical debates about women's experiences, gender relations, and feminism. Courses take diverse theoretical and practical approaches, including feminist cultural studies and studies of popular culture, violence against women, lesbian and queer studies, women in science and technology, gendered violence in urban spaces, sex work and sex workers, feminist geography, indigenous feminisms, masculinity studies, and reconstructing indigenous art histories that recontextualize museum collections and reclaim women's voices and lives.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

The following entries contain information which is not contained in Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

### Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in each of two 3 credit hour courses in Women's and Gender Studies. It is suggested that students wishing to Major in Women's and Gender Studies take both WOMN 1500 and WOMN 1600. For students who have taken additional courses toward the Major, then a minimum cumulative

GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

### Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in each of two 3 credit hour courses in Women's and Gender Studies.

### Honours Program

For entry to the Honours program, see Basic Faculty Regulations (p. 211) for the B.A. General, Advanced and Honours Degree Programs.

### Coordinated Programs in Women's and Gender Studies

Students may take courses in the Women's and Gender Studies program at the University of Winnipeg (<https://www.uwinnipeg.ca/academics/calendar/docs/wgs.pdf>) and, where applicable, have these courses credited to their degree at the University of Manitoba. The coordinated program offers students access to more faculty resources, greater course selection and additional library facilities and thus can enrich their Women's and Gender Studies program.

Students are advised to consult with the Women's and Gender Studies coordinator for information on courses available for credit in Women's and Gender Studies.

In addition, special courses under the rubric of selected topics or contemporary issues may be available in various Arts departments, particularly Anthropology, English, Psychology, and Sociology, for Women's and Gender Studies credit in any given academic term.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Women's and Gender Studies, B.A. Double Advanced Major (p. 437)	4	120	
Women's and Gender Studies, B.A. Double Honours (p. 435)	4	120	
Women's and Gender Studies, B.A. General (p. 439)	3	90	
Women's and Gender Studies, B.A. Single Advanced Major (p. 436)	4	120	
Women's and Gender Studies, B.A. Single Honours (p. 434)	4	120	
Women's and Gender Studies Minor (Concentration) (p. 441)		18	

# Women's and Gender Studies, B.A. Single Honours

## Degree Requirements

Course	Title	Hours
<b>Years 1-4</b>		
WOMN 1500 or WOMN 1600	Introduction to Women's and Gender Studies in the Humanities or Introduction to Women's and Gender Studies in the Social Sciences	3
WOMN 2000	Feminist Thought	3
18 credit hours from Women's and Gender Studies courses		18
12 credit hours from Women's and Gender Studies courses and/or List A		12
WOMN 3000	Interdisciplinary Research in Women's and Gender Studies	3
12 credit hours from courses numbered at or above the 3000 level from Women's and Gender Studies courses and/or List A		12
WOMN 4100	Honours Thesis	6
WOMN 4200	Seminar in Women's and Gender Studies	3
24 credit hours of ancillary options <sup>1</sup>		24
36 credit hours of free options <sup>2</sup>		36
Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.		
<b>Hours</b>		<b>120</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Women's and Gender Studies courses).

<sup>2</sup> Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Women's and Gender Studies courses). WOMN 4120 is strongly recommended although not required.

### Note:

- Honours courses: all 4000 level courses.

## List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3321	Femmes, sociétés et cultures	3
ANTH 3330	Sex and Sexualities	3
Classics:		
CLAS 2210	Women in Ancient Greece and Rome	3
Economics:		
ECON 2362	Economics of Gender	3
French, Spanish and Italian:		
FREN 2680	Littérature féminine française (B)	3
FREN 3860	Études sur Beauvoir (B)	3
German:		

GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
History:		
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
HIST 3760	Problems in United States History (A) (Acceptable for credit only when the topic is "Gender and Sexuality in 20th Century America.")	3
HIST 4060	Gender History in Canada (C)	6
Indigenous Studies:		
INDG 2430	Indigenous Women's Stories	3
INDG 3360	Indigenous Women in Canada	3
INDG 3380	Gender and Indigenous Societies	3
Philosophy:		
PHIL 3220	Feminist Philosophy	3
Political Studies:		
POLS 3100	Gender and Politics in Canada	3
Psychology:		
PSYC 2380	Psychology of Gender	3
PSYC 3570	Psychology of Women	3
Religion:		
RLGN 2680	Women and Religion 1	3
RLGN 2690	Women and Religion 2	3
Slavic Studies:		
UKRN 3970	Women and Ukrainian Literature	3
Sociology:		
SOC 2460	The Family	3
SOC 2461	La famille	3
SOC 3350	Feminism and Sociological Theory	3
SOC 3770	Women, Health and Medicine	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3811	Sociologie de la sexualité et des rôles sexuels	3
<b>School of Art</b>		
FAAH 2110	Women and Art	3
FAAH 4090	Seminar on Contemporary Issues in Art (Acceptable for credit only when the topic is "Women Artists")	3

### Clayton H. Riddell Faculty of Environment, Earth, and Resources

GEOG 4280	Gender and the Human Environment	3
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### Marcel A. Desautels Faculty of Music

MUSC 4130	History of Women in Music	3
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### Faculty of Nursing

NURS 3330	Women and Health	3
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For course descriptions, see departmental listings.

**Note:** List A courses are identified in Aurora Student with the course attribute of "Women's Studies Requirement."

**While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (p. 206) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (p. 217) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (p. 206)
2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (p. 220) and attain a minimum degree grade point average of 3.0.
3. Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (p. 219).
4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (p. 219), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.

## Women's and Gender Studies, B.A. Double Honours Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
WOMN 1500 or WOMN 1600	Introduction to Women's and Gender Studies in the Humanities or Introduction to Women's and Gender Studies in the Social Sciences	3
6 credit hours in second Honours field as described in that unit's section of the calendar		6
6 credit hours in ancillary options <sup>1</sup>		6
15 credit hours in free options <sup>2</sup>		15
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
WOMN 2000	Feminist Thought	3
WOMN 3000	Interdisciplinary Research in Women's and Gender Studies	3
WOMN 4100	Honours Thesis	6
WOMN 4200	Seminar in Women's and Gender Studies	3
12 credit hours from Women's and Gender Studies courses		12
12 credit hours from courses numbered at or above the 3000 level from Women's and Gender Studies courses and/or List A		12
36 credit hours in second Honours field as described in that unit's section of the calendar		36
15 credit hours in free options <sup>2</sup>		15

Refer to the information directly below this list for other important degree requirements that B.A. Honours students must satisfy for graduation.

Hours	90
Total Hours	120

- 1 Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Women's and Gender Studies courses).
- 2 Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Women's and Gender Studies courses). WOMN 4120 is strongly recommended although not required.

#### Note:

- Honours courses: all 4000 level courses.
- If the second Honours field chosen is either Economics or Sociology, students need to be aware that these two departments require an additional 3 credit hours of required course work in their Double Honours programs.

### List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3321	Femmes, sociétés et cultures	3
ANTH 3330	Sex and Sexualities	3
Classics:		
CLAS 2210	Women in Ancient Greece and Rome	3
Economics:		
ECON 2362	Economics of Gender	3
French, Spanish and Italian:		
FREN 2680	Littérature féminine française (B)	3
FREN 3860	Études sur Beauvoir (B)	3
German:		
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
History:		
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
HIST 3760	Problems in United States History (A) (Acceptable for credit only when the topic is "Gender and Sexuality in 20th Century America.")	3
HIST 4060	Gender History in Canada (C)	6
Indigenous Studies:		
INDG 2430	Indigenous Women's Stories	3
INDG 3360	Indigenous Women in Canada	3
INDG 3380	Gender and Indigenous Societies	3
Philosophy:		
PHIL 3220	Feminist Philosophy	3
Political Studies:		
POLS 3100	Gender and Politics in Canada	3
Psychology:		

PSYC 2380	Psychology of Gender	3
PSYC 3570	Psychology of Women	3
Religion:		
RLGN 2680	Women and Religion 1	3
RLGN 2690	Women and Religion 2	3
Slavic Studies:		
UKRN 3970	Women and Ukrainian Literature	3
Sociology:		
SOC 2460	The Family	3
SOC 2461	La famille	3
SOC 3350	Feminism and Sociological Theory	3
SOC 3770	Women, Health and Medicine	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3811	Sociologie de la sexualité et des rôles sexuels	3
<b>School of Art</b>		
FAAH 2110	Women and Art	3
FAAH 4090	Seminar on Contemporary Issues in Art (Acceptable for credit only when the topic is "Women Artists")	3
<b>Clayton H. Riddell Faculty of Environment, Earth, and Resources</b>		
GEOG 4280	Gender and the Human Environment	3
<b>Marcel A. Desautels Faculty of Music</b>		
MUSC 4130	History of Women in Music	3
<b>Faculty of Nursing</b>		
NURS 3330	Women and Health	3

For course descriptions, see departmental listings.

**Note:** List A courses are identified in Aurora Student with the course attribute of "Women's Studies Requirement."

## Women's and Gender Studies, B.A. Single Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
WOMN 1500 or WOMN 1600	Introduction to Women's and Gender Studies in the Humanities or Introduction to Women's and Gender Studies in the Social Sciences	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar.		6
21 credit hours from outside of your Major and Minor areas of study		21
<b>Hours</b>		<b>30</b>
<b>Years 2-4</b>		
WOMN 2000	Feminist Thought	3
WOMN 3000	Interdisciplinary Research in Women's and Gender Studies	3
9 credit hours from Women's and Gender Studies courses		9
9 credit hours from courses numbered at or above the 3000 level from Women's and Gender Studies courses and/or List A		9

21 credit hours from Women's and Gender Studies courses and/ or List A	21
12 credit hours from your Minor area of study as described in that unit's section of the calendar.	12
21 credit hours from outside your Major and Minor areas of study.	21
12 credit hours of open electives	12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	

Hours	90
<b>Total Hours</b>	<b>120</b>

### List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3321	Femmes, sociétés et cultures	3
ANTH 3330	Sex and Sexualities	3
Classics:		
CLAS 2210	Women in Ancient Greece and Rome	3
Economics:		
ECON 2362	Economics of Gender	3
French, Spanish and Italian:		
FREN 2680	Littérature féminine française (B)	3
FREN 3860	Études sur Beauvoir (B)	3
German:		
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German- Speaking World in English Translation (C)	3
History:		
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
HIST 3760	Problems in United States History (A) (Acceptable for credit only when the topic is "Gender and Sexuality in 20th Century America.")	3
HIST 4060	Gender History in Canada (C)	6
Indigenous Studies:		
INDG 2430	Indigenous Women's Stories	3
INDG 3360	Indigenous Women in Canada	3
INDG 3380	Gender and Indigenous Societies	3
Philosophy:		
PHIL 3220	Feminist Philosophy	3
Political Studies:		
POLS 3100	Gender and Politics in Canada	3
Psychology:		
PSYC 2380	Psychology of Gender	3
PSYC 3570	Psychology of Women	3
Religion:		
RLGN 2680	Women and Religion 1	3
RLGN 2690	Women and Religion 2	3
Slavic Studies:		
UKRN 3970	Women and Ukrainian Literature	3

Sociology:		
SOC 2460	The Family	3
SOC 2461	La famille	3
SOC 3350	Feminism and Sociological Theory	3
SOC 3770	Women, Health and Medicine	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3811	Sociologie de la sexualité et des rôles sexuels	3
<b>School of Art</b>		
FAAH 2110	Women and Art	3
FAAH 4090	Seminar on Contemporary Issues in Art (Acceptable for credit only when the topic is "Women Artists")	3
<b>Clayton H. Riddell Faculty of Environment, Earth, and Resources</b>		
GEOG 4280	Gender and the Human Environment	3
<b>Marcel A. Desautels Faculty of Music</b>		
MUSC 4130	History of Women in Music	3
<b>Faculty of Nursing</b>		
NURS 3330	Women and Health	3

For course descriptions, see departmental listings.

**Note:** List A courses are identified in Aurora Student with the course attribute of "Women's Studies Requirement."

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
 

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Women's and Gender Studies, B.A. Double Advanced Major Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
WOMN 1500 or WOMN 1600	Introduction to Women's and Gender Studies in the Humanities or Introduction to Women's and Gender Studies in the Social Sciences	3

6 credit hours in the second Advanced Major subject field as described in that unit's section of the calendar	6
21 credit hours from outside both Advanced Major subject fields	21
<b>Hours</b>	<b>30</b>
<b>Years 2-4</b>	
WOMN 2000 Feminist Thought	3
WOMN 3000 Interdisciplinary Research in Women's and Gender Studies	3
9 credit hours from Women's and Gender Studies courses	9
9 credit hours from courses numbered at or above the 3000 level from Women's and Gender Studies courses and/or List A	9
15 credit hours from Women's and Gender Studies courses and/or List A	15
36 credit hours from second Advanced Major subject field as described in that unit's section of the calendar	36
15 credit hours from outside both Advanced Major subject fields	15
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation	
<b>Hours</b>	<b>90</b>
<b>Total Hours</b>	<b>120</b>

## List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3321	Femmes, sociétés et cultures	3
ANTH 3330	Sex and Sexualities	3
Classics:		
CLAS 2210	Women in Ancient Greece and Rome	3
Economics:		
ECON 2362	Economics of Gender	3
French, Spanish and Italian:		
FREN 2680	Littérature féminine française (B)	3
FREN 3860	Études sur Beauvoir (B)	3
German:		
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
History:		
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
HIST 3760	Problems in United States History (A) (Acceptable for credit only when the topic is "Gender and Sexuality in 20th Century America.")	3
HIST 4060	Gender History in Canada (C)	6
Indigenous Studies:		
INDG 2430	Indigenous Women's Stories	3
INDG 3360	Indigenous Women in Canada	3
INDG 3380	Gender and Indigenous Societies	3
Philosophy:		
PHIL 3220	Feminist Philosophy	3
Political Studies:		

POLS 3100	Gender and Politics in Canada	3
Psychology:		
PSYC 2380	Psychology of Gender	3
PSYC 3570	Psychology of Women	3
Religion:		
RLGN 2680	Women and Religion 1	3
RLGN 2690	Women and Religion 2	3
Slavic Studies:		
UKRN 3970	Women and Ukrainian Literature	3
Sociology:		
SOC 2460	The Family	3
SOC 2461	La famille	3
SOC 3350	Feminism and Sociological Theory	3
SOC 3770	Women, Health and Medicine	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3811	Sociologie de la sexualité et des rôles sexuels	3
<b>School of Art</b>		
FAAH 2110	Women and Art	3
FAAH 4090	Seminar on Contemporary Issues in Art (Acceptable for credit only when the topic is "Women Artists")	3

### Clayton H. Riddell Faculty of Environment, Earth, and Resources

GEOG 4280	Gender and the Human Environment	3
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### Marcel A. Desautels Faculty of Music

MUSC 4130	History of Women in Music	3
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### Faculty of Nursing

NURS 3330	Women and Health	3
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For course descriptions, see departmental listings.

**Note:** List A courses are identified in Aurora Student with the course attribute of "Women's Studies Requirement."

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.

4. **Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

5. **Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
6. A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.
- A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 42 credit hours numbered at or above the 2000 level.
10. **Residency Requirement:** A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Women's and Gender Studies, B.A. General

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
WOMN 1500 or WOMN 1600	Introduction to Women's and Gender Studies in the Humanities or Introduction to Women's and Gender Studies in the Social Sciences	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
21 credit hours from outside of your Major and Minor areas of study		21
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
WOMN 2000	Feminist Thought	3
WOMN 3000	Interdisciplinary Research in Women's and Gender Studies	3
21 credit hours from Women's and Gender Studies courses and/or List A		21
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
9 credit hours from outside your Major and Minor areas of study		9
12 credit hours of open electives		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

### List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3321	Femmes, sociétés et cultures	3
ANTH 3330	Sex and Sexualities	3
Classics:		
CLAS 2210	Women in Ancient Greece and Rome	3
Economics:		
ECON 2362	Economics of Gender	3
French, Spanish and Italian:		
FREN 2680	Littérature féminine française (B)	3
FREN 3860	Études sur Beauvoir (B)	3
German:		
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
History:		
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3



HIST 3760	Problems in United States History (A) (Acceptable for credit only when the topic is "Gender and Sexuality in 20th Century America.")	3
HIST 4060	Gender History in Canada (C)	6
Indigenous Studies:		
INDG 2430	Indigenous Women's Stories	3
INDG 3360	Indigenous Women in Canada	3
INDG 3380	Gender and Indigenous Societies	3
Philosophy:		
PHIL 3220	Feminist Philosophy	3
Political Studies:		
POLS 3100	Gender and Politics in Canada	3
Psychology:		
PSYC 2380	Psychology of Gender	3
PSYC 3570	Psychology of Women	3
Religion:		
RLGN 2680	Women and Religion 1	3
RLGN 2690	Women and Religion 2	3
Slavic Studies:		
UKRN 3970	Women and Ukrainian Literature	3
Sociology:		
SOC 2460	The Family	3
SOC 2461	La famille	3
SOC 3350	Feminism and Sociological Theory	3
SOC 3770	Women, Health and Medicine	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3811	Sociologie de la sexualité et des rôles sexuels	3
<b>School of Art</b>		
FAAH 2110	Women and Art	3
FAAH 4090	Seminar on Contemporary Issues in Art (Acceptable for credit only when the topic is "Women Artists")	3
<b>Clayton H. Riddell Faculty of Environment, Earth, and Resources</b>		
GEOG 4280	Gender and the Human Environment	3
<b>Marcel A. Desautels Faculty of Music</b>		
MUSC 4130	History of Women in Music	3
<b>Faculty of Nursing</b>		
NURS 3330	Women and Health	3

For course descriptions, see departmental listings.

**Note:** List A courses are identified in Aurora Student with the course attribute of "Women's Studies Requirement."

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

- At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.  
  
Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.
- Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
- At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 30 credit hours must be numbered at or above the 2000 level.
- Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

# Women's and Gender Studies Minor (Concentration)

## Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
WOMN 1500 or WOMN 1600	Introduction to Women's and Gender Studies in the Humanities or Introduction to Women's and Gender Studies in the Social Sciences	3
<b>Hours</b>		<b>3</b>
<b>Years 2-3</b>		
6 credit hours from Women's and Gender Studies courses		6
9 credit hours from Women's and Gender Studies courses and/or List A		9
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>18</b>

## List A

Course	Title	Hours
<b>Faculty of Arts</b>		
Anthropology:		
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3321	Femmes, sociétés et cultures	3
ANTH 3330	Sex and Sexualities	3
Classics:		
CLAS 2210	Women in Ancient Greece and Rome	3
Economics:		
ECON 2362	Economics of Gender	3
French, Spanish and Italian:		
FREN 2680	Littérature féminine française (B)	3
FREN 3860	Études sur Beauvoir (B)	3
German:		
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
History:		
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
HIST 3760	Problems in United States History (A) (Acceptable for credit only when the topic is "Gender and Sexuality in 20th Century America.")	3
HIST 4060	Gender History in Canada (C)	6
Indigenous Studies:		
INDG 2430	Indigenous Women's Stories	3
INDG 3360	Indigenous Women in Canada	3
INDG 3380	Gender and Indigenous Societies	3
Philosophy:		
PHIL 3220	Feminist Philosophy	3
Political Studies:		
POLS 3100	Gender and Politics in Canada	3
Psychology:		
PSYC 2380	Psychology of Gender	3

PSYC 3570	Psychology of Women	3
Religion:		
RLGN 2680	Women and Religion 1	3
RLGN 2690	Women and Religion 2	3
Slavic Studies:		
UKRN 3970	Women and Ukrainian Literature	3
Sociology:		
SOC 2460	The Family	3
SOC 2461	La famille	3
SOC 3350	Feminism and Sociological Theory	3
SOC 3770	Women, Health and Medicine	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3811	Sociologie de la sexualité et des rôles sexuels	3
<b>School of Art</b>		
FAAH 2110	Women and Art	3
FAAH 4090	Seminar on Contemporary Issues in Art (Acceptable for credit only when the topic is "Women Artists")	3

### Clayton H. Riddell Faculty of Environment, Earth, and Resources

GEOG 4280	Gender and the Human Environment	3
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### Marcel A. Desautels Faculty of Music

MUSC 4130	History of Women in Music	3
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### Faculty of Nursing

NURS 3330	Women and Health	3
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For course descriptions, see departmental listings.

**Note:** List A courses are identified in Aurora Student with the course attribute of "Women's Studies Requirement."

## Courses and Programs Offered by Other Faculties and Schools for Credit in Arts

### Courses

All degree credit courses offered by other Faculties or Schools at the University of Manitoba are acceptable for credit in Arts (excludes Pass/Fail courses) subject to the Faculty of Arts overall degree requirements. Such courses taken prior to admission to Arts will be included on transfer and will also be used in determining eligibility for admission. For details please see Faculty Academic Regulations- Residency Requirement (p. 211). For course descriptions see the departmental listing in this Calendar.

### Programs

Also listed below are eight programs which can be used by Faculty of Arts students to satisfy the Major or Minor requirement for graduation with a Bachelor of Arts degree. These programs are:

- History of Art General Major
- History of Art Minor
- Minor in Management
- Mathematics General Major
- Mathematics Advanced Major
- Mathematics Minor

Effective September 2009 Arts students may complete Minor programs offered by other Faculties/Schools not listed above providing the Minor program consists of a minimum of 18 credit hours and all other degree requirements are satisfied.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Art History, B.A. General (p. 443)	3	90	
Art History Minor (p. 442)		18	
Mathematics, B.A. General (p. 444)	3	90	
Mathematics, B.A. Single Advanced Major (p. 445)	4	90	
Mathematics Minor (p. 446)		18	

## Art History Minor

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3
	<b>Hours</b>	<b>6</b>
<b>Years 2-3</b>		
12 credit hours from either List A or List B		12
	<b>Hours</b>	<b>12</b>
	<b>Total Hours</b>	<b>18</b>

## School of Art: Art History

**Program Coordinator:** L. Stirling  
**Program Office:** 349 University College  
**Telephone:** 204 474 7357

### Program Information

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, please refer to the Faculty Academic Regulations-Basic Faculty Regulations (p. 211). **NOTE:** It is strongly recommended that students majoring in Art History have competence in a second language.

## Faculty of Management/I.H. Asper School of Business

All courses offered by the Asper School of Business in the Faculty of Management are acceptable for credit in the Faculty of Arts. Management courses may be taken by Faculty of Arts students subject to availability of space and satisfaction of prerequisites.

## Faculty of Science

All Minors offered by the Faculty of Science can be used as satisfying the Faculty of Arts requirement of a Minor (Concentration); (for details, please refer to the Faculty of Science (p. 799)). In addition, Arts students may also choose a General or Advanced Major, or a Minor in Mathematics.

The Mathematics General Major offered at the Université de Saint-Boniface differs from the one offered at the Fort Garry campus. For a complete description, consult the Université de Saint-Boniface's website (<https://ustboniface.ca/sciences/>).

### Programs

#### Introductory Courses

Course	Title	Hours
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3
FA 1990	First Year Field Trip	0

#### List A

##### Faculty of Arts

Course	Title	Hours
<b>Classics</b>		
CLAS 2670	Greek Art and Archaeology	3
CLAS 2680	Roman Art and Archaeology	3

**School of Art**

Course	Title	Hours
<b>Art History</b>		
FAAH 1100	Survey of Asian Art	3
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 2080	Modern to Contemporary Art	3
FAAH 2090	Art of the North American Aboriginal Peoples	3
FAAH 2110	Women and Art	3

**List B****School of Art**

Course	Title	Hours
FAAH 2910	Field Studies in Art History I	3
FAAH 2920	Field Studies in Art History 2	3
FAAH 2930	Writing about Art	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3150	Topics in 18th and 19th Century Art	3
FAAH 3160	Topics in 20th Century Art	3
FAAH 3180	History of Photography	3
FAAH 3190	History of Ceramics	3
FAAH 3200	Art in New Media	3
FAAH 3202	Contemporary Art History	3
FAAH 3212	Introduction to The Theory of Art	3
FAAH 3220	Topics in Aboriginal Art	3
FAAH 3230	Chinese Art and Architecture	3
FAAH 3240	Japanese Art and Architecture	3
FAAH 3250	Topics in Art History	3
FAAH 3260	Canadian Art and Architecture to World War 2	3
FAAH 3270	Canadian Art Since World War 2	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 3430	Inuit Art	3
FAAH 3590	Islamic Art and Architecture	3
FAAH 3780	Twentieth Century American Art Until 1950	3
FAAH 3930	Introduction to Curatorial Studies	3
FAAH 4060	Seminar in Art Theory and Criticism	3
FAAH 4070	Seminar in Art History 1	3
FAAH 4090	Seminar on Contemporary Issues in Art	3
FAAH 4710	Directed Study 1	3
FAAH 4720	Directed Study 2	3

## Art History, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3

6 credit hours from your Minor area of study as described in that unit's section of the calendar	6
18 credit hours from outside of your Major and Minor areas of study	18

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**Hours 30**

**Years 2-3**

FA 1990	First Year Field Trip	0
12 credit hours from List A		12
FAAH 3260 or FAAH 3270	Canadian Art and Architecture to World War 2 or Canadian Art Since World War 2	3
9 credit hours from either List A or List B		9
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
12 credit hours from outside of your Major and Minor areas of study		12
12 credit hours of open electives		12
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

**Introductory Courses**

Course	Title	Hours
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3
FA 1990	First Year Field Trip	0

**List A****Faculty of Arts**

Course	Title	Hours
<b>Classics</b>		
CLAS 2670	Greek Art and Archaeology	3
CLAS 2680	Roman Art and Archaeology	3

**School of Art**

Course	Title	Hours
<b>Art History</b>		
FAAH 1100	Survey of Asian Art	3
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 2080	Modern to Contemporary Art	3
FAAH 2090	Art of the North American Aboriginal Peoples	3
FAAH 2110	Women and Art	3

**List B****School of Art**

Course	Title	Hours
FAAH 2910	Field Studies in Art History I	3
FAAH 2920	Field Studies in Art History 2	3
FAAH 2930	Writing about Art	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3150	Topics in 18th and 19th Century Art	3
FAAH 3160	Topics in 20th Century Art	3

FAAH 3180	History of Photography	3
FAAH 3190	History of Ceramics	3
FAAH 3200	Art in New Media	3
FAAH 3202	Contemporary Art History	3
FAAH 3212	Introduction to The Theory of Art	3
FAAH 3220	Topics in Aboriginal Art	3
FAAH 3230	Chinese Art and Architecture	3
FAAH 3240	Japanese Art and Architecture	3
FAAH 3250	Topics in Art History	3
FAAH 3260	Canadian Art and Architecture to World War 2	3
FAAH 3270	Canadian Art Since World War 2	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 3430	Inuit Art	3
FAAH 3590	Islamic Art and Architecture	3
FAAH 3780	Twentieth Century American Art Until 1950	3
FAAH 3930	Introduction to Curatorial Studies	3
FAAH 4060	Seminar in Art Theory and Criticism	3
FAAH 4070	Seminar in Art History 1	3
FAAH 4090	Seminar on Contemporary Issues in Art	3
FAAH 4710	Directed Study 1	3
FAAH 4720	Directed Study 2	3

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1500 (B) or MATH 1510 (B) may be taken in place of MATH 1230;
- MATH 1210 (B) or MATH 1300 (C+) may be taken in place of MATH 1220;
- MATH 1700 (B) or MATH 1710 (B) may be taken in place of MATH 1232;
- MATH 1690 (C+) in place of MATH 1230 and MATH 1232.
- MATH 1200 may be taken in place of MATH 1240, but these courses are not equivalent, i.e., students should note that MATH 1240 is a prerequisite to some 2nd year Mathematics courses for which MATH 1200 is not a prerequisite.

<sup>2</sup> MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, and MATH 1090 may not be used for credit in this program.

#### Notes:

- For entry to either Major in Mathematics, the prerequisite is a grade of "C+" or better in six hours of Mathematics courses taken.
- A detailed listing of courses in the Department of Mathematics is available in the Calendar entries of the Faculty of Science.

**While completing the courses listed above, students in the B.A. General Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. General Degree

1. A student must successfully complete a minimum of 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Courses Acceptable for Credit (p. 220) in the Faculty of Arts) with a "C" average or better on the courses that contribute to satisfying all of the B.A. General Degree requirements.

**The minimum 90 credit hours of passed coursework must also include the remaining nine faculty requirements:**

2. At least six credit hours from subject fields designated Humanities (p. 219), at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
3. At least six credit hours completed in each of five different subject fields (as listed under (<https://catalog.umanitoba.ca/undergraduate-studies/arts/#facultyacademicregulationstext/#Five-subject-field>)Five-subject Field Requirement (p. 219) and Humanities/Social Science/Science Requirement). A subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
4. Major: 30 credit hours which constitute a **Major** in one of the subject fields approved by the Faculty of Arts. The student must also have a minimum "C" average in courses where a final grade is recorded and that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor, but must complete 30 credit hours as specified by each Major department. *Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department.* A Major may be declared once the prerequisite is satisfied.

## Mathematics, B.A. General Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics <sup>1</sup>	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours from outside of your Major and Minor areas of study		12
<b>Hours</b>		<b>30</b>
<b>Years 2-3</b>		
18 credit hours of 2000, 3000 and/or 4000 level Mathematics courses (of these a minimum of 3 credit hours must be at the 3000 or 4000 level)		18
12 credit hours from your Minor area of study as described in that unit's section of the calendar		12
18 credit hours from outside of your Major and Minor areas of study		18
12 credit hours of open electives <sup>2</sup>		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>90</b>

Students who declare and complete a Major in Global Political Economy will not be required to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5. Minor: 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Major, which constitute a Minor approved by the Faculty of Arts. A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. It is not possible to declare a "Double Minor." No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.
6. At least 30 credit hours of coursework must be successfully completed outside the Major(s) and Minor subject fields (p. 219). In addition, there must be at least 12 credit hours of coursework successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.
7. A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
8. At least 60 credit hours must be taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
9. At least 30 credit hours must be numbered at or above the 2000 level.
10. Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (p. 220).

## Mathematics, B.A. Single Advanced Major

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics <sup>1</sup>	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
12 credit hours from outside of your Major and Minor areas of study		12
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
15 credit hours from outside of your Major and Minor areas of study		15
<b>Hours</b>		<b>30</b>

### Years 3-4

MATH 2020	Algebra 1	3
MATH 2180	Real Analysis 1	3
MATH 3470	Real Analysis 2	3
MATH 2160 or MATH 3440	Numerical Analysis 1 or Ordinary Differential Equations	3
15 credit hours from the following of which at least 3 credit hours must be at the 3000 or 4000 level:		15
MATH 2030	Combinatorics 1	
MATH 2040	Curves and Surfaces	
MATH 2070	Graph Theory 1	
MATH 2160	Numerical Analysis 1	
MATH 2170	Number Theory 1	
Any 3000 or 4000 level Mathematics course		
6 credit hours from your Minor area of study as described in that unit's section of the calendar		6
15 credit hours from outside of your Major and Minor areas of study		15
12 credit hours of open electives <sup>2</sup>		12
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230, and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1500 (B) or MATH 1510 (B) may be taken in place of MATH 1230;
- MATH 1210 (B), MATH 1300 (C+) may be taken in place of MATH 1220;
- MATH 1700 (B) or MATH 1710 (B) may be taken in place of MATH 1232;
- MATH 1690 (C+) in place of MATH 1230 and MATH 1232.
- MATH 1200 may be taken in place of MATH 1240, but these courses are not equivalent, i.e., students should note that MATH 1240 is a prerequisite to some 2nd year Mathematics courses for which MATH 1200 is not a prerequisite.

<sup>2</sup> MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, and MATH 1090 may not be used for credit in this program.

#### Notes:

- For entry to either Major in Mathematics, the prerequisite is a grade of "C+" or better in six hours of Mathematics courses taken.
- A detailed listing of courses in the Department of Mathematics is available in the Calendar entries of the Faculty of Science.

**While completing the courses listed above, students in the B.A. Advanced Degree must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:**

#### Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1. A student must successfully complete a minimum of 120 credit hours from among the courses acceptable (p. 220) for credit in the Faculty of Arts, with a "C" average or better on the courses that contribute to satisfying all of the B.A. Advanced Degree requirements.

**The minimum 120 credit hours of passed coursework must include the remaining nine faculty requirements:**

- At least six credit hours from subject fields (p. 219) designated Humanities, at least six credit hours from subject fields designated Social Science, (p. 219) at least six credit hours from the list of courses that satisfy the Science (p. 219) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (p. 219) requirement.
- At least six credit hours completed in each of five different subject fields (p. 219). A subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Indigenous Content, or Mathematics, or Written English.
- Single Advanced Major:** 48 credit hours which constitute a Single Advanced Major in one of the subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward the Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required to complete a Minor for purposes of satisfying the degree requirements.

**Double Advanced Major:** At least 42 credit hours which constitute a Double Advanced Major in each of two subject fields (p. 219) approved by the Faculty of Arts. The student must have a minimum "C" average in courses where a final grade is recorded that are used toward each Major including only the higher grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

**Note:** No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. Please refer to department (p. 206) listings and other courses offered (p. 220) in faculties and schools.

- Minor:** 18 credit hours which are in a subject field (p. 219) that is different from that of the declared Single Advanced Major, which constitute a Minor approved by the Faculty of Arts. A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. Only one Minor may be declared. A Minor may be declared once the prerequisite has been satisfied.
- A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

- A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.
- At least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- At least 42 credit hours numbered at or above the 2000 level.
- Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Residency Requirement (p. 220)).

## Mathematics Minor Degree Requirements

Course	Title	Hours
<b>Years 1-3</b>		
MATH 1220	Linear Algebra <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus <sup>1</sup>	3
9 credit hours from the following:		9
MATH 1240	Elementary Discrete Mathematics <sup>1</sup>	
Any 2000 and/or 3000 level Mathematics courses		
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1500 or MATH 1510 may be taken in place of MATH 1230;
- MATH 1210 (B) or MATH 1300 may be taken in place of MATH 1220;
- MATH 1700 or MATH 1710 may be taken in place of MATH 1232.
- MATH 1200 may be taken in place of MATH 1240, but these courses are not equivalent. i.e. students should note that MATH 1240 is a prerequisite to some 2nd year mathematics courses of which MATH 1200 is not a prerequisite.

### Notes:

- For entry to the Minor in Mathematics, the prerequisite is a grade of "C" or better in six hours of Mathematics courses taken.
- A detailed listing of courses in the Department of Mathematics is available in the Calendar entries of the Faculty of Science.

## Management Minor

For entry to the Minor, the prerequisite is a grade of "C" or better in the first 6 hours of Management courses. The Management Minor will consist of any 18 credit hours in the Faculty of Management/Asper School of Business courses.

## Faculty of Education

### General Office

**Dean:** Dr. Charlotte Enns is Acting Dean of Education

**Associate Dean(s):** Dr. Frank Deer (Indigenous Education); Dr. Melanie Janzen (Graduate Programs and Research); Dr. Martha Koch (Undergraduate and Partnerships)

**Campus Address/General Office:** 203 Education Building

**Telephone:** (204) 474-9004

**Fax:** (204) 474-7551

**Website:** [umanitoba.ca/education](http://umanitoba.ca/education) (<http://umanitoba.ca/education/>)

**Academic Staff:** Please refer to the Faculty website at [umanitoba.ca/faculties/education/directory/faculty-directory-index.html](http://umanitoba.ca/faculties/education/directory/faculty-directory-index.html) (<http://umanitoba.ca/faculties/education/directory/faculty-directory>)

### Faculty of Education Programs

The educational objective of the Faculty of Education is to prepare students for a career in the teaching profession. Attaining the Bachelor of Education (B.Ed.) degree leads to professional certification by Manitoba Education and the opportunity to attain employment as a classroom teacher in Manitoba and elsewhere. Those desiring other roles in education can achieve the professional requirements via the Post Baccalaureate Diploma in Education (PBDE) or graduate degrees in education (M.Ed. or Ph.D.)

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
After-Degree Bachelor of Education (p. 456)	2	60	
Post Baccalaureate Diploma in Education (p. 459)	1	30	

## Faculty Academic Regulations

### Bachelor of Education Program- Admission Requirements

#### Admission Requirements for After-Degree Program

All After-Degree B.Ed. applicants must choose a stream: Early, Middle or Senior and must meet the requirements outlined in Early and Middle Years Programs (p. 447) and Senior Years Programs (p. 447). In addition, please refer to; Other Admission Requirements (p. 448); Diversity Admission Category (p. 449); Criminal Records and Child Abuse Registry (p. 449).

#### Early and Middle Years Programs

A recognized bachelor's degree of a minimum of 90 credit hours and the requirements for two different subjects plus a breadth component as follows:

- 18 credit hours in a teachable major<sup>1</sup>
- 12 credit hours in a teachable minor<sup>1</sup>
- 6 credit hours English literature or French literature
- 6 credit hours Social Studies (History or Geography)
- 6 credit hours Mathematics (or Statistics)
- 6 credit hours Science (Biology, Chemistry, Environmental Science, Geology or Physics).

<sup>1</sup> See Applicable Early and Middle Years teachable majors and minors

### After-Degree Bachelor of Education: Early Years, Middle Years and Senior Years

Following the completion of a first bachelor's degree of at least 90 credit hours (three years in duration), the After-Degree B.Ed. is a two year program consisting of 60 credit hours of coursework taken within the Faculty of Education and leads to general certification and a B.Ed. degree. Current certification requirements for the Province of Manitoba require twenty-four weeks of practicum which are completed as part of the 60 credit hours required for the After-Degree B.Ed.

### Post Baccalaureate Diploma in Education

Designed for teacher professional development, the Post Baccalaureate Diploma in Education (PBDE) is a 30 credit hour program following completion of an undergraduate degree, normally a B.Ed. degree.

## Professional Teacher Certification Requirements for Manitoba Education

Students are required to apply for certification. The application form and specific requirements for certification can be found on the Manitoba Education website (<https://www.edu.gov.mb.ca/k12/profcert/certificates/bedgradap.html>).

## Programs

### Senior Years Programs

A recognized bachelor's degree of a minimum of 90 credit hours and the requirements for two different subjects:

- 30 credit hours in a teachable major<sup>1</sup>
- 18 credit hours in a teachable minor<sup>1</sup>

<sup>1</sup> Please see Applicable Senior Years teachable majors and minors

### Applicable Early and Middle Years Teachable Majors and Minors

#### Applicable Subjects for Both Majors & Minors:

- Art<sup>1</sup>
- Computer Science<sup>2</sup> (Middle Years Only)
- Drama/Theatre
- English (Language Arts)
- French
- General Science<sup>3</sup> (Major only)
- Geography<sup>4</sup>
- History<sup>5</sup>
- Human Ecology<sup>6</sup> (Home Economics) (Middle Years Only)
- Mathematics<sup>7</sup>
- Music<sup>8</sup>
- Native Studies<sup>9</sup>
- Physical Education<sup>10</sup>
- Second Language<sup>11</sup>



- <sup>1</sup> Art: Middle Years applicants must possess a minimum of 12 credit hours of studio courses for a major and 9 credit hours of studio courses for a minor. Early Years applicants have no specific course requirements.
- <sup>2</sup> Computer Science: Applicable for Middle Years applicants only.
- <sup>3</sup> General Science: Major only. This is not available as a minor teachable area. Must include three (3) (only) Science disciplines (Biology/Biological Science, Chemistry, Computer Science, Environment Science, Geological Science, and Physics. Does not include Geography courses). A minimum of 3 credit hours is required in each of the three disciplines. Additionally, 3 credit hours must be at the 2000 level or above.
- <sup>4</sup> Geography: Must include 6 credit hours of Canadian and/or North American content.
- <sup>5</sup> History: Must include 6 credit hours of Canadian and/or North American content.
- <sup>6</sup> Human Ecology: Applicable for Middle Years applicants only. Consists of courses with the designation of HNSC (Human Nutritional Sciences), FMLY (Family Social Science), TXSC (Textile Science) and/or HMEC (General Human Ecology) or their equivalents. Future applicants are encouraged to contact the Faculty of Education for guidance.
- <sup>7</sup> Mathematics: A minimum of 6 credit hours must be above the 1000 level. Both major and minor may include courses from either the department of Mathematics and/or the department of Statistics.
- <sup>8</sup> Music: See Admissions (<https://umanitoba.ca/admissions/>) website for detailed requirements.
- <sup>9</sup> Native Studies: May include 6 credit hours of a Native Language course.
- <sup>10</sup> Physical Education: See Admissions (<https://umanitoba.ca/admissions/>) website for detailed requirements.
- <sup>11</sup> Second Language: Language other than English or French

#### Additional Teachable Minors:

(in addition to the teachable areas above, the Minister of Education recognizes the following as minors only)

- Anthropology
- Classics
- Dance
- Developmental Studies<sup>1</sup>
- Earth Science (Geological Science)
- Economics
- Environmental Science (Environmental Studies)
- Law
- Philosophy
- Political Studies (Political Science)
- Psychology
- Religious Studies
- Sociology

<sup>1</sup> For applicable coursework see the Faculty of Education website (<https://umanitoba.ca/education/programs-study/#bachelor-of-education>)

#### Applicable Senior Years Teachable Majors and Minors

##### Applicable Subjects for Both Majors & Minors:

- Art<sup>1</sup>
- Biology
- Chemistry
- Computer Science
- Drama/Theatre
- English (Language Arts)
- French
- General Science<sup>2</sup>
- Geography
- History
- Human Ecology<sup>3</sup> (Home Economics)
- Mathematics<sup>4</sup>
- Music<sup>5</sup>
- Native Studies<sup>6</sup>
- Physical Education<sup>7</sup>
- Physics
- Second Language<sup>8</sup>

- <sup>1</sup> Art: Applicants must possess a minimum of 18 credit hours of studio courses for a major and 12 credit hours of studio courses for a minor.
- <sup>2</sup> General Science: Must include two (only) Science disciplines (Biology/Biological Science, Chemistry, Computer Science, Environment Science, Geological Science, and Physics. Does not include Geography courses). A minimum of 3 credit hours is required in each of the two disciplines. Additionally, applicants selecting this major must present 3 credit hours at the 3000 level or above; and, applicants selecting this minor must present 6 credit hours at the 2000 level or above.
- <sup>3</sup> Human Ecology: Consists of courses with the designation of HNSC (Human Nutritional Sciences), FMLY (Family Social Science), TXSC (Textile Science) and/or HMEC (General Human Ecology) or their equivalents. Future applicants are encouraged to contact the Faculty of Education for guidance.
- <sup>4</sup> Mathematics: A minimum of 6 credit hours must be above the 1000 level. Both major and minor may include courses from either the department of Mathematics and/or the department of Statistics.
- <sup>5</sup> Music: See Admissions (<https://umanitoba.ca/admissions/>) website for detailed requirements
- <sup>6</sup> Native Studies: May include 6 credit hours of a Native Language course.
- <sup>7</sup> Physical Education: See Admissions (<https://umanitoba.ca/admissions/>) website for detailed requirements.
- <sup>8</sup> Second Language: Language other than English or French.

#### Other Admission Requirements for After-Degree Bachelor of Education

Minimum admission GPA for consideration: 2.50 on university coursework with a minimum grade of "C"<sup>1</sup> in each teachable major/minor course and in breadth component coursework. The admission GPA is calculated on the most recent 30 credit hours of university coursework available at February 1 of admission year<sup>1</sup>. Courses graded 'Satisfactory' or 'Pass' in non-letter graded pass/fail courses will be used within the teachable courses, but excluded from the GPA calculation. International Baccalaureate (IB) and Advanced Placement (AP) will follow the University of Manitoba regulations and will be calculated if part of the above mentioned 30 credit hours.

<sup>1</sup> For Fall 2022: See Admissions website for upcoming changes

To be eligible for the After-Degree program, applicants must have a conferred bachelor's degree and all course requirements as stipulated in 2.1 at the 1000 level or higher completed from a recognized institutions by May 1 of the year of application.

In addition to criteria outlined above, all applicants must complete:

- writing skills exercise
- references

Selection criteria: 69.0% on GPA; and 31.0% on writing skills.

### Diversity Admission Category

The Faculty of Education has a Diversity Admissions Category. The Faculty recognizes the importance of providing the highest quality of education to all students in Manitoba via a teaching force that is fully representative of the cultural, ethnic and racial diversity of the province.

As the largest teacher education institution in the province, the Faculty recognizes its responsibility to facilitate the development of such a teaching force. Furthermore, the Faculty recognizes the need to ensure that its recruitment and admission policies and procedures do not inappropriately obstruct the achievement of such a goal, but rather actively promote its attainment.

In keeping with the above, the Faculty will admit up to forty-five percent (45%) of the After-Degree B.Ed. applicants under this policy. For the purposes of self-identification, the Diversity Admissions Categories include: Canadian Indigenous Peoples, Racialized Persons, Persons with Gender Identity/Sexual Orientation Difference, Persons with Disabilities, and Disadvantaged Persons.

*Canadian Indigenous Peoples (Allocations 15% of each stream)* – This includes Canadian First Nations, Metis, and Inuit peoples.

*Racialized Persons (Allocation 7.5% of each stream)* – This includes those who have been treated differently by people or institutions on the basis of their perceived racial backgrounds, colour, and/or ethnicity. This diversity category includes non-Canadian Indigenous peoples.

*Persons with Gender Identity/Sexual Orientation Difference (Allocation 7.5% of each stream)* – This includes persons who self-identify as lesbian, gay, bisexual, transgender/transsexual, two spirit or queer (LGBTQ).

*Persons with Disabilities (Allocation 7.5% of each stream)* – This includes those who have a diagnosed physical, mental, psychological, sensory or diagnosed learning disability.

*Disadvantaged Persons (Allocation 7.5% of each stream)* – A student graduating from the University of Manitoba ACCESS<sup>1</sup> Program from an Undergraduate Degree Program in May of the application year or in October of the preceding year.

All information on admission requirements are described in detail in the applicant information bulletin ([https://umanitoba.ca/student/admissions/media/education\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/education_bulletin.pdf)) that includes application deadline dates and information about applying online. This material is available from the Office of the Registrar and Enrolment Services, 4th Floor University Centre.

<sup>1</sup> For the purpose of admission, the Faculty of Education follows the University of Manitoba criteria for ACCESS Program applicants, that is: those who have not had the opportunity for university studies at the degree level because of social, economic and cultural reasons, lack of formal education or residence in remote areas.

### Criminal Records and Child Abuse Registry

All applicants offered admission to the After-Degree Bachelor of Education program are required to complete the "Self-Declaration for Newly Admitted Students: Child Abuse Registry and Statement of Criminal Records" form as a condition of final acceptance to the program. Only adult convictions must be disclosed, and the existence of such a record will not automatically exclude applicants.

In addition to the above self-declaration, all successful applicants will be conditionally admitted pending clearance of an official Criminal Record Search (including vulnerable sector screening) and clearance from the Child Abuse Registry. Both documents must be current (dated March 15 or later of admit year). Registration will not be permitted until these clearances are received. Failure to clear or failure to provide these documents by the stated deadline (see Applicant Bulletin ([https://umanitoba.ca/student/admissions/media/education\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/education_bulletin.pdf))) will result in admission offer being revoked. It is strongly recommended that applicants order these documents immediately following admission offer.

### Bachelor of Education Program- Academic Regulations

The provisions of the Academic Calendar chapters, General Academic Regulations (p. 118) and University Policies and Procedures (p. 37), apply to all students. In addition, the Faculty of Education has regulations and requirements, published below, that apply specifically to its students.

#### Academic Regulations of All Bachelor of Education Programs Academic Requirement for Graduation

A DGPA of 2.50 is required for graduation in the B.Ed.

#### Academic Standing

A minimum DGPA of 2.50 must be maintained in the B.Ed. program for clear standing. A grade of "C" or a Pass (P) is a passing grade for Education courses including practicum.

#### Additional Academic Considerations

Each student in the Faculty of Education is presumed to be generally suited to a teaching program. Should this prove not to be the case, the Faculty reserves the right, at any time, to require a student to withdraw from the B.Ed. program. Unsatisfactory performance in Practicum courses may be considered reason to require a B.Ed. student to withdraw from the faculty. Please refer to Professional Unsuitability By-Law (p. 451).

#### Appeal Procedures

The Faculty of Education Grade Appeal Policy & Procedure ([https://umanitoba.ca/faculties/education/media/Grade\\_Appeal\\_Policy\\_March\\_18\\_2019.pdf](https://umanitoba.ca/faculties/education/media/Grade_Appeal_Policy_March_18_2019.pdf)) is located on the Faculty of Education website. Information about admission decision appeals may be found in the Academic Calendar chapter, Admissions (p. 129).

#### Assessment of Student Academic Performance

Academic performance is assessed at the end of each regular term in which the B.Ed. student is registered in all courses that are used for credit towards the B.Ed. degree. Decisions concerning academic standing are normally made upon initial completion of 15 credit hours.

Based on the DGPA attained in these courses, the following decisions with respect to the student's eligibility to continue as a Faculty of Education B.Ed. student will be made.

### Eligible to Proceed

The student with a minimum of 2.50 is eligible to proceed.

### Academic Probation

The student who passes all courses, but whose DGPA is below 2.50 but above 1.99 is placed on academic probation

The student with failing grades whose DGPA is below 2.50 but above 1.99 may be granted permission to repeat and/or replace the failed courses and permission to proceed on probation until completion of an additional 15 credit hours of Education coursework

Students placed on academic probation may continue on probation until they have completed an additional 15 credit hours of required degree coursework. To clear probation, a student must raise their DGPA to 2.50 by the end of the probationary period. Students on probation who fail to raise the DGPA to at least 2.50 will be required to withdraw on academic grounds (suspension) for a period of two years.

### Academic Suspension

Any student who does not meet the minimum academic requirements or whose DGPA is below 2.00 shall be required to withdraw on academic grounds (suspension) from the Faculty of Education for a period of two academic years.

Students who have been required to withdraw on academic grounds will be informed via registered mail. These students may not register at the university for two academic years. Following this period, students wishing to pursue a B.Ed. degree, must make a written request for reinstatement. The following will apply in such cases:

No application for reinstatement will be considered before a minimum period of two academic years has lapsed from the effective date of the required withdrawal to the effective date of the requested reinstatement.

The applicant will be expected to demonstrate that he or she will now be able to meet the academic requirements of the program.

If the student is reinstated after the time limit for program completion has expired (see Statute of Limitation (p. 451)), the Associate Dean (Undergraduate) shall determine which, if any, courses previously successfully completed shall be repeated or replaced.

### Attendance at Class/Withdrawal

Regular attendance is expected for all students in all courses, including practicum. An instructor or Associate Dean Undergraduate in consultation with the instructor, will normally initiate procedures to withdraw a student from a course where unexcused absences exceed 10% of the scheduled instructional class hours for a course in any one term, or where absences (excused or unexcused) reach 20% or higher of the scheduled class instructional hours for a course in any one term.

Students must contact instructors regarding absences. Students may be required to complete alternative professional learning activities.

The Director of Practicum & Partnerships can initiate proceedings to withdraw a student from a practicum course where absences from required practicum days, excused or unexcused, cannot be made up within the term.

See refer to the Attendance Policy (<https://umanitoba.ca/faculties/education/media/2019-20AttendancePolicyProcedures.pdf>) for details.

See the Academic Calendar, General Academic Regulations (p. 37), Attendance and Withdrawal (p. 116)

### Authorized Withdrawals

Authorized Withdrawals (AWs) may be requested on medical or compassionate grounds, subject to satisfactory documentation. Students must contact an Education Academic Advisor to initiate an Authorized Withdrawal.

### Dean's Honour List

Students registered in a minimum of 12 credit hours within a single term and who achieve a Term Grade Point Average of 3.90 or better will be included in the Dean's Honour List. Grades for coursework taken on a Letter of Permission and used towards the B.Ed. degree will be used in meeting the eligibility requirements of the Dean's Honour List.

Students receiving failing grades where such coursework is required to earn the B.Ed. degree and/or practicum will not be eligible for the Dean's Honour List.

Eligible students must be enrolled in the After-Degree B.Ed. program.

### Degree with Distinction

A student graduating from the After-Degree B.Ed. program will have the degree granted "With Distinction" if a minimum DGPA of 4.20 has been attained on all courses that are used for credit towards the B.Ed. degree. This distinction will be noted on the parchment and on the student's transcript.

### Gold Medal

The Gold Medal is awarded each year to the B.Ed. graduate who has the highest GPA (minimum 3.75) in the last 60 credit hours of the B.Ed. degree and who has completed at least 80 percent of what is considered to be the normal full course load in each of the last two years of the program.

### Grading Scale

Letter Grade	Grade Point	Level of Achievement	Percentage Range
A+	4.50	Exceptional	95 and above
A	4.00	Excellent	90-94
B+	3.50	Very Good	85-89
B	3.00	Good	80-84
C+	2.50	Satisfactory	75-79
C	2.00	Adequate	70-74
D	1.00	Unacceptable	60-69
F	0.00	Failure	Below 60

The required B.Ed. Practicum courses are marked on a Pass/Fail basis.

A minimum grade of "C" or a Pass (P) is required for all B.Ed. courses.

### Incompletes

Please refer to the General Academic Regulations, Academic Evaluation (p. 121).

### Leave of Absence and Part-Time Studies

Although most students will complete the After-Degree B.Ed. program in two years, the Faculty recognizes that individual circumstances may arise that require a student to take one or more full years away from study. In such cases a student should meet with an Education Academic Advisor

as early as possible to discuss their particular situation and to map out plans for completing their program. It is important to note that in such cases the following applies:

- Newly admitted students must successfully complete a minimum of 3 credit hours of required B.Ed. coursework in the fall or winter term of the year of admission. That is, a leave of absence is not permitted in the first year.
- The normal maximum time allowed for completion of the B.Ed. program is six years from the date of admission.
- Application to return for a practicum following a leave must be made by the deadline stated under “Application Deadline for School Placement” in the “Program Requirements” sections.
- Any student returning to resume studies after a leave of absence is expected to conform to any new requirements that have been approved during their absence.
- A student who is on a leave of absence is still considered to be within the B.Ed. program and therefore, cannot take courses at another post-secondary institution unless approved on a Letter of Permission (please refer to the General Academic Regulations, Academic Evaluation (p. 121)).

Students considering part-time options should note that required B.Ed. courses may not always be offered each term or each year (for example, Senior Years C & I in Physics is offered in alternate years). Therefore, students should consult with an Academic Advisor when considering part-time options.

### Professional Unsuitability By-Law

The Senate of the University has approved a by-law granting authority to the Faculty of Education to require a student to withdraw from the Faculty for reasons of professional unsuitability. A student may be required to withdraw from the Faculty or may face other disciplinary action when, at any time, the Professional Unsuitability Committee has determined that the student is unsuited, on consideration of competence or professional fitness, for the practice of teaching.

Copies of this by-law may be obtained from the Faculty of Education website. (<https://umanitoba.ca/education/>)

### Repeating a Course

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

Required courses which receive a grade of “F” or “D” must be repeated. Education elective courses which receive a grade of “F” or “D” must be repeated or replaced with other Education elective courses. Courses which receive a “C” grade or higher may be repeated; but only with the consent of the Associate Dean, Undergraduate Program.

Education courses may only be repeated once. When a course is repeated, the last grade achieved will be used in calculating the DGPA.

Students admitted to the After-Degree B.Ed. program will be required to withdraw from the B.Ed. program on academic grounds upon failure (receipt of a grade of “F”) of any 3 (of the 4) required practicum courses.

### Statute of Limitation

The normal maximum time allowed for the completion of the B.Ed. program is six years from the date of admission.

### Supplemental Examinations

Supplemental examinations are not permitted in Education courses.

### Voluntary Withdrawals

Please refer to the General Academic Regulations (p. 118).

### Voluntary Withdrawal from Practicum Limit

All students admitted are permitted one voluntary withdrawal from each of the practicum courses.

### 5000-Level Courses

Students enrolled in the After-Degree B.Ed. program are not permitted to take 5000-level courses.

### Academic Regulations for the After-Degree Bachelor of Education

In addition to Academic Regulations of Bachelor of Education Programs (p. 449), the following regulations apply to the After-Degree B.Ed. program.

### Maximum Course Load

The maximum credit hour load for After-Degree B.Ed. students is 30 credit hours in the regular session (September-April). The following requests for exception will apply:

- Requests to register for 33 credit hours, from students who are in good standing, do not need approval but the student must contact an Academic Advisor for assistance.
- Requests to register for 36 credit hours are approved by an Academic Advisor provided the student’s minimum DGPA is 3.50.
- Requests to register for 3 credit hours above the maximum load but where the student’s DGPA is below 2.50 are not permitted.
- Requests to register for more than 36 credit hours must be submitted, in writing, to the Associate Dean, Undergraduate Programs.

### Transfer of Credit

Students may transfer a maximum of five full courses (30 credit hours) from another recognized university or college Professional Education program toward the After-Degree B.Ed. provided the courses are comparable and acceptable to the program, and they have not been applied to another degree program.

Students will not receive advance standing for any Education course which is more than six years old at the point of their admission to the Faculty of Education.

Courses taken as part of the Certificate in Teaching English as a Second Language (CTESL) (completed by end of Winter 2017) or Certificate in Adult and Continuing Education (CACE) (started by Summer 2017) through Extended Education, U of M, may receive credit for some coursework. See PBDE (p. 459), Transfer of Credit for a listing of equivalents.

Those students who are currently in the program and wish to register for a course at another university or college must complete an application for “Letter of Permission” prior to registering. Further information can be found on the website (<https://umanitoba.ca/registrar/letter-permission/>).

Courses at the 5000-level cannot be transferred (p. 451) to the B.Ed. After-Degree program .

### Bachelor of Education Program- Additional Information

Scheduling changes to courses and practicum will be updated to Aurora Student. Students are expected to check their Week-At-A-Glance on *Aurora Student* to confirm location, time, and instructor changes. Cohort

meetings and faculty events will be posted on the faculty website. Students are encouraged to regularly refer to the website.

### Continuing Students

Please refer to Admissions (p. 129).

### Part-Time Students

Opportunities for part-time study are available in all B.Ed. After-Degree streams. In addition to Statue of Limitations (p. 451) and attending Part-Time (p. 450), the following should be noted:

- Students can begin part-time studies in the first year provided they successfully complete 3 credit hours of Education coursework from the Year 1 program requirements. Failure to do so will result in ineligibility to continue in program and require re-application and re-admission.
- Part-time students should note that not all Curriculum and Instruction courses are offered every year.
- Part-time students should work with an Academic Advisor for program planning.

### Special Students

The Faculty of Education does not admit students to this category.

### Students Enrolled in Other Faculties/Schools

Students currently enrolled in other faculties/schools at the University of Manitoba may take some 1000-level Education courses. Students who hold a recognized degree from an accredited institution may also take 5000-level courses, however, students must obtain permission by completing the Registration Permission form available on the website (<https://umanitoba.ca/education/sites/education/files/2020-11/pbde-grad-registration-permission-form-fillable.pdf>) or from the B.Ed. Student Services office, Education Building. 5000-level courses cannot be applied towards a B.Ed. degree.

### Visiting Students

For admissions procedure, refer to the Application for Visiting Students (<https://www.umanitoba.ca/student/admissions/application/programs/4266.html>) and contact the B.Ed. Student Services office, Faculty of Education at (204) 474-9004.

The Faculty sponsors a number of lectures, workshops and forums. Attendance for B.Ed. students at program days is expected. Details will be posted on the "News and Events" of the faculty's website (<https://umanitoba.ca/education/>).

Education courses may have unique start and end dates. Students are referred to Academic Schedule (p. ) to view voluntary withdrawal and fee refund dates.

## Post Baccalaureate Diploma in Education (PBDE) - Admission Requirements

### Applicants for Admission must possess:

- A bachelor's degree and one of the following types of certificates granted by Manitoba Education and Training: Permanent Professional Certificate, Provisional Professional Certificate, or Clinicians' Certificate; or equivalent from other provinces [See note 1 on teacher certification] or a bachelor's degree and two years of appropriate teaching/work experience (see note 2);
- A Grade Point Average of 2.00 in the bachelor's degree (including any after degree certification program).

### Note 1: Teacher Certification

The majority of applicants will possess a valid teaching certificate before being admitted to the Post Baccalaureate Diploma in Education Program.

The granting of a certificate to teach in the public schools of Manitoba is the prerogative of Manitoba Education and Training and is based on a recognized program of teacher education. Individuals wishing to apply for such certification should contact the Professional Certification Unit, Manitoba Education and Advanced Learning.

### Note 2:

Individuals must also complete a Supplementary Application and include a brief statement as to educational plans and a resume showing evidence of two years of appropriate full-time teaching or work experience. Applications are reviewed by the Office of the Associate Dean (Undergraduate) for suitability for PBDE study.

### Admission Procedure

Applications may only be completed online and the form is available at <http://umanitoba.ca/faculties/education/future/index.html> (<http://umanitoba.ca/faculties/education/future/>). The deadlines are:

### APPLICATION DEADLINES <sup>1</sup>

- April 1/June 1 for classes beginning Summer (May-July)<sup>2</sup>
- August 1 for classes beginning Fall (September)
- December 1 for classes beginning Winter (January)
  - <sup>1</sup> International Applicants should apply at least five (5) months in advance of the above deadlines.
  - <sup>2</sup> Students who wish to enrol in courses that start in May should apply by April 1.

### Readmission, Continuing, and Returning Students

All students who were admitted and who did not follow through with course registration or who voluntarily withdrew from their first year of studies must reapply for admission ([www.umanitoba.ca/applynow](http://www.umanitoba.ca/applynow)) (<http://www.umanitoba.ca/applynow/>).

All students who were admitted to the PBDE and who have not been in attendance for three consecutive terms, must request permission to re-register in the program and pay the re-admission fee. The "Request for Permission to Re-Register in the Post Baccalaureate Diploma in Education" is available at <http://umanitoba.ca/education/>.

## Post Baccalaureate Diploma in Education (PBDE) Program - Academic Regulations

### Appeal Procedures

The Faculty of Education Grade Appeal Policy & Procedure ([https://umanitoba.ca/faculties/education/media/Grade\\_Appeal\\_Policy\\_March\\_18\\_2019.pdf](https://umanitoba.ca/faculties/education/media/Grade_Appeal_Policy_March_18_2019.pdf)) is located on the Faculty of Education website. Information about admission decision appeals may be found in the Academic Calendar, Admissions (p. 129).

### Assessment of Student Academic Performance- Effective Fall 2022 <sup>1</sup>

Academic performance is normally assessed at the completion of nine credit hours of course work and at the end of every session thereafter. A minimum grade of "C" is required for each course that is to be included in the student's diploma program. Effective September 2011, a student must maintain a minimum Degree Grade Point Average (DGPA) of 2.50 to continue in the program. A student whose DGPA falls below 2.50 will be placed on academic suspension for two years. Reapplication and written request for reinstatement addressed to the Associate Dean Undergraduate Programs is required for readmission to the program. The written request must be received no later than 30 days prior to the

application deadline and must identify actions the student has taken during the suspension period to better prepare for meeting the academic requirements of the program.

Note: Students admitted prior to Fall 2022 should consult relevant calendar.

<sup>1</sup> Amended July 15, 2021

### Attendance at Class and Debarment

Regular attendance is expected of all students in all courses, including practicum. An instructor or Associate Dean Undergraduate in consultation with the instructor, will initiate procedures to withdraw a student from a course where unexcused absences exceed 10% of the scheduled instructional class hours for a course, or where absences (excused or unexcused) reach 20% or higher of the scheduled class instructional hours for a course in any one term.

Students must contact instructors regarding absences. Students may be required to complete alternative professional learning activities.

The Director of Practicum & Partnerships will initiate proceedings to withdraw a student from a practicum course where absences from required practicum days, excused or unexcused, cannot be made up within the term.

See the chapter, General Academic Regulations (p. 118), Attendance at Class and Withdrawal. In addition, see Post-Baccalaureate Diploma in Education Attendance (<https://umanitoba.ca/education/sites/education/files/2020-08/pbde-fall-2020-revised-undergrad-attendance-policy-pbde-procedures.pdf>) Procedures ([http://umanitoba.ca/faculties/education/media/PBDE\\_Attendance\\_Procedures\\_May\\_2\\_2018.pdf](http://umanitoba.ca/faculties/education/media/PBDE_Attendance_Procedures_May_2_2018.pdf)) for full details.

### Continuing Students

See Admissions (p. 129).

Letter Grade	Grade Point	Level of Achievement	Percentage Range
A+	4.50	Exceptional	95 and above
A	4.00	Excellent	90-94
B+	3.50	Very Good	85-89
B	3.00	Good	80-84
C+	2.50	Satisfactory	75-79
C	2.00	Adequate	70-74
D	1.00	Marginal	60-69
F	0.00	Failure	Below 60

### Incompletes

See the chapter, General Academic Regulations and Requirements (p. 118), Academic Evaluation. Students who are unable to complete the term work prescribed in a course may apply to the instructor prior to the end of term for consideration of a grade classification of 'incomplete.' It is understood that the student is to write the final examination if one is scheduled for the course.

Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the instructor shall calculate the temporary grade using a zero value for incomplete work.

Normally, the following maximum extensions are allowed:

- August 1 for courses terminated in April
- December 1 for courses terminated in August
- April 1 for courses terminated in December

If a final grade is not reported within one month of the extension deadline, the Incomplete (I) classification will be dropped and the grade will remain as awarded. The student will no longer have an opportunity to improve the grade. In no case will the satisfaction of the incomplete requirements result in a lower grade being awarded.

### Maximum Time Limits

The maximum time allowed for completing the PBDE is six<sup>1</sup> years from the time of admission. In addition, a student will not be permitted to count toward the diploma any course completed more than six<sup>1</sup> years prior to the time of admission. Students will be permitted to retake and use as PBDE credit Education courses beyond the six<sup>1</sup> years provided they have not been previously used elsewhere for credit toward a degree or diploma program. Courses from other faculties will need to be dealt with on an individual basis.

<sup>1</sup> For students admitted prior to September 2015, the maximum time allowed to complete the PBDE is nine years and courses cannot be older than nine years at the completion of the PBDE.

### Repeating a Course

Courses for which a grade of "F" or "D" is obtained, must be repeated or replaced; however, courses may only be repeated once. Courses in which a grade of "C" or higher is obtained may not be repeated. Courses may be repeated once. When a course is repeated, the last grade achieved will be used in calculating the Degree Grade Point Average.

### Supplemental Examinations

Supplemental examinations are not permitted in education courses.

### Voluntary Withdrawals

See, General Academic Regulations (p. 123).

### Authorized Withdrawals (AWs)

Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds, subject to satisfactory documentation. Students must contact an Education Student Advisor to initiate an authorized withdrawal.

### Graduate Requirements

In order to graduate from the Faculty of Education with a Post Baccalaureate Diploma in Education, students must complete at least 60 percent of their coursework in the Faculty of Education at the University of Manitoba.

### Transfer of Credit - Effective Fall 2022<sup>1</sup>

Subject to approval by the Faculty, transfer of credit may be granted on the basis of:

Courses taken as part of the Certificate in Teaching English as a Second Language (CTESL) (completed by end of Winter 2017) or as part of the Certificate in Adult and Continuing Education (CACE) (completed by the end of Fall 2017) through Extended Education, U of M, may receive credit for some coursework.

Those students who are currently in the program and wish to register for a course at another university or college must complete an application for "Letter of Permission" prior to registering. Further information can be found at <http://umanitoba.ca/registrar/letter-permission>.

A maximum of 12 credit hours may be transferred from an accredited post-secondary institution provided they have not been previously used towards a degree. Transferred courses must have a grade of C or better. Students will not be permitted to count toward the diploma any course completed more than six years<sup>2</sup> prior to the time of admission.

Note: Students admitted prior to Fall 2022 should consult relevant calendar.

<sup>1</sup> Amended July 14, 2021

<sup>2</sup> For students admitted prior to September 2015, courses transferred to the PBDE must fall within the nine year statute of limitation at the completion date, must be within the program requirements, and must have a grade of C or better.

### Extension of Time to Complete Program of Study (Applicable to students admitted September 2015 and later)

All requests for extensions must be made to the Associate Dean (Undergraduate), and must be made within the final term prior to the expiration. The student must complete the "Request for Extension" form available at <http://umanitoba.ca/education/> (<http://umanitoba.ca/faculties/education/current/>) and submit it to the Office of the Associate Dean (Undergraduate), Faculty of Education at least three, but no more than four, months prior to expiration of the respective maximum time limit. Requests for an extension are reviewed by Associate Dean (Undergraduate) on a case by case basis.

Requests for extension must be accompanied by a realistic timeline for completion.

The normal time requested for extensions is one term. More than one extension period may be considered; however, the total approved for all extensions will not normally exceed one year. Students requesting extensions should consult with an Academic Advisor.

### Leave of Absence

#### REGULAR LEAVE

A request for a leave of absence must be made to the Associate Dean (Undergraduate) who may grant a leave for a maximum of one year. While on leave of absence, a student would not be expected to maintain study. Students on a Regular Leave of Absence will be required to register for courses at the end of the leave period. A Regular Leave of Absence status does not extend the time limits as outlined in the Faculty regulations.

*Fees: No Re-Admission fee will be levied upon return to study at the end of a 12 month leave.*

#### EXCEPTIONAL LEAVE

In exceptional circumstances, at the request of the PBDE student, the Associate Dean (Undergraduate) may grant an exceptional leave of absence for a period of time not to exceed one year. While on leave of absence for exceptional reasons, a student would not be expected to maintain study nor pay the Re-Admission fee. In addition, the leave period would not be included in the time period allowed for the completion of the diploma.

*Fees: No Re-Admission fee will be levied upon return to study at the end of a 12 month leave.*

#### PARENTAL LEAVE

A PBDE student who is bearing a child or who has primary responsibility of the care of an infant or young child immediately following a birth or adoption of a child is eligible for parental leave. The request should be made to the Associate Dean (Undergraduate) and may be granted for up

to one year. While on leave of absence for parental reasons, a student would not be expected to maintain study. The leave period is not included in the time period allowed for completion of the diploma.

*Fees: No Re-Admission fee will be levied upon return to study at the end of a 12 month leave.*

Note: At the time of approval of an application for leave, the procedures for the return of the student to the Faculty at the completion of the leave must be stipulated.

The **Leave of Absence Application Form** is available at <http://umanitoba.ca/education/>. ([https://umanitoba.ca/faculties/education/media/Leave\\_of\\_Absence\\_Application.pdf](https://umanitoba.ca/faculties/education/media/Leave_of_Absence_Application.pdf))

### AWARDS & LEAVE OF ABSENCE

Students granted exceptional or parental leave will retain the full value of an award whose terms and conditions are established by the Faculty of Education. Such an award will be suspended at the onset of the leave and reinstated at the termination of the leave period (4 to 12 months) provided that the student returns to full time study at that time. Other awards will be paid according to the conditions established by the donor or granting agency.

### Courses Grouped by Subject

#### UNGROUPED COURSES

Course	Title	Hours
EDUA 5012	Legal and Administrative Aspects of Schools for Clinicians	3
EDUA 5302	Gender and Sexual Diversity in Education and Community	3
EDUB 5870	Mentoring for Teachers	3
EDUB 5940	Instructional Product Development	3

#### COUNSELLING PSYCHOLOGY

Course	Title	Hours
EDUA 5480	Counselling Skills	3
EDUA 5490	Field Placement in Counselling	3
EDUA 5500	Theories and Issues in Counselling	3
EDUA 5510	Elementary School Counselling	3
EDUA 5520	Ethics in Counselling	3
EDUA 5530	Secondary School Counselling	3
EDUA 5540	Group Counselling	3
EDUA 5550	Psychology of Human Relationships	3
EDUA 5570	Family Life Education	3
EDUA 5580	Career Development	3
EDUA 5590	Career Information	3

#### CROSS-CULTURAL, SOCIOLOGICAL, AND PHILOSOPHICAL FOUNDATIONS IN EDUCATION

Course	Title	Hours
EDUA 5200	Readings in Educational Foundations	3
EDUA 5210	Recent Developments in Educational Foundations 1	3
EDUA 5230	Studies in International Education	3

**EARLY YEARS EDUCATION**

Course	Title	Hours
EDUA 5930	Observing Child Behaviour	3
EDUA 5940	Language and Symbolic Process	3

**EDUCATIONAL ADMINISTRATION**

Course	Title	Hours
EDUA 5010	Introduction to Educational Administration	3
EDUA 5014	Educational Leadership	3
EDUA 5020	Principles of Curriculum Development	3
EDUA 5030	Management of Educational Institutions	3
EDUA 5040	Personnel Administration in Education	3
EDUA 5060	Principles of Instructional Supervision	3
EDUA 5080	Recent Developments in Educational Administration 1	3
EDUA 5070	Course no longer offered	3
EDUA 5090	Recent Developments in Educational Administration 2	3
EDUA 5100	Issues in the Administration of Education	3

**EDUCATIONAL PSYCHOLOGY**

Course	Title	Hours
EDUA 5710	Readings in Educational Psychology 1	3
EDUA 5730	Recent Developments in Educational Psychology 1	3
EDUA 5740	Recent Developments in Educational Psychology 2	3
EDUA 5760	Psychology of Instruction in Educational Contexts	3

**EDUCATIONAL TECHNOLOGY**

Course	Title	Hours
EDUB 5840	Internet Pedagogy	3
EDUB 5850	Theory and Practice of Designing and Developing Web-based Courses	3
EDUB 5860	Project Management in Education and Training	3

**EXPRESSIVE ARTS**

Course	Title	Hours
EDUB 5012	Video Art, Culture, and Education	3
EDUB 5014	Pedagogy and Film	3
EDUB 5040	Theory and Practice of Teaching Art (Elementary)	6
EDUB 5060	Theory and Practice of Teaching Art in the Senior Years 1	3
EDUB 5120	Music in the Early Years/Middle Years School 1	3
EDUB 5130	Music in the Early Years/Middle Years School 2	3
EDUB 5140	Special Methods in Music 1	3
EDUB 5150	Special Methods in Music 2	3
EDUB 5160	School Band	3
EDUB 5190	School Music Productions	3
EDUB 5250	Music: Advanced Choral Methods	3

**INCLUSIVE EDUCATION**

Course	Title	Hours
EDUA 5602	Introduction to Inclusive Education	6
EDUA 5612	Field Experience in Inclusive Education	6
EDUA 5614	An Introduction to Trauma Care	3
EDUA 5620	Teaching Children Through Alternative and Augmented Communication	3

EDUA 5632	Assessment and Instruction in Inclusive Education	6
EDUA 5642	Inclusive Education: Transition from School to Adult Life	3
EDUA 5652	FASD and other Neurodiverse Conditions in the Classroom	3
EDUA 5662	Delivering Supports for Inclusive Education	3
EDUA 5680	Promoting Responsible Behaviour in Educational Settings	3
EDUA 5690	Focus on Exceptionality: Gifted and Talented	3

**INSTRUCTIONAL DESIGN AND EVALUATION**

Course	Title	Hours
EDUB 5330	Teaching Language and Literacy in the Content Areas	3
EDUB 5350	Current Issues in Language and Literacy	3
EDUB 5360	Children's Literature	3
EDUB 5370	Adolescent Literature	3
EDUB 5380	Theory and Practice in Written Composition	3
EDUB 5390	The Teaching of Written Composition	3
EDUB 5400	Diagnostic and Remedial Techniques in Language Arts	6

**LIBRARY SCIENCE**

Course	Title	Hours
EDUB 5550	Library Reference and Informational Materials	6

**MATHEMATICS**

Course	Title	Hours
EDUB 5760	Recent Developments in Mathematics Education	3
EDUB 5770	Diagnosis and Remediation in Elementary School Mathematics	3

**READINGS IN CURRICULUM**

Course	Title	Hours
EDUB 5200	Readings in Curriculum, Teaching and Learning 1	3
EDUB 5210	Readings in Curriculum, Teaching and Learning 2	3
EDUB 5220	Recent Developments in Curriculum, Teaching and Learning 1	3
EDUB 5230	Recent Developments in Curriculum, Teaching and Learning 2	3
EDUB 5470	Recent Developments in Curriculum: Mathematics and Natural Sciences 1	3
EDUB 5480	Recent Developments in Curriculum: Mathematics and Natural Sciences 2	3

**SECOND LANGUAGE EDUCATION**

Course	Title	Hours
EDUB 5510	ESL Materials Development and Practicum	3
EDUB 5512	Teacher Development and Leadership in Second Language Education	3
EDUB 5514	Assessment and Testing of ESL/EAL Learners	3
EDUB 5516	Teaching Literacy, Academics, and Language (LAL) Learners	3
EDUB 5518	Intercultural Communication in Transnational Contexts	3
EDUB 5520	Grammar in ESL Learning and Instruction	3



EDUB 5522	English as an Additional Language Teaching for Academic and Specific Purposes	3
EDUB 5524	Language Development for Multilingual Educators	3
EDUB 5530	ESL and Content Instruction	3
EDUB 5540	Vocabulary and Pronunciation Instruction	3
EDUB 5580	Fundamentals of ESL (English Second Language) Instruction	3

**SOCIAL STUDIES**

Course	Title	Hours
EDUB 5600	The Teaching of Social Studies in the Early and Middle Years	3
EDUB 5660	Theoretical Foundations of Social Studies	3

**TECHNICAL/VOCATIONAL**

Course	Title	Hours
EDUB 5100	Developing Competency Skills in Enterprise Education 1	3
EDUB 5110	Developing Competency Skills in Enterprise Education 2	3
EDUB 5690	Seminar in Business Education	6

## After-Degree Bachelor of Education

### B.Ed. Programs

Telephone: (204) 474-9004

Fax: (204) 474-7551

E-mail: Bachelor.Education@umanitoba.ca (  
bachelor.education@umanitoba.ca)

Website: [umanitoba.ca/education](https://umanitoba.ca/education/) (<https://umanitoba.ca/education/>)

**Reminder:** While Education Academic Advisors are available to clarify faculty and university regulations and degree requirements, it is the student's responsibility to ensure that degree and program requirements are met.

## Program Requirements for After-Degree Bachelor of Education

### Application Deadline for School Placement

Actively registered After-Degree B.Ed. students will be contacted by February via email requesting that they complete an online "Request for School Placement" and must reply by the date specified in the email.

Part time students or students not currently in attendance must contact the B.Ed. Student Services office no later than February 1 to make their intentions known. Failure to reply or make contact by the specified dates may result in students being denied a school placement.

After-Degree B.Ed. students who anticipate needing special accommodations are required to register with Student Accessibility Services (<https://umanitoba.ca/student-supports/accessibility/>) and may also contact an Education Academic Advisor about the kinds of supports they may need. Once students have registered with Student Accessibility Services, reasonable accommodations for practicum can be made in consultation with the Director of Practicum and Partnerships.

### Student Criminal Background Check

Applicants should also be aware that the Professional Certification Unit will require students graduating from the Bachelor of Education program to undergo a criminal record check, including vulnerable sector screening as part of the certification process. Information on the "Self-Declaration for Newly Admitted Students: Child Abuse Registry and Statement of Criminal Records" form is included in the applicant information bulletin available from Admissions (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>).

All continuing students will be required to complete and submit a "Self-Declaration for Continuing Students: Child Abuse Registry and Statement of Criminal Records" form prior to registration for every year they are enrolled in the After-Degree B.Ed. program.

### Orientation and Faculty Program Days

All After-Degree B.Ed. students registered for the current academic year must attend the annual Orientation session (late August/early September) in order to proceed to Practicum. The date(s) is provided to new students following submission of their deposit (April/May), to returning students via the B.Ed. Newsletter (in the previous March-May), and to all students via their registration information in June/July. Orientation dates will also be available on the Faculty website.

The Faculty sponsors a number of lectures, workshops and forums. Details will be posted on the the faculty's website (<https://umanitoba.ca/education/>).

## Degree Requirements

### Early Years Stream

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
EDUB 3012	Early Years Mathematics and Quantitative Reasoning for All Learners	3
EDUB 3010	Classroom Community and Early Years Literacy	3
	Indigenous Education <sup>1</sup>	3
EDUA 3000 or EDUA 3002	Canadian School Systems and Their Public Purposes or Contested Spaces in Education	3
EDUB 3310	Early Years: Practicum 1	3
<b>Hours</b>		<b>15</b>
<b>Winter</b>		
EDUB 3016	Creative Collaboration in the Arts	3
EDUB 3014	Early Years Science and Social Studies: Pedagogy and Curriculum	3
EDUB 3018	Multi-Language Development in Early Years <sup>2</sup>	3
EDUA 3000 or EDUA 3002	Canadian School Systems and Their Public Purposes or Contested Spaces in Education	3
EDUB 3312	Early Years: Practicum 2	3
<b>Hours</b>		<b>15</b>

**Year 2****Fall**

EDUB 4010	Pedagogy for Sustainable Well-being: Science, Mathematics and Social Studies	6
EDUB 4012	Pedagogy in Multiple Literacies: Children as Meaning Makers	6
EDUB 4310	Early Years Practicum 3	3
<b>Hours</b>		<b>15</b>

**Winter**

EDUB 4014	Early Years: Physical Education/ Health Education	3
EDUA/EDUB Elective <sup>3</sup>		3
EDUA/EDUB Elective <sup>3</sup>		3
EDUA 4000	Inclusive Education	3
EDUB 4312	Early Years Practicum 4	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> All graduates of the After-Degree B.Ed. program must have 3 credit hours of Indigenous Education coursework chosen from: EDUA 3404 or EDUB 3406.

<sup>2</sup> Meets the Special Education/Diversity coursework requirement.

<sup>3</sup> See: Education Electives (p. 458)

**Middle Years Stream**

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
EDUB 3050	Middle Years Learners & Learning	3
EDUB 3056	Teaching English Language Arts in Middle Years	3
Select one of the following:		3
Indigenous Education <sup>1</sup>		
Special Education /Diversity <sup>2</sup>		
EDUA 3000 or EDUA 3002	Canadian School Systems and Their Public Purposes or Contested Spaces in Education	3
EDUB 3320	Middle Years: Practicum 1	3
<b>Hours</b>		<b>15</b>
<b>Winter</b>		
EDUB 3052	Middle Years: Teaching for Learning - Developing a Responsive Pedagogy	3
EDUB 3054	Introduction to Teaching Mathematics in Middle Years 1	3
Select one of the following:		3
Indigenous Education <sup>1</sup>		
Special Education /Diversity <sup>2</sup>		
EDUA 3000 or EDUA 3002	Canadian School Systems and Their Public Purposes or Contested Spaces in Education	3
EDUB 3322	Middle Years: Practicum 2	3
<b>Hours</b>		<b>15</b>

**Year 2****Fall**

EDUB 3060	Teaching Social Studies in Middle Years	3
EDUB 3062	Teaching the Arts in Middle Years	3
EDUB 3064	Teaching Physical Education/Health Education in Middle Years	3
EDUA/EDUB Elective <sup>3</sup>		3
EDUB 4320	Middle Years: Practicum 3	3
<b>Hours</b>		<b>15</b>

**Winter**

EDUB 4050	Middle Years: Creating Classroom Learning Environments	3
EDUB 3058	Teaching Science in Middle Years	3
EDUB 4052	Teaching Mathematics in Middle Years 2	3
EDUA 4000	Inclusive Education	3
EDUB 4322	Middle Years: Practicum 4	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> All graduates of the After-Degree B.Ed. program must have 3 credit hours of Indigenous Education coursework chosen from: EDUA 3404 or EDUB 3406.

<sup>2</sup> All graduates of the After-Degree B.Ed. program must have 3 credit hours of Special Education/ Diversity coursework chosen from: EDUA 3420, EDUA 3422, EDUB 3426, EDUB 3506, EDUB 3508 or EDUB 3510.

<sup>3</sup> See: Education Electives (p. 458)

**Senior Years Stream**

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
EDUB 3100	Senior Years: Principles and Processes for Teaching	3
EDUB 3XXX	Curriculum & Instruction <sup>1</sup>	3
Select one of the following:		3
Indigenous Education <sup>2</sup>		
Special Education / Diversity <sup>3</sup>		
EDUA 3000 or EDUA 3002	Canadian School Systems and Their Public Purposes or Contested Spaces in Education	3
EDUB 3330	Senior Years: Practicum 1	3
<b>Hours</b>		<b>15</b>
<b>Winter</b>		
EDUB 3102	Senior Years: Language and Literacy Across the Curriculum	3
EDUB 4XXX	Curriculum & Instruction <sup>4,5</sup>	3
Select one of the following:		3
Indigenous Education <sup>2</sup>		
Special Education / Diversity <sup>3</sup>		
EDUA 3000 or EDUA 3002	Canadian School Systems and Their Public Purposes or Contested Spaces in Education	3

EDUB 3332	Senior Years: Practicum 2	3
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
<b>Fall</b>		
EDUB 4XXX	Curriculum & Instruction <sup>4,5</sup>	3
EDUA/EDUB Elective <sup>6</sup>		3
EDUA/EDUB Elective <sup>6</sup>		3
EDUA 4000	Inclusive Education	3
EDUB 4330	Senior Years: Practicum 3	3
<b>Hours</b>		<b>15</b>
<b>Winter</b>		
EDUB 4102	Themes in Senior Years	3
EDUB 4100	Teacher and Technology	3
EDUA/EDUB Elective <sup>6</sup>		3
EDUA/EDUB Elective <sup>6</sup>		3
EDUB 4332	Senior Years: Practicum 4	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> 3 credit hours chosen from EDUB 3110, EDUB 3120, EDUB 3130 or EDUB 3140 dependent on Major subject area.

<sup>2</sup> All graduates of the After-Degree B.Ed. program must have 3 credit hours of Indigenous Education coursework chosen from: EDUA 3404 or EDUB 3406.

<sup>3</sup> All graduates of the After-Degree B.Ed. program must have 3 credit hours of Special Education/Diversity coursework chosen from: EDUA 3420, EDUA 3422, EDUB 3426, EDUB 3506, EDUB 3508 or EDUB 3510.

<sup>4</sup> 3 credit hours chosen from EDUB 4110, EDUB 4112, EDUB 4114, EDUB 4120, EDUB 4122, EDUB 4124, EDUB 4130, EDUB 4132, EDUB 4134, EDUB 4140, EDUB 4142, EDUB 4144, EDUB 4146, EDUB 4148, EDUB 4150, EDUB 4152, EDUB 4154 a required for major and as required for minor. Not all courses are offered every year.

<sup>5</sup> Registration in EDUB 4XXX is dependent on scheduling. May require 6 credits of EDUB 4XXX for both subject areas to be taken in second term of program.

<sup>6</sup> See: Education Electives (p. 458)

## Education Electives

Not all courses are offered every year.

Students can choose from the lists of electives. Students may seek permission to have other B.Ed. courses considered as an elective in their program by first consulting the Student Services Office (203 Education) and then obtaining approval from the instructor, the department head and an Academic Advisor. Forms are available from the Student Services Office or from the Faculty of Education website (<https://umanitoba.ca/education/student-experience/resources-bachelor-education/>). (Note: If permission is being sought to take courses with a prerequisite and/or those intended for Senior Years teachable major or minor subjects, evidence of having appropriate background in the area as acquired through coursework or related experiences should be provided on the "Registration Permission" form).

PBDE students can request permission to enrol in B.Ed. courses by following the procedure outlined above.

Course	Title	Hours
EDUA 3404	Indigenous Education	3
EDUA 3420	Cross-Cultural Education	3
EDUA 3422	An Introduction to Childhood Trauma and Its Impact in the Classroom	3
EDUA 3500	Recent Developments in Educational Administration and Foundations	3
EDUA 3502	Recent Developments in Educational Psychology	3
EDUA 3506	Foundations of Moral and Religious Education	3
EDUA 3508	Measurement and Evaluation	3
EDUA 3510	Communication and Interpersonal Relationships in Education	3
EDUB 1610	CyberPedagogy: Technology Production in Education	3
EDUB 1614	K-8 Curriculum Studies	3
EDUB 2160	Teaching Music in Early/Middle Years	3
EDUB 3406	Indigenous Perspectives and the Curriculum	3
EDUB 3408	Reconciliation in K - 12 Education	3
EDUB 3426	La pédagogie du français de base aux niveaux intermédiaire et de la jeune enfance	3
EDUB 3502	Recent Developments in Curriculum, Teaching and Learning 1	3
EDUB 3504	Academic and Professional English for Multilingual Teachers	3
EDUB 3506	Principles and Procedures of Second Language Education	3
EDUB 3508	Language and Content Instruction of EAL Students	3
EDUB 3510	Language Awareness for Teachers	3
EDUB 3512	Literature for Adolescents	3
EDUB 3514	Literature for Children	3
EDUB 3516	Art Across the Curriculum	3
EDUB 3518	Drama Across the Curriculum	3
EDUB 3520	Historical Development of Physical Science up to the 20th Century	3
EDUB 3522	Recent Developments in Learning and Teaching Senior Years Mathematics	3
EDUB 3524	Practical Work in School Science	3
EDUB 3526	Integration of Technological Literacy Across the K-12 Curriculum	3
EDUB 3528	Media Literacy	3
EDUB 3530	Beyond Schools: Experiencing Teaching and Learning in Community Settings	3
EDUB 3532	Basic Experiences in Movement and Dance Education	3
EDUB 3534	Creating Communities of Writers in Diverse Classrooms and Contexts	3
EDUB 4100	Teacher and Technology	3
EDUB 4502	Recent Developments in Curriculum, Teaching and Learning 2	3

## Education Electives (Open to Non-Education Students During Open Access Period)

Course	Title	Hours
EDUA 1560	Adult Learning and Development	3
EDUA 1570	Foundations of Adult Education	3

EDUA 1580	Program Planning in Adult Education	3
EDUA 1590	Facilitating Adult Education	3
EDUB 1600	Teaching General Music	3

## Post Baccalaureate Diploma in Education

### Post Baccalaureate Diploma in Education (PBDE)

**Telephone:** (204) 474-7886

**Fax:** (204) 474-7551

**E-mail:** PBDE.Education@umanitoba.ca

**Website:** [umanitoba.ca/education](https://umanitoba.ca/education/) (<https://umanitoba.ca/education/>)

The Faculty of Education offers a Post Baccalaureate Diploma in Education (PBDE) designed for teachers and other professionals.

The unique features of the PBDE program are that students can: design their own program of study and tailor it to their own areas of interest; take courses at the Faculty of Education as well as at other faculties and schools at the U of M or other approved institutions. A wide selection of courses are available through Summer Term, distance education, and summer institutes.

This program is also used for Internationally Educated Teachers who require additional coursework to meet Manitoba Teacher Certification requirements.

The PBDE is recognized by Manitoba Education and Training for salary classification purposes. Further, the PBDE program provides the opportunity for teachers to follow courses of study leading to the school counsellor, special education and special education coordinator certificates, certificate in school leadership, and to partial fulfilment of the requirements of the school administrators' (Level 1) and principals' (Level 2) certificates, all of which are issued by Manitoba Education and Training. For information regarding specialist certificates, contact:

Professional Certification Unit  
Manitoba Education and Training

Box 700, Russell  
Manitoba, R0J 1W0

telephone toll free at: 1-800-667-2378, or 1-204-773-2998

e-mail [certification@gov.mb.ca](mailto:certification@gov.mb.ca)

web: [www.edu.gov.mb.ca/k12/profcert/](http://www.edu.gov.mb.ca/k12/profcert/) (<http://www.edu.gov.mb.ca/k12/profcert/#clinician>).

## Degree Requirements

**Reminder:** While Education academic advisors are available to clarify faculty and university regulations and degree requirements, it is the student's responsibility to ensure that diploma and program requirements are met.

The Post Baccalaureate Diploma in Education consists of 30 credit hours of coursework, subject to the following regulations:

### Effective for Fall 2022<sup>1</sup>

1. A minimum of 18 credit hours must be taken in from the Faculty of Education at the University of Manitoba at the 5000-level;
2. A maximum of 12 credit hours may be taken in from the Faculty of Education below the 5000- level;

3. A maximum of 12 credit hours may be taken outside the Faculty of Education at the introductory or higher level of which six credit hours may be taken at the 1000-level. In the case of language study other than English or French, a maximum of 12 credit hours may be taken at the 1000-level provided all courses are in the same language.
4. A maximum of six credit hours may be earned through approved external field-led courses. These courses are Faculty-approved courses offered by approved partner organizations. Prior approval through the 'Application for Letter of Permission' will be required before taking courses and only students enrolled in the PBDE may take these courses.
5. PBDE students are not permitted to take graduate courses.
6. PBDE students may take Education Electives courses. Please refer to B. Ed. Education Electives (p. 458).

Note: Students admitted prior to Fall 2022 should consult relevant calendar.

<sup>1</sup> Amended July 14, 2021

## Concentrations

### TEAL Concentration

Students must complete 18 credit hours of coursework at the 5000-level from the following list of courses:

Course	Title	Hours
EDUB 5220	Recent Developments in Curriculum, Teaching and Learning 1 <sup>1</sup>	3
EDUB 5510	ESL Materials Development and Practicum	3
EDUB 5512	Teacher Development and Leadership in Second Language Education	3
EDUB 5514	Assessment and Testing of ESL/EAL Learners	3
EDUB 5516	Teaching Literacy, Academics, and Language (LAL) Learners	3
EDUB 5518	Intercultural Communication in Transnational Contexts	3
EDUB 5522	English as an Additional Language Teaching for Academic and Specific Purposes	3
EDUB 5524	Language Development for Multilingual Educators	3
EDUB 5580	Fundamentals of ESL (English Second Language) Instruction	3

<sup>1</sup> Where the topic is related to TEAL and approved by the TEAL Area Chair(s)

# Price Faculty of Engineering

## General Office

**Dean:** Dr. Marcia Friesen, Ph.D., P.Eng.

**Associate Dean(s):** Dr. Karen Dow, Ph.D., P. Eng. (Undergraduate Programs); Dr. Cyrus Shafai, Ph.D., P.Eng. (Research and Graduate Programs); Dr. Paul Labossiere, Ph.D., P.Eng., (Design Education)

**Campus Address/General Office:** E2-290 EITC (Engineering and Information Technology Complex)

**Telephone:** (204) 474 9809

**Fax:** (204) 275-3773

**Email Address:** eng\_info@umanitoba.ca

**Website:** [umanitoba.ca/faculties/engineering](http://umanitoba.ca/faculties/engineering/) (<http://umanitoba.ca/faculties/engineering/>)

## The Profession of Engineering

Engineers use fundamental principles and energy sources from the natural world and direct them to the benefit of people. They interpret science in terms of material, human needs and, managing personnel, cost, and supplies. The profession is involved in all aspects of construction and manufacturing, including conceptualization, design, preparation of plans and specifications, and fabrication of products to meet predetermined standards of reliability and performance. Engineers acquire competence through instruction in basic sciences, mathematics, and engineering sciences; by introduction to the processes of synthesis and design; by complementary studies in the humanities, social sciences,

and management; by learning from the skills and experience of more senior engineers during the early years of employment.

The educational objective in the Price Faculty of Engineering is to prepare students for positions of leadership in a world where engineering, science, and management are of major importance.

## Engineering Access Program

**Campus Address/General Office:** E2-442 EITC

**Telephone:** (204) 474 9872 toll free: 1 800 432 1960 ext. 9872

**Fax:** (204) 474 7518

**Email Address:** [engap@umanitoba.ca](mailto:engap@umanitoba.ca) ([engap@cc.umanitoba.ca](mailto:engap@cc.umanitoba.ca))

The Engineering Access Program (ENGAP) recognizes that students of First Nation, Metis, and Inuit ancestry may be challenged with geographic and economic barriers, and/or lack of access to academic preparation, which may make them unable to meet the faculty's admission requirements. ENGAP serves as a specifically designed post-secondary program that provides an opportunity for students to complete their Bachelor of Science degree in Engineering. The program accomplishes this objective by offering upgrading courses in mathematics, chemistry, physics, and computer science, as well as providing academic advice, personal and family counselling along with financial supports. First Nation, Metis, and Inuit students who do meet the regular entrance requirements may still wish to join the program to benefit from these supports.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biosystems Engineering, B.Sc. (p. 468)	4-5	150-153	Yes
Civil Engineering, B.Sc. (p. 473)	4	163	Yes
Computer Engineering, B.Sc. (p. 477)	4	152-157	Yes
Electrical Engineering, B.Sc. (p. 481)	4	158-163	Yes
Internationally Educated Engineers Qualification Program (IEEQ) – Post-Baccalaureate Diploma in Engineering (p. 489)	1-2	24	
Mechanical Engineering, B.Sc. (p. 485)	4	157-162	Yes
Preliminary Engineering Program (p. 466)		36	

## Available Minors

- Arts (p. 463)
- Computer Science (p. 463)
- Geological Sciences (p. 463)
- Management (p. 463)
- Mathematics (p. 463)
- Music (p. 463)
- Recreational Studies (p. 463)

- Civil Engineering (p. 473)
- Electrical and Computer Engineering (p. 476)
- Mechanical Engineering (p. 485)
- Internationally Educated Engineers Qualification Program (IEEQ) – Post-Baccalaureate Diploma in Engineering (p. 489)

## Units

- Preliminary Engineering Program (p. 466)
- Biosystems Engineering (p. 468)

## Faculty Academic Regulations

### Admission to the Price Faculty of Engineering

The following is a summary of the admission requirements. Equivalent academic courses completed at recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in an applicant information

bulletin that is available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the university's website (<https://umanitoba.ca/admissions/>).

### Direct Admission into the Price Faculty of Engineering from High School

Applicants may apply directly to the Preliminary Engineering Program from a Manitoba high school (or the equivalent) and must meet the General Entrance and Specific Admission Requirements for the Price Faculty of Engineering. The General Admission Requirement is a Manitoba (or equivalent) high school graduation. The Specific Admission Requirements is a minimum 80% average over the following four subjects, with no less than 70% in each course: Chemistry 40S, Precalculus Mathematics 40S, Physics 40S, and English 40S. In cases where the number of eligible applicants exceeds the available spaces, applicants will require higher averages than stipulated to be successful in the admissions competition.

Please see the website ([https://umanitoba.ca/student/admissions/media/direct\\_entry\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/direct_entry_bulletin.pdf)) for more detailed information.

### All Other Admissions

A minimum of 8 of the 12 courses in the Preliminary Engineering Program (p. 466), each with a minimum grade of "C", and a minimum Adjusted Grade Point Average (AGPA) of 2.0. In addition, if the total number of credit hours attempted by the student in all courses that apply in the Price Faculty of Engineering meets or exceeds 72, then the ratio of those credit hours passed (from all courses with a grade of "C" or better that are applicable to the student's potential Engineering program) to total credit hours attempted must be greater than or equal to 75%. Furthermore, if the student has attempted less than 72 credit hours, the total number of failed credit hours (from all courses with a grade of "D" or "F" that are applicable to the student's potential Engineering program) must not exceed 18 credit hours in order to be eligible to be considered for admission.

Acceptance to Engineering programs is competitive. Courses must be completed within ten years of the application date in order to be considered for transfer credit.

### English and Mathematics Requirements

All students are required to complete the University written English and mathematics requirement within the first 60 credit hours of their program. The requirement is described in the chapter General Academic Regulations and Requirements of this Calendar. In the Engineering programs the mathematics requirement is satisfied by one of MATH 1510 or MATH 1710 (or an equivalent); the written English requirement is satisfied by completing a course selected from the list of approved Written English Courses for Engineering Students listed below.

Note that courses transferred from other institutions are evaluated for content, but are not assessed for the written English requirement unless the student explicitly requests such an assessment. Therefore, students wishing to transfer a course from another institution which may be considered equivalent to a course on the list of Written English Courses for Engineering Students should request that the transfer be assessed as meeting the written English requirement. If the assessed course is found not to meet the requirement, the student will be compelled to complete another course from the list.

### Written English Courses for Engineering Students

Course	Title	Hours
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
CATH 1190	Introduction to Catholic Studies	3
ENGL 1200	Representative Literary Works	6
ENGL 1300	Literature since 1900	6
ENGL 1340	Introduction to Literary Analysis	3
ENGL 1400	Thematic Approaches to the Study of Literature	3
GPE 2700	Perspectives on Global Political Economy	3
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3
HIST 1XXX	Any 1000 level HIST course <sup>1</sup>	3-6
HIST 2XXX	Any 2000 level HIST course <sup>1</sup>	3-6
INDG 2020	The Métis in Canada	3
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POLS 1502	Introduction to Political Studies <sup>2</sup>	3
RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RLGN 1424	Religion and Sexuality	3
RLGN 1440	Evil in World Religions	3
RLGN 2036	Introduction to Christianity	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2170	Introduction to the New Testament	3
RLGN 2222	The Supernatural in Popular Culture	3
RLGN 2590	Religion and Social Issues	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2410	Ukrainian Canadian Cultural Experience	3
UKRN 2590	Ukrainian Literature and Film	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3
WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
WOMN 2560	Women, Science and Technology	3

<sup>1</sup> Unallocated credits may not be used

<sup>2</sup> This course requires a laboratory

### Chemical Engineering at the University of North Dakota

The University of Manitoba has an agreement with the University of North Dakota, Grand Forks, N.D., which allows students to obtain a degree

in chemical engineering from the University of North Dakota (<https://engineering.und.edu/academics/chemical/>) by taking the Preliminary Engineering program at the University of Manitoba and three years at the University of North Dakota. The chemical engineering program at the University of North Dakota is accredited by the Accreditation Board for Engineering and Technology in the United States and is recognized by Engineers Geoscientists Manitoba (formerly the Association of Professional Engineers and Geoscientists of Manitoba).

## Academic Regulations

The provisions of the, General Academic Regulations (p. 118), and the, University Policies and Procedures, (p. 37) apply to all students. In addition, the Price Faculty of Engineering has regulations and requirements, published below, which apply specifically to its students. Notwithstanding the regulations given in this section, the Faculty Council of Engineering reserves the right to rule on individual cases in exceptional circumstances.

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>) will not affect registration for the 2022-2023 (including Summer Term 2023).**

### Appeals

Students who feel that they have received unfair treatment in a course should appeal to the instructor. If the matter is not thereby resolved, it should be raised with the Department Head and subsequently the Associate Dean (Undergraduate Programs).

A student's academic status is based on academic performance. Students who feel that there are circumstances that have affected their academic performance should write to the Associate Dean (Undergraduate Programs), Chair of the Committee on Standing and Appeals, E1-262 EITC. Information regarding this process is available from the Undergraduate Student Services Office, E1-262 EITC and may be viewed through web site (<https://umanitoba.ca/engineering/student-experience/>).

### Attendance and Approved Leaves

#### Attendance in Courses

When the number of unexcused absences recorded against a student in the Price Faculty of Engineering in any course exceeds 10 percent of the number of lectures and laboratories for that course the instructor may report the case to the Dean of Engineering. When a student's attendance or work continues to be unsatisfactory, the instructor has the authority to exclude the student from classes, or examinations, or both. Such cases shall be reported to the Faculty Council of Engineering at the first opportunity. Students who are excluded from an examination for inadequate attendance in a compulsory course will receive a failing grade and be required to repeat the course.

#### Leaves of Absence

Students may make a written request to the Associate Dean (Undergraduate Programs) for a Leave of Absence from their studies when significant circumstances (i.e. medical or compassionate) affect their ability to continue in their program. Should it be approved, the student will be notified in writing of the duration of the leave. The limit on a student's time to complete their Engineering program, as set out in Requirements for the Bachelor's Degree (p. 464), will be extended by the duration of the approved Leave of Absence.

For situations affecting a student's ability to complete courses already in progress, see Withdrawal from Courses (p. 465).

Notwithstanding a Leave of Absence, student may choose not to register for courses in any term at their own discretion. However, doing so *will not* extend a student's time to completion as set out in Requirements for the Bachelor's Degree (p. 464)..

### Categories of Students

A student shall normally register for three to six courses in a term. Registration for more than six or fewer than three courses in a term must be approved by the Department Head or, in the preliminary program, by the Associate Dean (Undergraduate Programs). Students must also receive approval for registration in courses that are not part of the regular degree program.

All undergraduate programs offered by the Price Faculty of Engineering are full-time programs. Engineering considers registration in 15 credit hours per term to be a full course load. Full-time status is defined as being registered in at least 60 percent of this load, or 9 credit hours per term. Scholarships and other awards may require registration in more than this minimum.

### Complementary Studies Electives

Complementary studies electives are an integral part of the curriculum. Their purpose is to broaden the student's experience beyond the purely scientific and technical content of engineering. They include studies in engineering economics and the impact of technology on society, as well as the central issues, methodologies and thought processes characteristic of the humanities and social sciences. Opportunities for development of the student's oral and written communication skills are also provided. The complementary studies elective requirements may vary from one program to another. Course numbers beginning with a 0 (i.e. ENGL 0930) are not allowed as complementary studies electives and ARTS 1110 cannot not be used for credit in the Price Faculty of Engineering.

### Procedure Regarding the Inclusion of Elective Courses Taken Towards a Student's Degree Requirements Upon Admission Into Engineering

At the time of admission, students may choose to apply (transfer) some or all eligible non-Engineering elective courses (i.e., complementary studies electives, science electives, free electives) taken prior to their admission to the Faculty towards their current Engineering degree program. All attempts for those selected courses shall be applied to the student's degree program and included in the calculation of Degree Grade Point Average (DGPA).

### After Admission Into Engineering

Grades for all eligible courses (i.e., technical electives, complementary studies electives, science electives, free electives) attempted following admission to Engineering shall be included in and applied to a student's current degree program.

Special cases for either circumstance may be considered at the discretion of the Price Faculty of Engineering Associate Dean (Undergraduate Programs).

### Course Selection

When arranging a program of study, a student must satisfy the following requirements:

1. All prerequisite and corequisite course requirements must be met.
2. All previously failed compulsory courses must be repeated. Students repeating a course previously taken are subject to Limited Access. Limited Access information may be viewed on the Registrar's Office web site (<https://umanitoba.ca/registrar/registration/>).

- Students are not normally allowed to repeat courses graded "C" or higher, except under special circumstances with the approval of the Department Head, or for students in the Preliminary Engineering Program, of the Associate Dean (Undergraduate Programs).
- Failed elective courses may be repeated or replaced with alternative elective courses, however, all attempts will be included in the degree grade point average calculation.

*Prerequisite Course:* A prerequisite course must have been completed with a "C" grade or better before a subsequent course can be attempted. Under exceptional circumstances, a course instructor may waive, subject to approval by the Department Head (or designate), a prerequisite requirement.

*Corequisite Course:* A corequisite course must be taken concurrently or before its companion course. Under exceptional circumstances, a course instructor may waive, subject to approval by the Department Head (or designate), a corequisite requirement.

## Examinations

### Deferred Examinations

If you miss a final examination for medical or compassionate reasons, you may be granted a deferred examination. Applications for a deferred examination after the examination has been missed must be filed within 48 hours of the date of the missed examination. A medical certificate or other appropriate documentation may be required.

(Please refer to the General Academic Regulations-Deferred Examinations (p. 124) for more information)

Deferred Examinations are normally scheduled to take place within 30 working days from the end of the examination series from which the examination was deferred. The date of the deferred examination for a particular course will be set by the Dean's Office **no later than January 15, May 15 or Sept 15 and in consultation with the instructor.**

### Supplemental Examinations

A student who has attempted to meet all requirements for the degree and has a single failure in their final academic year, in an Engineering course, may apply for a supplemental examination in that course. Supplemental examinations may not be requested for any other reason. A student shall only be permitted to exercise the privilege of writing a supplemental examination once in their degree program.

The grade for a course in which a supplemental examination is written shall be calculated in the following manner, with the grade reported being the greater of these two calculations:

- The supplemental examination shall have the same percentage weighting as the original examination, and shall be combined with all term marks;
- The supplemental examination shall have the percentage weighting equal to the combined weight of the original examination and all term tests, and shall be combined with all other term marks.

Both the original course grade and the supplemental examination course grade are retained on the student's record, and both are used in the calculation of TGPA and DGPA.

In the event that the supplemental examination is not successfully passed, the course must be repeated again in a subsequent term.

The results of supplemental examinations must be reported to the Faculty Council of Engineering. The supplemental examination privileges apply only to courses offered by the Price Faculty of Engineering.

### Challenge for Credit

Courses offered in Engineering may not be challenged for credit.

### Grading and Assessment

All grades awarded by instructors for undergraduate courses offered in the Price Faculty of Engineering are reviewed by examiners' boards, which comprise all of the instructors in the student's program year. After approval by department councils, grades are presented to the Faculty Council of Engineering for acceptance. Grades are published subsequent to their approval by the Faculty Council of Engineering.

Following are the descriptions of grade point averages used for evaluation **at end of** each of the terms (Fall, Winter, **and** Summer):

#### Term Grade Point Average (TGPA)

The Term Grade Point Average (TGPA) is computed from all of the final grades in all undergraduate courses completed during a given academic term.

#### Degree Grade Point Average (DGPA)

The Degree Grade Point Average (DGPA) is computed from the final grades obtained in all courses attempted, including applicable courses transferred from other faculties and other institutions, as part of a student's current degree program. Where a course has been repeated or replaced by an approved substitution or equivalent course, all attempts shall be included in the computation.

#### Cumulative Grade Point Average (CGPA)

The Cumulative Grade Point Average (CGPA) is computed from the final grades in all undergraduate courses attempted at the University of Manitoba and courses transferred from other faculties and other institutions.

#### Dean's Honour List

A continuing student who achieves a Term Grade Point Average (TGPA) of 3.50 or higher in their most recent academic term will be placed on the Dean's Honour List. The assessment is based on a minimum of 12 credit hours completed in that term. In addition, a graduating student who achieves a Degree Grade Point Average (DGPA) of 3.5 or higher in their final academic evaluation will graduate on the Dean's Honour List and receive a notation indicating this on their final term transcript.

#### Awards

A number of scholarships, bursaries and other academic awards are available to Engineering students. For information concerning awards (prizes, scholarships, and bursaries), please visit the Faculty web site (<https://umanitoba.ca/engineering/student-experience/scholarships-and-awards/>).

### Minors in Engineering

In meeting the specific requirements for any minors available to Engineering students, no more than 50% of the credit hours required for a minor may be common with those forming part of a student's regular Engineering program. Normal pre-requisites and class size restriction apply to courses taken towards minors.

#### Arts Minor

A Minor in Arts is available to Engineering students. The minor consists of 18 credit hours of Arts courses, including a minimum of 6 credit hours in the Humanities and 6 credit hours in the Social Sciences; students must meet all pre-requisite requirements and all courses must be at



the 1000 level or higher. ARTS 1110 may not be included in the minor. Depending on the approval of the Engineering department, courses used for the minor may also be used to fulfill program requirements in Engineering.

#### Computer Science Minor

A Minor in Computer Science is available to Engineering students. The minimum requirement is 18 credit hours of computer science courses subject to the following constraints:

1. Courses COMP 1012, COMP 1020, and COMP 2140 are compulsory;
2. Nine (9) additional credit hours of COMP courses at the 2000 level or above; and
3. registration in computer science courses will be controlled by normal pre-requisites and class size restrictions.

#### Geological Sciences Minor

The Minor in Geological Sciences includes the following set of courses:

1. GEOL 1340;
2. One of the following three courses: GEOL 1400, GEOL 1410 or GEOL 1420;
3. Twelve (12) credit hours of 2000-level or above courses in Geological Sciences

#### Management Minor

The Minor in Management offered by the Faculty of Management is available to Engineering students. The minor consists of any 18 credit hours of Management courses; students must meet all prerequisite requirements. Depending on the approval of the Engineering department, courses used for the minor may also be used to fulfill program requirements in Engineering. Admission requirements for the minor are based on all courses transferred to Engineering or completed while in Engineering; the requirements are a minimum of 30 credit hours applied to their degrees with a minimum Degree Grade Point Average (DGPA) of 3.00. Up to 10 spaces are available each year for engineering students on a competitive basis. Applications can be made in the Engineering Dean's office by May 30th. Students not granted a reserve space in the minor, but who have successfully completed 18 credit hours of Management courses at the time of graduation, will qualify for the Management Minor.

Notes:

1. Civil Engineering students only may use CIVL 2780 for credit towards the Management Minor in Engineering.
2. Mechanical Engineering students only may use MECH 3170 for credit towards the Management Minor in Engineering.

#### Mathematics Minor

A Minor in Mathematics is available to Engineering students. The minimum requirement is 24 credit hours of mathematics courses subject to the following constraints:

1. the students must notify their home department that they are pursuing the minor;
2. up to 12 credit hours of mathematics courses in a student's engineering program may be counted toward the minor;
3. the student must complete at least 6 credit hours of courses from the mathematics department at the 3000 level or higher that are not included as part of the curriculum in the student's engineering program; and

4. approval of the Department of Mathematics is required for courses outside of the regular engineering program.

#### Music Minor

The Minor in Music requires 18 credit hours of MUSC courses and students are subject to the regulations set by the Marcel A. Desautels Faculty of Music. Please see Music Minors (p. 797) for students in the Price Faculty of Engineering, Faculty of Arts and Faculty of Science under the Marcel A. Desautels Faculty of Music.

#### Recreational Studies Minor

The Minor in Recreational Studies requires 18 credit hours of approved coursework. Students are subject to the regulations set by the Faculty of Kinesiology and Recreational Management. Please see Minor (p. 684) in Recreational Studies under Faculty of Kinesiology and Recreational Management.

#### Professional Registration

In order to practice engineering in any province or territory in Canada, it is necessary to be a member of the professional engineering association of that province or territory. The requirements for membership are acceptable academic preparation and a subsequent period of acceptable engineering experience gained under the supervision of a registered professional engineer. The undergraduate programs in Biosystems, Civil, Computer, Electrical, and Mechanical Engineering are accredited by the Canadian Engineering Accreditation Board (CEAB), reflecting acceptable academic preparation for membership in the association of professional engineers in any province or territory in Canada. Through a mutual recognition agreement, these programs are also recognized as satisfying accreditation requirements in many other countries such as the United States, the United Kingdom, Ireland, New Zealand, Australia, and Hong Kong.

Graduates of an accredited program are eligible to apply for membership as an engineering intern, in the association of professional engineers in their province of residence in Canada. After a period of acceptable experience, they are eligible to apply to the association for registration as a professional engineer in that province.

#### Requirements for the Bachelor's Degree

The requirement for a Bachelor of Science degree in Engineering is a grade of "C" or better in all courses in the student's program. All students are governed by the rules in effect at the time of their first registration in Engineering.

A student must complete at least 50 per cent of an engineering degree program as a full-time student in the Price Faculty of Engineering. Unless otherwise approved by the Dean of Engineering, students must complete all degree requirements within seven calendar years after being accepted into an Engineering departmental program.

#### Degree with Distinction

A student who on graduation achieves a Degree Grade Point Average (DGPA) of 3.80 or higher is awarded the degree "With Distinction."

#### Criteria for Medal Awards

The Price Faculty of Engineering Program Medal shall be awarded to the graduating student in each engineering program who has achieved the highest Degree Grade Point Average (DGPA) (minimum of 3.80) with no distinction as to full- or part-time status. The Program Medal will be awarded at spring convocation to the student who has completed that program in the past academic year (including October and February graduands).

The University Gold Medal for the Price Faculty of Engineering shall be awarded to the graduating student in the Price Faculty of Engineering who has achieved the highest Degree Grade Point Average (DPGA) (minimum of 3.80) for the entire program with no distinction as to full- or part-time status.

### Student Progress and Academic Status

Students shall be evaluated at the conclusion of each academic term in which they receive a final grade in a minimum of 6 credit hours of course material (excluding Special Student credit hours), with the assessment being based on the resulting Term Grade Point Average (TGPA) in those courses. This assessment shall be based on only those courses which form part of the student's Engineering Program. The academic assessments are as follows:

#### Good Academic Standing

A student with a TGPA of 2.00 or higher is in Good Academic Standing. This will be notated as "Faculty Minimum Met" or "Satisfactory" on the student academic transcript.

#### Academic Warning

The first time the student's TGPA drops below 2.00, he/she will receive an Academic Warning. Students who receive such a warning are required to meet with an academic advisor from their department or, in the Preliminary Engineering Program, from the Dean's Office.

#### Academic Probation

The second time that a student's TGPA drops below 2.00, the student will be placed on Academic Probation.

#### Required to Withdraw

The third time that a student's TGPA drops below 2.00, the student will be Required to Withdraw. Students who receive such a suspension shall be ineligible to take courses offered by the Price Faculty of Engineering from the end of the term for which the suspension was issued through to the start of that same term in the subsequent academic year (normally, a period of 8 months.)

In order to be reinstated following the suspension period, the student must submit a written request for reinstatement to the Associate Dean (Undergraduate Programs). Applications must be received between 30-60 days in advance of the effective date of reinstatement; requests made earlier than 60 days in advance will not be accepted.

#### Ineligible to Proceed in Engineering

A student shall be Ineligible to Proceed in Engineering under either of the following conditions:

1. The student's TGPA drops below 2.00 for a fourth time, or;
2. The ratio of credit hours passed (from all courses with a grade of "C" or better that are applicable to the student's Engineering program) to total credit hours attempted for that student drops below 75%, and the student has attempted a minimum of 72 credit hours.

#### Starting Afresh

Students who have become Ineligible to Proceed in Engineering may apply to the Dean for permission to start their degree afresh, should they wish to return to the Price Faculty of Engineering.

At the discretion of the Dean, a student may start afresh in an engineering program after a minimum period of two years from their last academic assessment by the Price Faculty of Engineering, and may request to transfer up to 40 credit hours in which a minimum grade of "C+" was

achieved. All previous courses will remain on the student's academic transcript, but will not be applied to their new program.

### Limit on Time in the Preliminary Engineering Program

Students admitted to the Preliminary Engineering Program shall have two years to complete the minimum course requirements and submit an application for possible acceptance into an Engineering program. In the case of students admitted to the program through the Engineering Access Program the limit shall be three years.

Students who fail to meet this criterion shall be required to withdraw from Engineering. Such students may subsequently apply to an engineering program after successfully completing all courses forming the Preliminary Engineering Program.

### Students Applying to an Engineering Program

Students will be accepted into department programs based on the following criteria. Students who have completed 8-12 Preliminary Engineering Program courses by May 1st of each academic year will be ranked and admitted on a competitive basis based on the average of the best eight marks in courses in the Preliminary Engineering Program.

Students applying from programs, faculties, colleges, or other institutions will have all courses or equivalent courses that are required in a particular engineering program transferred in, including failed grades ("D's" and "F's") in those courses. In addition, if the total number of credit hours attempted by the student in all courses that apply in the Price Faculty of Engineering meets or exceeds 72, then the ratio of those credit hours passed (from all courses with a grade of "C" or better that are applicable to the student's potential Engineering program) to total credit hours attempted must be greater than or equal to 75%. Furthermore, if the student has attempted less than 72 credit hours, the total number of failed credit hours (from all courses with a grade of "D" or "F" that are applicable to the student's potential Engineering program) must not exceed 18 credit hours in order to be eligible to be considered for admission. Students are advised to consult with the Engineering Undergraduate Student Affairs Office if there is concern as to their standing under this rule.

Direct entry engineering students must submit an application for admission through the on line process (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>), indicating their program(s) of choice. The application fee for direct entry engineering students applying to an engineering program is waived. Students from University 1 and other faculties must apply for admission through the on line process (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) as well and will be subject to an application fee.

### Use of Calculating Devices

For courses offered by the Price Faculty of Engineering in which the use of devices capable of calculations is permitted in tests or examinations, such devices must be incapable of receiving and/or transmitting signals. Instructors wishing to restrict devices to certain capabilities must inform students, in writing, within the first week of term. Questions concerning the suitability of any given device should be directed to the course instructor(s).

### Withdrawal from Courses

The responsibility for initiating withdrawals rests solely with the student, and no voluntary withdrawals are permitted after the deadlines for voluntary withdrawal without academic penalty (please refer to the General Academic Regulations (p. 118)). For documented medical or

compassionate reasons, Authorized Withdrawals may be permitted by the Dean's Office, Price Faculty of Engineering.

A student who, after registering for courses, in any term, becomes Ineligible to Proceed in Engineering will be withdrawn from his or her courses for the effective term as well as any subsequent terms, including Summer Session.

## Co-operative Education and Industrial Internship Programs

### Contact and Program Information

**Director:** Carolyn Geddert, P.Eng., Engineer-in-Residence

**Tel.** 204 474 8948

**Email:** carolyn.geddert@umanitoba.ca

**Cooperative Education Administrator:** Megan Johnson

**Telephone:** 204 480 1069

**Email:** megan.johnson@umanitoba.ca

The Price Faculty of Engineering offers a Co-operative education and Industrial Internship Program (Co-op/IIP) designed to complement and enrich the academic program with work experience. The work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

Applications are accepted for Co-op/IIP every fall. Co-op/IIP supports the application and participation of all students who meet the requirements and wish to apply. Application to Co-op/IIP is a process. The Co-op/IIP Office will work with you. Please connect with our staff via email: [engineeringcoop@umanitoba.ca](mailto:engineeringcoop@umanitoba.ca) and refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>) for the benefits of Co-op/IIP.

Successful applicants to Co-op/IIP have:

- Attended an information session.
- Been accepted as an undergraduate student into an Engineering Department.
- Completed all 13 first year Engineering courses before their first work term.
- Completed 42 but not more than 90 credit hours towards your degree by the end of the Fall term. (This will support the completion of 3 work terms.)
- Been assessed as in Good Academic standing (GPA above 2.0). I.E. not on Probation or Academic Warning.
- Agree to follow all rules and regulations of the program as detailed in the Rules and Regulations

In addition to students following regular departmental programs, Internationally Educated Engineers Qualification (<http://umanitoba.ca/engineering/ieeq/>) (IEEQ) Program participants may also be approved for participation in Co-op/IIP upon written approval of the IEEQ Director.

Work placements must be confirmed to be appropriate by the Co-op/IIP office in order to be credited as a Co-op/IIP work term.

Upon securing a job placement, Engineering students enroll in the course ENG 4800 and subsequently the specific work term of employment ENG 4810, ENG 4820, ENG 4830, ENG 4840.

Students who are unable to maintain the standards of the Co-op/IIP will be transferred back into the regular program.

The course and grade requirements for completion of the Co-op/IIP are the same as those required for the regular program. However, in order to satisfy course prerequisite requirements, timetables may differ from the regular program. Co-op/IIP students are evaluated in the same manner as regular students and all rules and regulations of the Price Faculty of Engineering apply.

Students who are placed on Academic Warning or Academic Probation may either be removed from Co-op/IIP or have their acceptance deferred until they have completed two consecutive terms with an Academic Standing of "Satisfactory".

Students who are Required to Withdraw will immediately become ineligible for Co-op/IIP and will remain ineligible after re-instatement to the Price Faculty of Engineering.

Written reports must be completed at the end of each four month work term. Each successfully completed four month work term and its corresponding report receives a Pass/Fail grade and is rated at one credit hour. Graduates who successfully complete at least three work terms and the required work term reports will have the Co-operative Education Option acknowledged on their B.Sc. graduation parchment.

For more information regarding the Co-op/IIP rules, benefits, regulations and requirements, please refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>).

## Preliminary Engineering Program

### Preliminary Engineering Program

**Campus Address/General Office:** E1-262 EITC

**Telephone:** (204) 474 9807

**Email Address:** [eng\\_info@umanitoba.ca](mailto:eng_info@umanitoba.ca) ([eng\\_info@%20umanitoba.ca](mailto:eng_info@%20umanitoba.ca))

**Website:** [umanitoba.ca/engineering](https://umanitoba.ca/engineering/) (<https://umanitoba.ca/engineering/>)

The Preliminary Engineering Program is common to all programs in engineering. Students must complete a minimum of eight (**excluding CHEM 1122**) to be eligible to apply to one of the five degree granting engineering programs. A student must complete the following list of 13 courses as part of their engineering program in order to graduate with a BSc degree in engineering.

Course	Title	Hours
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1122	Introduction to Chemistry Techniques for Engineering <sup>1</sup>	1.5
COMP 1012	Computer Programming for Scientists and Engineers	3
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
MATH 1510	Applied Calculus <sup>1</sup> <sup>3</sup>	3
MATH 1710	Applied Calculus <sup>2</sup> <sup>3</sup>	3
PHIL 1290	Critical Thinking <sup>4</sup>	3
PHYS 1050	Physics 1: Mechanics	3

Written English Course <sup>5,6</sup>	3
<b>Total Hours</b>	<b>37.5</b>

- <sup>1</sup> The former CHEM 1300 may be used in lieu of the combination of CHEM 1100 and CHEM 1122.
- <sup>2</sup> MATH 1300 is not an acceptable equivalent to MATH 1210
- <sup>3</sup> Students intending to obtain a degree in Engineering are strongly advised to complete MATH 1510 and MATH 1710. However, MATH 1500 or MATH 1230 may be taken in lieu of MATH 1510; MATH 1700 or MATH 1232 may be taken in lieu of MATH 1710. MATH 1690 fulfills the requirement of both MATH 1510 and MATH 1710.
- <sup>4</sup> PHIL 1290 Critical Thinking is the recommended complementary studies elective. Students may; however, select any course from the Faculties of Arts or Management (Asper School of Business) at the 1000 level or above, except for ARTS 1110 Introduction to University.
- <sup>5</sup> Course selected from the list of approved Written English Courses for Engineering students.
- <sup>6</sup> Three credit hours are required to satisfy the written English course requirement. Should a student complete a six credit hour course, the additional three credit hours may be used to satisfy general complementary studies requirements within a student's program.
- <sup>7</sup> Equivalent courses offered through Université de Saint-Boniface may be used to satisfy program requirements.

### English and Mathematics Requirements

All students are required to complete the University written English and mathematics requirement within the first 60 credit hours of their program. The requirement is described in the chapter General Academic Regulations and Requirements of this Calendar. In the Engineering programs the mathematics requirement is satisfied by one of MATH 1510 or MATH 1710 (or an equivalent); the written English requirement is satisfied by completing a course selected from the list of approved Written English Courses for Engineering Students listed below.

Note that courses transferred from other institutions are evaluated for content, but are not assessed for the written English requirement unless the student explicitly requests such an assessment. Therefore, students wishing to transfer a course from another institution which may be considered equivalent to a course on the list of Written English Courses for Engineering Students should request that the transfer be assessed as meeting the written English requirement. If the assessed course is found not to meet the requirement, the student will be compelled to complete another course from the list.

### Written English Courses for Engineering Students

Course	Title	Hours
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
CATH 1190	Introduction to Catholic Studies	3
ENGL 1200	Representative Literary Works	6
ENGL 1300	Literature since 1900	6
ENGL 1340	Introduction to Literary Analysis	3
ENGL 1400	Thematic Approaches to the Study of Literature	3
GPE 2700	Perspectives on Global Political Economy	3
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3
HIST 1XXX	Any 1000 level HIST course <sup>1</sup>	3-6
HIST 2XXX	Any 2000 level HIST course <sup>1</sup>	3-6

INDG 2020	The Métis in Canada	3
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POLS 1502	Introduction to Political Studies <sup>2</sup>	3
RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RLGN 1424	Religion and Sexuality	3
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RLGN 2036	Introduction to Christianity	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2170	Introduction to the New Testament	3
RLGN 2222	The Supernatural in Popular Culture	3
RLGN 2590	Religion and Social Issues	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2410	Ukrainian Canadian Cultural Experience	3
UKRN 2590	Ukrainian Literature and Film	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3
WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
WOMN 2560	Women, Science and Technology	3

<sup>1</sup> Unallocated credits may not be used

<sup>2</sup> This course requires a laboratory

# Biosystems Engineering

**Head:** Dr. Danny Mann, P.Eng.

**Associate Head:** Jason Morrison, P.Eng. (Undergraduate Programs); Ying Chem (Graduate Programs)

**Campus Address/General Office:** E2-376 EITC

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**Website:** [umanitoba.ca/faculties/engineering/departments/biosystems](http://umanitoba.ca/faculties/engineering/departments/biosystems) (<http://umanitoba.ca/faculties/engineering/departments/biosystems/>)

**Academic Staff:** For a complete listing of academic staff, please refer to the following website: <http://umanitoba.ca/faculties/engineering/departments/biosystems/facstaff/acadstatic.html>

The Department of Biosystems Engineering offers an accredited degree program in Biosystems Engineering. The discipline of Biosystems Engineering emphasizes the application of engineering principles to biologically-centred systems. Biosystems engineers help to create new technologies for the well-being of humans and animals, and the preservation and enhancement of natural resources and the environment. The Biosystems Engineering program is designed to give students knowledge of the fundamental principles of engineering and introduces biological concepts to enable these engineers to successfully interact with relevant professionals when solving engineering problems involving biological systems. The program is offered in both a traditional and a co-operative education format. The department offers three Specializations (Biomedical, Bioresource and Environmental) and one Minor (Agribusiness). A bachelor's degree in Biosystems Engineering meets the requirements for admission to the Faculty of Medicine.

## Agribusiness Minor

A minor in Agribusiness is available to Biosystems Engineering students. The minimum requirement is 18 credit hours consisting of:

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biosystems Engineering, B.Sc. (p. 468)	4-5	150-153	Yes

## Biosystems Engineering, B.Sc.

### Degree Requirements

#### Program Core Courses

*Note:* Students are encouraged to consult the department for eight- and ten-term program models. Students are strongly encouraged to follow the model programs when possible, as timetabling and course offerings are based on these program models.

Course	Title	Hours
Students must complete the Preliminary Engineering Program requirements for graduation.		37.5
BIOE 2110	Transport Phenomena	3
BIOE 2480	Impact of Engineering on the Environment	3
BIOE 2590	Biology for Engineers <sup>1</sup>	3
BIOE 2790	Fluid Mechanics	4
BIOE 2800	Solid Mechanics	4
BIOE 2900	Biosystems Engineering Design 1	4
BIOE 3270	Instrumentation and Measurement for Biosystems	4

Course	Title	Hours
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
ABIZ 2520	Introduction to Management Sciences	3
Select at least three additional credit hours from the Department of Agribusiness and Agricultural Economics		3
<b>Total Hours</b>		<b>18</b>

Students must meet all prerequisite requirements. A maximum of 3 courses (9 credit hours) of courses used for the minor may also be used to fulfil course requirements in Biosystems Engineering.

## Admission to Medicine

The Bachelor of Science degree in Biosystems Engineering provides the background to meet eligibility requirements for admission into the Max Rady College of Medicine at the University of Manitoba. Students planning to apply for entrance to Medicine after completing the B.Sc. in Biosystems Engineering are advised to consult with the Max Rady College of Medicine for admission requirements.

## Co-operative Education Program in Biosystems Engineering

Please refer Co-operative Education (p. 466) and Industrial Internship Programs

## Programs

BIOE 3320	Engineering Properties of Biological Materials	4
BIOE 3400	Design of Structural Components in Machines	4
BIOE 3590	Mechanics of Materials in Biosystems	4
BIOE 3900	Biosystems Engineering Design 2	4
BIOE 4240	Graduation Project	3
BIOE 4900	Biosystems Engineering Design 3	4
BIOE 4950	Biosystems Engineering Design 4	4
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>2</sup>	3
CHEM 1126	Introduction to Chemistry Techniques for Engineering 2 <sup>2</sup>	1.5
ENG 2022	Engineering CAD Technology for Biosystems	3
ENG 3000	Engineering Economics	3
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3
MBO 1220	Essentials of Microbiology	3
or MBO 1010	Microbiology I	
MECH 2150	Mechanical Engineering Modelling and Numerical Methods	4

MECH 3482	Kinematics and Dynamics	4
STAT 2220	Contemporary Statistics for Engineers	3
Two Science Electives (see list below)		6
One course in Technology and Society (ENG 3020 or ANTH 2430)		3
One course from the List of Indigenous Knowledge Courses <sup>3</sup>		3
One Complementary Studies Electives		3
Three Biosystems Engineering Design Electives		12
Two Free Electives		6-8
<b>Total Hours</b>		<b>153-155</b>

<sup>1</sup> Please note the combination of BIOL 1020 Biology 1: Principles and Themes and BIOL 1030 Biology 2: Biological Diversity, Function and Interactions can be used in place of BIOE 2590 Biology for Engineers.

<sup>2</sup> The Former CHEM 1310 may be used in place of the combination of CHEM 1110 and CHEM 1126.

<sup>3</sup> Students are required to take at least one of the courses from the list of Indigenous Knowledge courses. Students admitted to Biosystems Engineering in Fall 2021 who have completed three complementary studies elective courses (or 9 credit hours) prior to admission to the program, may use one of those courses in place of the Indigenous knowledge course.

## Science Electives

Course	Title	Hours
AGEC 2370	Principles of Ecology (or the equivalent BIOL 2300)	3
ANSC 3530	The Animal and Its Environment	3
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
PLNT 2510	Fundamentals of Horticulture	3
SOIL 4060	Physical Properties of Soils	3

Students planning to complete a specialization, should take note that there are specific courses to be used as science electives.

## Biosystems Engineering Design Electives

Course	Title	Hours
BIOE 4390	Unit Operations 1	4
BIOE 4412	Design of Light-Frame Building Systems	4
BIOE 4414	Imaging and Spectroscopy for Biosystems	4
BIOE 4420	Crop Preservation	4
BIOE 4440	Bioprocessing for Biorefining	4
BIOE 4460	Air Pollution Assessment and Management	4
BIOE 4560	Structural Design in Wood	4
BIOE 4590	Management of By-Products from Animal Production	4
BIOE 4600	Design of Water Management Systems	4
BIOE 4610	Design of Assistive Technology Devices	4
BIOE 4620	Remediation Engineering	4
BIOE 4640	Bioengineering Applications in Medicine	4
BIOE 4650	Textiles in Healthcare and Medical Applications	4

Design elective courses offered vary from year to year. Courses offered in the current year are listed on the online timetables on the department website. Students planning to complete a specialization should take note that there are specific courses to be used as design electives.

## Indigenous Knowledge Courses

Course	Title	Hours
INDG 1200	Indigenous Peoples in Canada	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
INDG 2012 or HIST 2010	Indigenous History in Canada Indigenous History in Canada (C)	6
INDG 2020 or HIST 2020	The Métis in Canada The Métis in Canada (C)	3
POLS 2802	Introduction to Indigenous Politics	3
POLS 3870	Politics of Indigenous-Settler Relations	3

Students admitted to Biosystems Engineering in Fall 2021 who have completed three complementary studies elective courses prior to admission to the program, may use one of those courses in place of the Indigenous knowledge course.

## Complementary Studies Electives

Complementary studies electives are required to give the engineering student exposure to topics outside the fields of science and engineering. Many university courses fulfill the complementary studies requirement:

- Any course at the 1000-level or above from the Faculties of Arts or Management;
- Any course at the 1000-level or above from the Department of Agribusiness and Agricultural Economics;
- Any course listed in Group C of our three specializations

ARTS 1110 may not be used for credit in the Price Faculty of Engineering. Other university courses, which do not cover topics of science or engineering, may also be acceptable. Please consult with the department head (or his/her designate) for approval of such courses. Students planning to complete a specialization, should take note that there are specific courses to be used as complementary studies electives.

## Free Electives

Any university course at the 1000-level or above can be used as a free elective. However, ARTS 1110 may not be used for credit in the Price Faculty of Engineering. Students are permitted to take additional design electives or engineering courses from other departments to fulfill free elective requirements. Students planning to complete a specialization, should take note that there are specific courses to be used as free electives.

## Concentrations

### Specializations in Biosystems Engineering

Students wishing to pursue more focused studies in a Biosystems Engineering subject area have the choice of completing one of three specializations:

1. Biomedical,
2. Bioresource, or
3. Environmental.

To complete a specialization, you will be required to complete two science electives (identified as Group A), three Biosystems Engineering design electives (identified as Group B), one complementary studies electives (identified as Group C), one Indigenous knowledge course, and

two free electives (selected from Groups B, C or D). The similarly-themed courses that have been identified for each specialization take the place of two science electives, three Biosystems Engineering design electives, two complementary studies electives, and two free electives in the general Biosystems Engineering program (i.e., completing a specialization does not require any additional coursework).

### Biomedical Specialization

The biomedical specialization provides engineers with knowledge of human anatomy and physiology to enhance the understanding of the role to be played by engineers in specific areas within biomedical engineering such as rehabilitation engineering, clinical engineering, medical imaging, and orthopedics.

Students who obtain a grade of “C” or better in the courses listed below will receive a notation of “Biomedical Specialization” on their transcript at the time of graduation.

Course	Title	Hours
<b>Group A: Science Electives</b>		
Complete both of the following courses:		
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
<b>Group B: Biosystems Engineering Design Electives</b>		
Three of the following:		12
BIOE 4414	Imaging and Spectroscopy for Biosystems	
BIOE 4610	Design of Assistive Technology Devices	
BIOE 4640	Bioengineering Applications in Medicine	
BIOE 4650	Textiles in Healthcare and Medical Applications	
<b>Group C: Complementary Studies Electives</b>		
One of the following: <sup>1</sup>		3
ENG 1900	Occupational Health and Safety Awareness	
ENVR 3400	Introduction to Environment and Health	
HIST 4660	History of Health and Disease (G) (counts as two)	
HIST 4680	Social History of Health and Disease in Modern Canada (C) (counts as two)	
HNSC 1210	Nutrition for Health and Changing Lifestyles	
INDG 3240	Indigenous Medicine and Health	
KPER 1200	Physical Activity, Health and Wellness	
PHIL 2740	Ethics and Biomedicine	
	or PHIL 2741 Éthique et biomédecine	
<b>Group D: Free Electives</b>		
Two of the following: <sup>1,2</sup>		6-8
BIOL 2410	Human Physiology 1	
BIOL 2420	Human Physiology 2	
BIOL 4470	Physiology of Excitable Cells	
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	
CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	
CHEM 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
ECE 4610	Biomedical Instrumentation and Signal Processing	
KPER 2330	Biomechanics	
KIN 4330	Advanced Biomechanics	
MECH 4360	Topics in Engineering Materials 2	

MECH 4832	Biomaterials in Biomedical Engineering
PHYS 3220	Medical Physics and Physiological Measurement
PHYS 4400	Linear Systems for Imaging
<b>Total Hours</b>	<b>27-29</b>

- Special permission may be granted by the Head of Department for courses not appearing on the list of Group C or Group D.
- Additional courses from Group B and C can be used to fulfill Group D electives.

### Bioresource Specialization

Challenges remain in the production of food and renewable resources for a world of ever-increasing population. The Bioresource Specialization provides the educational background to enable engineers to devise strategies and technologies for producing food, fibre, bio-based products, and renewable energy efficiently and sustainably.

Students who obtain a grade of “C” or better in the courses listed below will receive a notation of “Bioresource Specialization” on their transcript at the time of graduation.

Course	Title	Hours
<b>Group A: Science Electives</b>		
Choose:		
SOIL 4060	Physical Properties of Soils	3
And one of the following:		
ANSC 3530	The Animal and Its Environment	3
PLNT 2510	Fundamentals of Horticulture	3
<b>Group B: Biosystems Engineering Design Electives</b>		
Three of the following:		12
BIOE 4390	Unit Operations 1	
BIOE 4412	Design of Light-Frame Building Systems	
BIOE 4420	Crop Preservation	
BIOE 4440	Bioprocessing for Biorefining	
BIOE 4560	Structural Design in Wood	
BIOE 4590	Management of By-Products from Animal Production	
BIOE 4600	Design of Water Management Systems	
<b>Group C: Complementary Studies Electives</b>		
One of the following:		3
ABIZ 1000	Introduction to Agribusiness Management	
ABIZ 1010	Economics of World Food Issues and Policies	
ABIZ 3530	Farm Management	
FOOD 1000	Food Safety Today and Tomorrow	
GEOG 2520	Geography of Natural Resources (HS)	
<b>Group D: Free Electives<sup>1,2</sup></b>		
Two of the following:		6-8
AGRI 1600	Introduction to Agrifood Systems	
ENTM 3170	Crop Protection Entomology	
FOOD 3010	Food Process 1	
FOOD 4260	Water Management in Food Processing	
PLNT 2500	Crop Production	
PLNT 2510	Fundamentals of Horticulture	
PLNT 3560	Organic Crop Production on the Prairies	

SOIL 3520	Pesticides: Environment, Economics and Ethics
<b>Total Hours</b>	<b>30-32</b>

- <sup>1</sup> Special permission may be granted by the Head of Department for courses not appearing on the list of Group C or Group D.
- <sup>2</sup> Additional Courses from Group B or C can be used to fulfill Group D electives

### Environmental Specialization

There are numerous environmental issues faced by society. The environmental specialization provides engineers with the knowledge to predict environmental impacts due to human developments and to solve problems associated with the environment (soil contamination, pollution of rivers and lakes, air pollution, wastewater treatment).

Students who obtain a grade of "C" or better in the courses listed below will receive a notation of "Environmental Specialization" on their transcript at the time of graduation.<sup>4</sup>

Course	Title	Hours
<b>Group A: Science Electives</b>		
Choose:		
SOIL 4060	Physical Properties of Soils	3
And one of the following:		
AGEC 2370	Principles of Ecology	3
BIOL 2300	Principles of Ecology	3
<b>Group B: Biosystems Engineering Design Electives</b>		
Three of the following:		12
BIOE 4412	Design of Light-Frame Building Systems	
BIOE 4460	Air Pollution Assessment and Management	
BIOE 4590	Management of By-Products from Animal Production	
BIOE 4600	Design of Water Management Systems	
BIOE 4620	Remediation Engineering	
<b>Group C: Complementary Studies Electives</b>		
One of the following:		3
ABIZ 2390	Introduction to Environmental Economics	
ENVR 1000	Environmental Science 1 - Concepts	
ENVR 2000	Environmental Science 2 - Issues	
ENVR 2810	Environmental Critical Thinking and Scientific Research	
ENVR 3160	Environmental Responsibilities and the Law	
ENVR 3400	Introduction to Environment and Health	
ENVR 3750	Green Building and Planning	
ENVR 3850	Sustainable Manitoba (A)	
ENVR 4050	Ecosystem Management	
ENVR 4400	Advanced Issues in Environment and Health	
GEOG 2520	Geography of Natural Resources (HS)	
PHIL 2750	Ethics and the Environment	
<b>Group D: Free Electives</b>		
Two of the following: <sup>1,2</sup>		6-8
AGEC 2370	Principles of Ecology	
CIVL 3690	Environmental Engineering Analysis	
CIVL 3700	Environmental Engineering Design	
CIVL 4350	Hazardous Waste Treatment	
ENVR 2550	Environmental Chemistry	

ENVR 3110	Environmental Conservation and Restoration
GEOG 3730	Geographic Information Systems (TS)
<b>Total Hours</b>	<b>30-32</b>

- <sup>1</sup> Special permission may be granted by the Head of Department for courses not appearing on the list for Group C or Group D.
- <sup>2</sup> Additional courses from Group B or C can be used to fulfill Group D electives.

## Preliminary Engineering Program

**Campus Address/General Office:** E1-262 EITC

**Telephone:** (204) 474 9807

**Email Address:** eng\_info@umanitoba.ca (eng\_info@%20umanitoba.ca)

**Website:** umanitoba.ca/engineering (<https://umanitoba.ca/engineering/>)

The Preliminary Engineering Program is common to all programs in engineering. Students must complete a minimum of eight (**excluding CHEM 1122**) to be eligible to apply to one of the five degree granting engineering programs. A student must complete the following list of 13 courses as part of their engineering program in order to graduate with a BSc degree in engineering.

Course	Title	Hours
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1122	Introduction to Chemistry Techniques for Engineering 1 <sup>1</sup>	1.5
COMP 1012	Computer Programming for Scientists and Engineers	3
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
MATH 1510	Applied Calculus 1 <sup>3</sup>	3
MATH 1710	Applied Calculus 2 <sup>3</sup>	3
PHIL 1290	Critical Thinking <sup>4</sup>	3
PHYS 1050	Physics 1: Mechanics	3
Written English Course <sup>5,6</sup>		3
<b>Total Hours</b>		<b>37.5</b>

<sup>1</sup> The former CHEM 1300 may be used in lieu of the combination of CHEM 1100 and CHEM 1122.

<sup>2</sup> MATH 1300 is not an acceptable equivalent to MATH 1210

<sup>3</sup> Students intending to obtain a degree in Engineering are strongly advised to complete MATH 1510 and MATH 1710. However, MATH 1500 or MATH 1230 may be taken in lieu of MATH 1510; MATH 1700 or MATH 1232 may be taken in lieu of MATH 1710. MATH 1690 fulfills the requirement of both MATH 1510 and MATH 1710.

<sup>4</sup> PHIL 1290 Critical Thinking is the recommended complementary studies elective. Students may, however, select any course from the Faculties of Arts or Management (Asper School of Business) at the 1000 level or above, except for ARTS 1110 Introduction to University.

<sup>5</sup> Course selected from the list of approved Written English Courses for Engineering students.



- <sup>6</sup> Three credit hours are required to satisfy the written English course requirement. Should a student complete a six credit hour course, the additional three credit hours may be used to satisfy general complementary studies requirements within a student's program.
- <sup>7</sup> Equivalent courses offered through Université de Saint-Boniface may be used to satisfy program requirements.

## Co-operative Education and Industrial Internship Programs

### Contact and Program Information

**Director:** Carolyn Geddert, P.Eng., Engineer-in-Residence

**Tel.** 204 474 8948

**Email:** carolyn.geddert@umanitoba.ca

**Cooperative Education Administrator:** Megan Johnson

**Telephone:** 204 480 1069

**Email:** megan.johnson@umanitoba.ca

The Price Faculty of Engineering offers a Co-operative education and Industrial Internship Program (Co-op/IIP) designed to complement and enrich the academic program with work experience. The work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

Applications are accepted for Co-op/IIP every fall. Co-op/IIP supports the application and participation of all students who meet the requirements and wish to apply. Application to Co-op/IIP is a process. The Co-op/IIP Office will work with you. Please connect with our staff via email: [engineeringcoop@umanitoba.ca](mailto:engineeringcoop@umanitoba.ca) and refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>) for the benefits of Co-op/IIP.

Successful applicants to Co-op/IIP have:

- Attended an information session.
- Been accepted as an undergraduate student into an Engineering Department.
- Completed all 13 first year Engineering courses before their first work term.
- Completed 42 but not more than 90 credit hours towards your degree by the end of the Fall term. (This will support the completion of 3 work terms.)
- Been assessed as in Good Academic standing (GPA above 2.0). I.E. not on Probation or Academic Warning.
- Agree to follow all rules and regulations of the program as detailed in the Rules and Regulations

In addition to students following regular departmental programs, Internationally Educated Engineers Qualification (<http://umanitoba.ca/engineering/ieeq/>) (IEEQ) Program participants may also be approved for participation in Co-op/IIP upon written approval of the IEEQ Director.

Work placements must be confirmed to be appropriate by the Co-op/IIP office in order to be credited as a Co-op/IIP work term.

Upon securing a job placement, Engineering students enroll in the course ENG 4800 and subsequently the specific work term of employment ENG 4810, ENG 4820, ENG 4830, ENG 4840.

Students who are unable to maintain the standards of the Co-op/IIP will be transferred back into the regular program.

The course and grade requirements for completion of the Co-op/IIP are the same as those required for the regular program. However, in order to satisfy course prerequisite requirements, timetables may differ from the regular program. Co-op/IIP students are evaluated in the same manner as regular students and all rules and regulations of the Price Faculty of Engineering apply.

Students who are placed on Academic Warning or Academic Probation may either be removed from Co-op/IIP or have their acceptance deferred until they have completed two consecutive terms with an Academic Standing of "Satisfactory".

Students who are Required to Withdraw will immediately become ineligible for Co-op/IIP and will remain ineligible after re-instatement to the Price Faculty of Engineering.

Written reports must be completed at the end of each four month work term. Each successfully completed four month work term and its corresponding report receives a Pass/Fail grade and is rated at one credit hour. Graduates who successfully complete at least three work terms and the required work term reports will have the Co-operative Education Option acknowledged on their B.Sc. graduation parchment.

For more information regarding the Co-op/IIP rules, benefits, regulations and requirements, please refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>).

## Civil Engineering

**Head:** Dr. Shawn Clark, P.Eng.

**Associate Head:** Dr. Jonathan Regehr, P.Eng. (Undergraduate Programs);  
Dr. Mohamed Bassuoni, P.Eng. (Graduate Programs)

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**Telephone:** 204 474 9220

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**Email Address:** civil\_eng@umanitoba.ca

**Website:** <http://umanitoba.ca/faculties/engineering/departments/civil/>

**Academic Staff:** Please refer to our website at: [umanitoba.ca/faculties/engineering/departments/civil/facultystaff-academic.html](http://umanitoba.ca/faculties/engineering/departments/civil/facultystaff-academic.html) (<http://umanitoba.ca/faculties/engineering/departments/civil/facultystaff-academic.html>)

The Department of Civil Engineering offers a fully accredited degree program in Civil Engineering. Graduates of the Civil Engineering program are academically qualified to register as Engineers-in-Training in engineering licensing bodies in Canada. The Civil Engineering program is designed to give students a broad knowledge of engineering principles and professional practice. The program has a strong core component that provides exposure to a range of areas in Civil Engineering. These include – but are not limited to – the design of buildings and bridges, the design of facilities and methods for treatment of water, waste water and solid waste, the design of foundations and earthworks such as river bank protection, transportation planning, the design of roads and pavement, the design of hydraulic structures such as sewers, canals, and spillways, and the management of surface and ground water. In the last years of the program, students specialize through selection of technical elective

courses. A cooperative education option allows students to include practical work experience in their program.

## Civil Engineering Degree Program

Students are to consult with the department for four and five-year program plans. Students are expected to follow the program plans when possible, as timetabling and course offerings are based on these plans.

## Environmental Engineering Option

An option in Environmental Engineering provides an opportunity for students to focus on environmental engineering related courses which cover the areas of water, wastewater and solid waste. Students study environmental engineering with a focus on municipal infrastructure.

## Student Support

The individual faculty members in the Department of Civil Engineering may offer summer employment of a limited number of undergraduate students. Typical duties include assisting academic staff members with research projects. This provides students with hands on opportunities to work in research laboratories, and field projects alongside of graduate students.

## Co-operative Education Program in Civil Engineering

Please refer Co-operative Education (p. 466) and Industrial Internship Programs

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Civil Engineering, B.Sc. (p. 473)	4	163	Yes

## Civil Engineering, B.Sc.

### Degree Requirements

#### Civil Engineering Departmental Program

Course	Title	Hours
Students must complete the Preliminary Engineering Program requirements for graduation.		
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
CHEM 1126	Introduction to Chemistry Techniques for Engineering 2 <sup>1</sup>	1.5
CIVL 2770	Civil Engineering Materials	5
CIVL 2780	Civil Engineering Systems	4
CIVL 2790	Fluid Mechanics	4
CIVL 2800	Solid Mechanics 1	4
CIVL 2830	Graphics for Civil Engineers	2
CIVL 2840	Civil Engineering Geomatics	3
CIVL 3590	Numerical Methods in Engineering Analysis	4
CIVL 3690	Environmental Engineering Analysis	4
CIVL 3700	Environmental Engineering Design	4
CIVL 3730	Geotechnical Materials and Analysis	4
CIVL 3740	Hydraulics	4

CIVL 3750	Hydrology	4
CIVL 3760	Structural Analysis	4
CIVL 3770	Design of Steel Structures	4
CIVL 3790	Transportation Engineering 1	4
CIVL 4220	Geotechnical Design	4
CIVL 4380	Infrastructure Engineering and Construction Management	4
CIVL 4390	Reinforced Concrete Structures	4
CIVL 4400	Transportation Engineering 2	4
CIVL 4590	Design Project	6
ENG 2030	Engineering Communication: Strategies for the Profession	3
or ENG 2040	Engineering Communication: Strategies, Practice and Design	
ENG 3000	Engineering Economics	3
ENG 3020	Technology, Society and the Future	3
GEOL 1340	The Dynamic Earth	3
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3
STAT 2220	Contemporary Statistics for Engineers	3
<b>Options</b>		
One of the following options:		3
Civil Engineering:		

Indigenous Knowledge Course <sup>2</sup>	
Environmental Option:	
PHIL 2750 Ethics and the Environment <sup>3</sup>	
<b>Electives</b>	
One of the following options:	19-20
Civil Engineering Technical Electives <sup>4</sup>	
Environmental Option Technical Electives <sup>4</sup>	
<b>Total Hours</b>	<b>165-166</b>

- <sup>1</sup> The former CHEM 1310 may be used in lieu of the combination of CHEM 1110 and CHEM 1126.
- <sup>2</sup> Students are required to take at least one of the courses from the list of Indigenous Knowledge courses. ENG 4100 may be used to meet this requirement when the course content satisfies the requirements for an indigenous course.
- <sup>3</sup> Students pursuing the Environmental Option must take PHIL 2750 as their complementary studies elective.
- <sup>4</sup> Technical elective courses offered vary from year to year and may have limited enrollment. Courses offered in the current year are listed on the online timetables on the Department website.

### Civil Engineering Technical Electives (5 courses)<sup>1,2,3,4</sup>

A minimum of 3 courses must be taken from Group A and up to 2 from Group B, with no more than one course from outside the Department of Civil Engineering.

#### Group A (Select 3 to 5 courses)

Course	Title	Hours
CIVL 3710	Finite Element Analysis	4
CIVL 4020	Masonry Design and Construction	4
CIVL 4022	Properties and Design of Concrete Mixtures	4
CIVL 4024	Sustainable Building Design: Principles of Best Practice <sup>4</sup>	4
CIVL 4030	Advanced Structural Design	4
CIVL 4032	Bridge Engineering	4
CIVL 4040	Structural Dynamics	4
CIVL 4100	Engineering Management and the Environment	4
CIVL 4120	Water Treatment Plant Design	4
CIVL 4130	Solid Waste Management	4
CIVL 4180	Environmental Systems	4
CIVL 4200	Groundwater Contamination	4
CIVL 4230	Geotechnical Engineering	4
CIVL 4232	Geotechnical Earthquake Engineering	4
CIVL 4250	Groundwater Hydrology	4
CIVL 4300	Design of Urban Water Systems	4
CIVL 4350	Hazardous Waste Treatment	4
CIVL 4360	Water Resources Planning and Management	4
CIVL 4410	Transportation Systems	4
CIVL 4420	Highway Pavement Design	4
CIVL 4470	Watershed Processes	4

#### Group B (Up to 2 courses, only 1 from outside of Civil Engineering)

Course	Title	Hours
BIOE 4560	Structural Design in Wood	4
CIVL 4000	Uncertainty Analysis in Civil Engineering Systems	4

CIVL 4332	Civil Engineering Thesis Project	4
CIVL 4500	Contemporary Topics in Civil Engineering	4

- <sup>1</sup> Technical elective courses offered vary from year to year and may have limited enrollment. Courses offered in the current year are listed on the online timetables on the Department website.
- <sup>2</sup> Students are encouraged to discuss their program of courses with members of the instructional staff to obtain advice concerning the best choice of electives for their needs.
- <sup>3</sup> Students may take one technical elective course with a significant engineering science and/or design component from another department subject to the approval by the department head (or designate) of Civil Engineering.
- <sup>4</sup> CIVL 4024 can not be held with BIOE 4412 or BIOE 4700.

### Environmental Option Technical Electives (5 courses)<sup>1,2,3</sup>

A minimum of 3 courses must be taken from Group A and up to 2 from Group B, with no more than one course from outside the Department of Civil Engineering.

#### Group A (Select 3 to 5 courses)

Course	Title	Hours
CIVL 3710	Finite Element Analysis	4
CIVL 4100	Engineering Management and the Environment	4
CIVL 4120	Water Treatment Plant Design	4
CIVL 4130	Solid Waste Management	4
CIVL 4180	Environmental Systems	4
CIVL 4200	Groundwater Contamination	4
CIVL 4250	Groundwater Hydrology	4
CIVL 4300	Design of Urban Water Systems	4
CIVL 4350	Hazardous Waste Treatment	4
CIVL 4360	Water Resources Planning and Management	4
CIVL 4470	Watershed Processes	4

#### Group B (Up to 2 courses, only 1 from outside of Civil Engineering)

Course	Title	Hours
BIOE 4460	Air Pollution Assessment and Management	4
CIVL 4000	Uncertainty Analysis in Civil Engineering Systems	4
CIVL 4332	Civil Engineering Thesis Project	4
CIVL 4500	Contemporary Topics in Civil Engineering	4
SOIL 4500	Remediation of Contaminated Land	3

- <sup>1</sup> Technical elective courses offered vary from year to year and may have limited enrollment. Courses offered in the current year are listed on the online timetables on the Department website.
- <sup>2</sup> Students are encouraged to discuss their program of courses with members of the instructional staff to obtain advice concerning the best choice of electives for their needs.
- <sup>3</sup> Students may take one technical elective course with a significant engineering science and/or design component from another department subject to the approval by the department head (or designate) of Civil Engineering.

### Indigenous Knowledge Courses

Course	Title	Hours
INDG 1200	Indigenous Peoples in Canada	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3

INDG 2012 or HIST 2010	Indigenous History in Canada Indigenous History in Canada (C)	6
INDG 2020 or HIST 2020	The Métis in Canada The Métis in Canada (C)	3
POLS 3870	Politics of Indigenous-Settler Relations	3
POLS 2802	Introduction to Indigenous Politics	3
ENG 4100	Contemporary Topics in Engineering Practice <sup>1</sup>	4

<sup>1</sup> ENG 4100 may be used to meet this requirement when the course content satisfies the requirements of an Indigenous course (amended July 5, 2021).

## Preliminary Engineering Program

**Campus Address/General Office:** E1-262 EITC

**Telephone:** (204) 474 9807

**Email Address:** [eng\\_info@umanitoba.ca](mailto:eng_info@umanitoba.ca) ([eng\\_info@%20umanitoba.ca](mailto:eng_info@%20umanitoba.ca))

**Website:** [umanitoba.ca/engineering](https://umanitoba.ca/engineering/) (<https://umanitoba.ca/engineering/>)

The Preliminary Engineering Program is common to all programs in engineering. Students must complete a minimum of eight (**excluding CHEM 1122**) to be eligible to apply to one of the five degree granting engineering programs. A student must complete the following list of 13 courses as part of their engineering program in order to graduate with a BSc degree in engineering.

Course	Title	Hours
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1122	Introduction to Chemistry Techniques for Engineering 1 <sup>1</sup>	1.5
COMP 1012	Computer Programming for Scientists and Engineers	3
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
MATH 1510	Applied Calculus 1 <sup>3</sup>	3
MATH 1710	Applied Calculus 2 <sup>3</sup>	3
PHIL 1290	Critical Thinking <sup>4</sup>	3
PHYS 1050	Physics 1: Mechanics	3
Written English Course <sup>5,6</sup>		3
<b>Total Hours</b>		<b>37.5</b>

<sup>1</sup> The former CHEM 1300 may be used in lieu of the combination of CHEM 1100 and CHEM 1122.

<sup>2</sup> MATH 1300 is not an acceptable equivalent to MATH 1210

<sup>3</sup> Students intending to obtain a degree in Engineering are strongly advised to complete MATH 1510 and MATH 1710. However, MATH 1500 or MATH 1230 may be taken in lieu of MATH 1510; MATH 1700 or MATH 1232 may be taken in lieu of MATH 1710. MATH 1690 fulfills the requirement of both MATH 1510 and MATH 1710.

<sup>4</sup> PHIL 1290 Critical Thinking is the recommended complementary studies elective. Students may; however, select any course from the Faculties of Arts or Management (Asper School of Business) at the 1000 level or above, except for ARTS 1110 Introduction to University.

<sup>5</sup> Course selected from the list of approved Written English Courses for Engineering students.

<sup>6</sup> Three credit hours are required to satisfy the written English course requirement. Should a student complete a six credit hour course, the additional three credit hours may be used to satisfy general complementary studies requirements within a student's program.

<sup>7</sup> Equivalent courses offered through Université de Saint-Boniface may be used to satisfy program requirements.

## Co-operative Education and Industrial Internship Programs

### Contact and Program Information

**Director:** Carolyn Geddert, P.Eng., Engineer-in-Residence

**Tel.** 204 474 8948

**Email:** [carolyn.geddert@umanitoba.ca](mailto:carolyn.geddert@umanitoba.ca)

**Cooperative Education Administrator:** Megan Johnson

**Telephone:** 204 480 1069

**Email:** [megan.johnson@umanitoba.ca](mailto:megan.johnson@umanitoba.ca)

The Price Faculty of Engineering offers a Co-operative education and Industrial Internship Program (Co-op/IIP) designed to complement and enrich the academic program with work experience. The work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

Applications are accepted for Co-op/IIP every fall. Co-op/IIP supports the application and participation of all students who meet the requirements and wish to apply. Application to Co-op/IIP is a process. The Co-op/IIP Office will work with you. Please connect with our staff via email: [engineeringcoop@umanitoba.ca](mailto:engineeringcoop@umanitoba.ca) and refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>) for the benefits of Co-op/IIP.

Successful applicants to Co-op/IIP have:

- Attended an information session.
- Been accepted as an undergraduate student into an Engineering Department.
- Completed all 13 first year Engineering courses before their first work term.
- Completed 42 but not more than 90 credit hours towards your degree by the end of the Fall term. (This will support the completion of 3 work terms.)
- Been assessed as in Good Academic standing (GPA above 2.0). I.E. not on Probation or Academic Warning.
- Agree to follow all rules and regulations of the program as detailed in the Rules and Regulations

In addition to students following regular departmental programs, Internationally Educated Engineers Qualification (<http://umanitoba.ca/engineering/ieeq/>) (IEEQ) Program participants may also be approved for participation in Co-op/IIP upon written approval of the IEEQ Director.

Work placements must be confirmed to be appropriate by the Co-op/IIP office in order to be credited as a Co-op/IIP work term.

Upon securing a job placement, Engineering students enroll in the course ENG 4800 and subsequently the specific work term of employment ENG 4810, ENG 4820, ENG 4830, ENG 4840.

Students who are unable to maintain the standards of the Co-op/IIP will be transferred back into the regular program.

The course and grade requirements for completion of the Co-op/IIP are the same as those required for the regular program. However, in order to satisfy course prerequisite requirements, timetables may differ from the regular program. Co-op/IIP students are evaluated in the same manner as regular students and all rules and regulations of the Price Faculty of Engineering apply.

Students who are placed on Academic Warning or Academic Probation may either be removed from Co-op/IIP or have their acceptance deferred until they have completed two consecutive terms with an Academic Standing of "Satisfactory".

Students who are Required to Withdraw will immediately become ineligible for Co-op/IIP and will remain ineligible after re-instatement to the Price Faculty of Engineering.

Written reports must be completed at the end of each four month work term. Each successfully completed four month work term and its corresponding report receives a Pass/Fail grade and is rated at one credit hour. Graduates who successfully complete at least three work terms and the required work term reports will have the Co-operative Education Option acknowledged on their B.Sc. graduation parchment.

For more information regarding the Co-op/IIP rules, benefits, regulations and requirements, please refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>).

## Electrical and Computer Engineering

**Head:** Dr. Derek Oliver, Ph.D., P.Eng.

**Associate Head:** Dr. Dean McNeill, Ph. D., P.Eng. (Computer Engineering); Dr. Carl Ho, Ph. D., (Electrical Engineering)

**Campus Address/General Office:** E2-390 EITC

**Telephone:** 204 474 9603

**Email Address:** [umece@umanitoba.ca](mailto:umece@umanitoba.ca)

**Website:** <http://umanitoba.ca/ece/>

**Academic Staff:** <http://umanitoba.ca/faculties/engineering/departments/ece/staff/academics.html>

The Department of Electrical and Computer Engineering offers two fully accredited degree programs, one in Electrical Engineering and one in Computer Engineering. Both programs may include an industry internship (co-op). The programs are designed to give students knowledge of the basic principles of engineering and, in particular, an adequate training and education in the fundamentals and professional applications of Electrical and Computer Engineering. It is recommended that students entering Electrical or Computer Engineering acquire their own computer.

### Industry Internship Program (IIP)

The Price Faculty of Engineering offers cooperative education or industry internship opportunities as part of all degree programs. For information on these programs, please refer to Co-operative Education (p. 460) and Industrial Internship Programs (p. 466).

### Computer Engineering Program

The program in Computer Engineering has a core-plus-elective structure. The core includes fundamental professional courses focused on digital hardware, digital systems design, software engineering, algorithms, electronics, and communications, as well as developing a necessary foundation in mathematics, computer programming, electric circuits, the physical sciences, and thermodynamics. At the conclusion of the program, a graduate will have acquired both the knowledge and experience necessary to design and engineer practical custom digital hardware and software systems to solve real-world problems. To support that outcome, the final year includes a significant, industrially relevant, capstone group design project as a core requirement, with the remaining program based on electives. A certain level of specialization is possible through the selection of elective courses offered in the final year. In addition, the Department offers recognized Focus Areas (p. 479) in Computer Networks and Communications, Embedded Systems, Software Engineering, and Biomedical.

The student's program must include six credit hours of complementary studies electives. Courses in engineering economics, technical writing, and ecology, technology and society are compulsory.

Students are encouraged to consult with the department for model four-year ([https://umanitoba.ca/faculties/engineering/departments/ece/pdf/2020-2021\\_EE\\_Flowchart\\_\(4\\_year\\_plan\).pdf](https://umanitoba.ca/faculties/engineering/departments/ece/pdf/2020-2021_EE_Flowchart_(4_year_plan).pdf)) and five-year ([https://umanitoba.ca/faculties/engineering/departments/ece/pdf/2020-2021\\_EE\\_Flowchart\\_\(5\\_year\\_plan\).pdf](https://umanitoba.ca/faculties/engineering/departments/ece/pdf/2020-2021_EE_Flowchart_(5_year_plan).pdf)) programs. Students are strongly encouraged to follow the model programs when possible, as timetabling and course offerings are based on these.

### Electrical Engineering Program

The program in Electrical Engineering has a core-plus-elective structure. The core develops the necessary base in mathematics, the physical

sciences, dynamics, thermodynamics, electric fields and circuits, and fundamental professional courses focused on energy conversion and transmission, electronics, materials and devices, communications, and control systems. At the conclusion of the program, a graduate will have acquired both the knowledge and experience necessary to design and engineer practical electrical and electronic systems to solve real-world problems. To support that outcome, the final year includes a significant, industrially relevant, capstone group design project, in addition to control systems, and communication systems as core requirements, with the remaining program based on electives. A certain level of specialization is possible through the selection of elective courses offered in the final year. In addition, the Department offers recognized Focus Areas (p. 482) in Power and Energy Systems, Communication Devices, Engineering Physics, and Biomedical.

The student's program must include six credit hours of complementary studies electives. Courses in engineering economics, technical writing, and ecology, technology and society are compulsory.

Students are encouraged to consult with the department for model four-year and five-year programs. Students are strongly encouraged to follow the model programs when possible, as timetabling and course offerings are based on these.

## Second Degree in Electrical or Computer Engineering

Students who have completed a first degree in Electrical Engineering or Computer Engineering may seek a second degree in the complementary program. The requirements for completion of the second degree include:

1. The completion of all deficient required (core) courses for the second degree. If a student has completed any of these courses as fourth year electives towards the first degree, then they will not have to repeat or replace the courses already taken.
2. The equivalent of a full fourth year program is required for the second degree, i.e., twelve half courses. This must include:
  - i) A second capstone group design project on a different topic relating to the field of the second degree;
  - ii) All the fourth year course requirements of the second degree. If a student has already taken one or more of the required fourth year courses during their first degree, then they must replace those courses by other appropriate fourth year courses as approved by the Department Head. For example, core courses common to both programs must be replaced by fourth year electives from the Department.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Computer Engineering, B.Sc. (p. 477)	4	152-157	Yes
Electrical Engineering, B.Sc. (p. 481)	4	158-163	Yes

## Computer Engineering, B.Sc.

### Degree Requirements

#### Computer Engineering Departmental Program

Course	Title	Hours
Students must complete the Preliminary Engineering Program requirements for graduation.		37.5
ANTH 2430	Ecology, Technology and Society	3
COMP 1020	Introductory Computer Science 2	3
COMP 2140	Data Structures and Algorithms	3
COMP 3430	Operating Systems	3
ENG 2030	Engineering Communication: Strategies for the Profession	3
or ENG 2040	Engineering Communication: Strategies, Practice and Design	
ENG 3000	Engineering Economics	3
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3
MATH 3120	Applied Discrete Mathematics	3
MATH 3132	Engineering Mathematical Analysis 3	3
PHYS 2152	Modern Physics for Engineers	3
STAT 2220	Contemporary Statistics for Engineers	3
ECE 2160	Electronics 2E	5

ECE 2220	Digital Logic Systems	5
ECE 2262	Electric Circuits	4
ECE 3610	Microprocessing Systems	4
ECE 3700	Telecommunication Network Engineering	4
ECE 3740	Systems Engineering Principles 1	4
ECE 3760	Digital Systems Design 1	4
ECE 3780	Signal Processing 1	4
ECE 3790	Engineering Algorithms	4
ECE 4150	Control Systems	4
or ECE 4260	Communications Systems	
ECE 4240	Microprocessor Interfacing	4
ECE 4830	Signal Processing 2	4
ECE 4600	Group Design Project <sup>1</sup>	6
One Complementary Studies Elective <sup>2</sup>		3
Two Natural Science Electives from the approved list		6
Five Technical Electives from the approved list		15-20
<b>Total Hours</b>		<b>153.5-158.5</b>

<sup>1</sup> Course continues through both terms with credit given upon completion.

<sup>2</sup> The complementary studies elective can be any course at the 1000 level or above from either the faculties of Arts or Management. However, ARTS 1110 may not be used for credit in the Price Faculty of Engineering.

### Computer Engineering Technical Electives<sup>1</sup>

Students may select their five technical electives from the following approved list of courses from Computer Engineering, Electrical Engineering, or Computer Science, with the only limitations that no more than two may come from the list of Approved Electrical Engineering Electives.

#### Computer Engineering Electives

Course	Title	Hours
ECE 3750	Systems Engineering Principles 2	4
ECE 3770	Digital Systems Design 2	4
ECE 4180	Introduction to Robotics	4
ECE 4250	Digital Communications	4
ECE 4420	Digital Control	4
ECE 4440	Computer Vision	4
ECE 4450	Applied Computational Intelligence	4
ECE 4520	Simulation and Modelling	4
ECE 4530	Parallel Processing	4
ECE 4560	Modern Computing Systems	4
ECE 4540	Wireless Networks	4
ECE 4740	Digital Systems Implementation	4
ECE 4850	Topics in Electrical and Computer Engineering 1 <sup>2</sup>	4
ECE 4860	Topics in Electrical and Computer Engineering 2 <sup>2</sup>	4
ECE 4870	Topics in Electrical and Computer Engineering 3 <sup>2</sup>	3
ECE 4880	Topics in Electrical and Computer Engineering 4 <sup>2</sup>	3

<sup>1</sup> The Department of Electrical and Computer Engineering does not guarantee that all elective courses will be offered every session or that it will be possible to fit courses into all of the many possible timetable combinations of students taking the programs. The term in which an elective course is offered is specified each year in Aurora and on the Department website. There may be a maximum limit on the number of students allowed to take an elective in a particular session. Similarly, there may be a minimum limit and if registration is below the minimum, the elective will be cancelled for the session, and those registered will be required to transfer to another elective before registration revision deadline.

<sup>2</sup> Requires permission of the Department.

#### Approved Electrical Engineering Electives (maximum of 2)<sup>1</sup>

Course	Title	Hours
ECE 3540	Advanced Circuit Analysis and Design	4
ECE 3580	Foundations of Electromagnetics	4
ECE 3600	Physical Electronics	4
ECE 3670	Electronics 3E	4
ECE 3720	Electric Power and Machines	4
ECE 4100	Introduction to Microelectronic Fabrication	4
ECE 4150	Control Systems	4
ECE 4160	Control Engineering	4
ECE 4260	Communications Systems	4
ECE 4390	Engineering Computations 4E	4
ECE 4610	Biomedical Instrumentation and Signal Processing	4

<sup>1</sup> The Department of Electrical and Computer Engineering does not guarantee that all elective courses will be offered every session or that it will be possible to fit courses into all of the many possible timetable combinations of students taking the programs. The term in which an elective course is offered is specified each year in Aurora and on the Department website. There may be a maximum limit on the number of students allowed to take an elective in a particular session. Similarly, there may be a minimum limit and if registration is below the minimum, the elective will be cancelled for the session, and those registered will be required to transfer to another elective before the registration revision deadline.

#### Approved Computer Science Electives

Course	Title	Hours
COMP 2150	Object Orientation	3
COMP 2160	Programming Practices	3
COMP 3010	Distributed Computing	3
COMP 3020	Human-Computer Interaction 1	3
COMP 3190	Introduction to Artificial Intelligence	3
COMP 3350	Software Engineering 1	3
COMP 3290	Introduction to Compiler Construction	3
COMP 3380	Databases Concepts and Usage	3
COMP 3490	Computer Graphics 1	3
COMP 4020	Human-Computer Interaction 2	3
COMP 4190	Artificial Intelligence	3
COMP 4200	Expert Systems	3
COMP 4350	Software Engineering 2	3
COMP 4360	Machine Learning	3
COMP 4380	Database Implementation	3
COMP 4430	Operating Systems 2	3
COMP 4490	Computer Graphics 2	3
COMP 4580	Computer Security	3
COMP 4710	Introduction to Data Mining	3

#### Natural Science Electives for Computer Engineering

The Computer Engineering program requires students to complete two (2) Natural Science Electives as part of their program selected from a Department approved list. These courses may be taken anytime during the student's program.

Course	Title	Hours
ASTR 1810	Introduction to Astronomy: The Magnificent Universe	3
ASTR 3180	Stars	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1300	Economic Plants	3
BIOL 1410	Anatomy of the Human Body	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1130	Introduction to Organic Chemistry	3
ENTM 2050	Introductory Entomology	3
GEOL 1340	The Dynamic Earth	3
MBIO 1220	Essentials of Microbiology	3
PHYS 2260	Optics	3
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3

PHYS 2600	Electromagnetic Field Theory	3
PHYS 2650	Classical Mechanics 1	3
PHYS 3220	Medical Physics and Physiological Measurement	3
PHYS 3630	Electro - and Magnetostatic Theory	3

**Note:**

- Students are urged to discuss their program of courses with members of the instructional staff before the end of their third year to obtain advice concerning the best choice of electives for their needs.

## Concentrations

### Computer Engineering Focus Areas

Students wishing to pursue more focused studies in a Computer Engineering subject/research area have the choice of doing so through a recognized Focus Area. Courses taken towards a Focus Area take the place of some of the Technical Electives required in the Computer Engineering program.

#### Computer Networks and Communications Focus Area

Course	Title	Hours
ECE 4260	Communications Systems	4
Three CNC Electives		9-12
Two Technical Electives		6-8
<b>Total Hours</b>		<b>19-24</b>

#### Computer Networks and Communications (CNC) Electives

Course	Title	Hours
ECE 4250	Digital Communications	4
ECE 4520	Simulation and Modelling	4
ECE 4540	Wireless Networks	4
ECE 4870	Topics in Electrical and Computer Engineering 3 <sup>1</sup>	3
COMP 3010	Distributed Computing	3
COMP 4580	Computer Security	3

<sup>1</sup> Topic Title: ECE 4870 Computer Communication Networks

#### Embedded Systems Focus Area

Course	Title	Hours
ECE 4150	Control Systems	4
Three ES Electives		9-12
Two Technical Electives		6-8
<b>Total Hours</b>		<b>19-24</b>

#### Embedded Systems (ES) Electives List

Course	Title	Hours
ECE 3770	Digital Systems Design 2	4
ECE 4180	Introduction to Robotics	4
ECE 4440	Computer Vision	4
ECE 4560	Modern Computing Systems	4
ECE 4610	Biomedical Instrumentation and Signal Processing	4
ECE 4740	Digital Systems Implementation	4
COMP 3020	Human-Computer Interaction 1	3
COMP 4580	Computer Security	3

#### Software Engineering Focus Area

Course	Title	Hours
ECE 4260	Communications Systems	4
or ECE 4150	Control Systems	
COMP 3350	Software Engineering 1	3
Three SE Electives		9-12
One Technical Elective		3-4
<b>Total Hours</b>		<b>19-23</b>

#### Software Engineering (SE) Electives

Course	Title	Hours
ECE 3750	Systems Engineering Principles 2	4
ECE 4530	Parallel Processing	4
COMP 3010	Distributed Computing	3
COMP 3020	Human-Computer Interaction 1	3
COMP 3380	Databases Concepts and Usage	3
COMP 4350	Software Engineering 2	3
COMP 4580	Computer Security	3
COMP 4710	Introduction to Data Mining	3

#### Biomedical Focus Area

Course	Title	Hours
ECE 4610	Biomedical Instrumentation and Signal Processing	4
BIOL 1410	Anatomy of the Human Body <sup>1</sup>	3
PHYS 2600	Electromagnetic Field Theory <sup>1</sup>	3
One Biomedical Group A Elective Course		3-4
One Biomedical Group A or Group B Elective Course		3-4
Two Technical Electives		6-8
<b>Total Hours</b>		<b>22-26</b>

<sup>1</sup> These courses satisfy the Natural Science Elective Requirement.

#### Biomedical Group A Elective Courses

Course	Title	Hours
ECE 4860	Topics in Electrical and Computer Engineering 2 <sup>1</sup>	4
PHYS 3220	Medical Physics and Physiological Measurement	3
PHYS 4300	Topics in Physics	3

<sup>1</sup> Topic Title: ECE 4860 Biomedical Optics

#### Biomedical Group B Elective Courses

Course	Title	Hours
BIOL 1412	Physiology of the Human Body	3
MBIO 1220	Essentials of Microbiology	3
BIOE 3320	Engineering Properties of Biological Materials	4
BIOE 4610	Design of Assistive Technology Devices	4

## Preliminary Engineering Program

**Campus Address/General Office:** E1-262 EITC

**Telephone:** (204) 474 9807

**Email Address:** eng\_info@umanitoba.ca (eng\_info@%20umanitoba.ca)

**Website:** umanitoba.ca/engineering (<https://umanitoba.ca/engineering/>)

The Preliminary Engineering Program is common to all programs in engineering. Students must complete a minimum of eight (**excluding CHEM 1122**) to be eligible to apply to one of the five degree granting engineering programs. A student must complete the following list of 13



courses as part of their engineering program in order to graduate with a BSc degree in engineering.

Course	Title	Hours
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1122	Introduction to Chemistry Techniques for Engineering 1 <sup>1</sup>	1.5
COMP 1012	Computer Programming for Scientists and Engineers	3
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
MATH 1510	Applied Calculus 1 <sup>3</sup>	3
MATH 1710	Applied Calculus 2 <sup>3</sup>	3
PHIL 1290	Critical Thinking <sup>4</sup>	3
PHYS 1050	Physics 1: Mechanics	3
Written English Course <sup>5,6</sup>		3
<b>Total Hours</b>		<b>37.5</b>

<sup>1</sup> The former CHEM 1300 may be used in lieu of the combination of CHEM 1100 and CHEM 1122.

<sup>2</sup> MATH 1300 is not an acceptable equivalent to MATH 1210

<sup>3</sup> Students intending to obtain a degree in Engineering are strongly advised to complete MATH 1510 and MATH 1710. However, MATH 1500 or MATH 1230 may be taken in lieu of MATH 1510; MATH 1700 or MATH 1232 may be taken in lieu of MATH 1710. MATH 1690 fulfills the requirement of both MATH 1510 and MATH 1710.

<sup>4</sup> PHIL 1290 Critical Thinking is the recommended complementary studies elective. Students may; however, select any course from the Faculties of Arts or Management (Asper School of Business) at the 1000 level or above, except for ARTS 1110 Introduction to University.

<sup>5</sup> Course selected from the list of approved Written English Courses for Engineering students.

<sup>6</sup> Three credit hours are required to satisfy the written English course requirement. Should a student complete a six credit hour course, the additional three credit hours may be used to satisfy general complementary studies requirements within a student's program.

<sup>7</sup> Equivalent courses offered through Université de Saint-Boniface may be used to satisfy program requirements.

## Co-operative Education and Industrial Internship Programs

### Contact and Program Information

**Director:** Carolyn Geddert, P.Eng., Engineer-in-Residence

**Tel.** 204 474 8948

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**Cooperative Education Administrator:** Megan Johnson

**Telephone:** 204 480 1069

**Email:** megan.johnson@umanitoba.ca

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provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

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- Completed all 13 first year Engineering courses before their first work term.
- Completed 42 but not more than 90 credit hours towards your degree by the end of the Fall term. (This will support the completion of 3 work terms.)
- Been assessed as in Good Academic standing (GPA above 2.0). I.E. not on Probation or Academic Warning.
- Agree to follow all rules and regulations of the program as detailed in the Rules and Regulations

In addition to students following regular departmental programs, Internationally Educated Engineers Qualification (<http://umanitoba.ca/engineering/ieeq/>) (IEEQ) Program participants may also be approved for participation in Co-op/IIP upon written approval of the IEEQ Director.

Work placements must be confirmed to be appropriate by the Co-op/IIP office in order to be credited as a Co-op/IIP work term.

Upon securing a job placement, Engineering students enroll in the course ENG 4800 and subsequently the specific work term of employment ENG 4810, ENG 4820, ENG 4830, ENG 4840.

Students who are unable to maintain the standards of the Co-op/IIP will be transferred back into the regular program.

The course and grade requirements for completion of the Co-op/IIP are the same as those required for the regular program. However, in order to satisfy course prerequisite requirements, timetables may differ from the regular program. Co-op/IIP students are evaluated in the same manner as regular students and all rules and regulations of the Price Faculty of Engineering apply.

Students who are placed on Academic Warning or Academic Probation may either be removed from Co-op/IIP or have their acceptance deferred until they have completed two consecutive terms with an Academic Standing of "Satisfactory".

Students who are Required to Withdraw will immediately become ineligible for Co-op/IIP and will remain ineligible after re-instatement to the Price Faculty of Engineering.

Written reports must be completed at the end of each four month work term. Each successfully completed four month work term and its corresponding report receives a Pass/Fail grade and is rated at one credit hour. Graduates who successfully complete at least three work terms and the required work term reports will have the Co-operative Education Option acknowledged on their B.Sc. graduation parchment.

For more information regarding the Co-op/IIP rules, benefits, regulations and requirements, please refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>).

## Electrical Engineering, B.Sc.

### Degree Requirements

#### Electrical Engineering Departmental Program

Course	Title	Hours
Students must complete the Preliminary Engineering Program requirements for graduation.		37.5
ANTH 2430	Ecology, Technology and Society	3
ENG 2030	Engineering Communication: Strategies for the Profession	3
or ENG 2040	Engineering Communication: Strategies, Practice and Design	
ENG 3000	Engineering Economics	3
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3
MATH 3132	Engineering Mathematical Analysis 3	3
PHYS 2152	Modern Physics for Engineers	3
STAT 2220	Contemporary Statistics for Engineers	3
ECE 2160	Electronics 2E	5
ECE 2220	Digital Logic Systems	5
ECE 2240	Numerical Methods for Electrical Engineers	4
ECE 2262	Electric Circuits	4
ECE 3540	Advanced Circuit Analysis and Design	4
ECE 3580	Foundations of Electromagnetics	4
ECE 3590	Electromagnetic Theory	4
ECE 3600	Physical Electronics	4
ECE 3610	Microprocessing Systems	4
ECE 3670	Electronics 3E	4
ECE 3720	Electric Power and Machines	4
ECE 3730	Principles of Embedded System Design	4
ECE 3780	Signal Processing 1	4
ECE 4150	Control Systems	4
ECE 4260	Communications Systems	4
ECE 4600	Group Design Project <sup>1</sup>	6
One Complementary Studies Elective <sup>2</sup>		3
One Natural Science Elective from the approved list		3
Seven Technical Electives from the approved list		24-29
<b>Total Hours</b>		<b>159.5-164.5</b>

<sup>1</sup> Course continues through both terms with credit given upon completion.

<sup>2</sup> The complimentary studies electives can be any course at the 1000 level or above from either the faculties of Arts or Management. However, ARTS 1110 may not be used for credit in the Price Faculty of Engineering.

#### Electrical Engineering Technical Electives <sup>1,2</sup>

##### Group A Qualified Engineering Design Elective Courses

Course	Title	Hours
ECE 4160	Control Engineering	4
ECE 4250	Digital Communications	4

ECE 4290	Microwave Engineering	4
ECE 4370	Power Electronics	4
ECE 4830	Signal Processing 2	4

##### Group B Technical Elective Courses

Course	Title	Hours
ECE 3650	Electric Machines	5
ECE 3700	Telecommunication Network Engineering	4
ECE 3770	Digital Systems Design 2	4
ECE 4100	Introduction to Microelectronic Fabrication	4
ECE 4180	Introduction to Robotics	4
ECE 4240	Microprocessor Interfacing	4
ECE 4270	Antennas	4
ECE 4280	Engineering Electromagnetics	4
ECE 4300	Electrical Energy Systems 1	4
ECE 4310	Electrical Energy Systems 2	4
ECE 4360	High Voltage Engineering	4
ECE 4390	Engineering Computations 4E	4
ECE 4420	Digital Control	4
ECE 4430	Design of RF Devices and Wireless Systems	4
ECE 4440	Computer Vision	4
ECE 4450	Applied Computational Intelligence	4
ECE 4520	Simulation and Modelling	4
ECE 4530	Parallel Processing	4
ECE 4540	Wireless Networks	4
ECE 4560	Modern Computing Systems	4
ECE 4580	Optoelectronics	4
ECE 4610	Biomedical Instrumentation and Signal Processing	4
ECE 4740	Digital Systems Implementation	4
ECE 4850	Topics in Electrical and Computer Engineering 1	4
ECE 4860	Topics in Electrical and Computer Engineering 2	4
ECE 4870	Topics in Electrical and Computer Engineering 3	3
ECE 4880	Topics in Electrical and Computer Engineering 4	3
COMP 1020	Introductory Computer Science 2	3
COMP 2140	Data Structures and Algorithms	3
COMP 3190	Introduction to Artificial Intelligence	3
COMP 4360	Machine Learning	3
MATH 3120	Applied Discrete Mathematics	3
MATH 3460	Partial Differential Equations	3
PHYS 2260	Optics	3
PHYS 3220	Medical Physics and Physiological Measurement	3
PHYS 4590	Advanced Optics	3
PHYS 4646	Electro - and Magnetodynamics and Special Relativity	3

<sup>1</sup> A minimum of 3 electives are required from Group A; the other 4 electives may be taken from either Group A or B unless the student completes a Focus Area.

<sup>2</sup> The Department of Electrical and Computer Engineering does not guarantee that all elective courses will be offered every session or that it will be possible to fit courses into all of the many possible timetable combinations of students taking the programs. The term in which an elective course is offered is specified each year in Aurora and the online timetables on the Department website. There may be a maximum limit set on the number of students allowed to take a particular elective in a session. Similarly, there may be a minimum limit and if registration is below the minimum, the elective will be cancelled and those registered will be required to transfer to another elective before the registration revision deadline.

### Natural Science Electives for Electrical Engineering

The Electrical Engineering program requires students to complete an elective course in natural science selected from the following Department approved list.

Course	Title	Hours
ASTR 1810	Introduction to Astronomy: The Magnificent Universe	3
ASTR 3180	Stars	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1300	Economic Plants	3
BIOL 1410	Anatomy of the Human Body	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1130	Introduction to Organic Chemistry	3
ENTM 2050	Introductory Entomology	3
GEOL 1340	The Dynamic Earth	3
MBIO 1220	Essentials of Microbiology	3
PHYS 2260	Optics	3
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2650	Classical Mechanics 1	3
PHYS 3220	Medical Physics and Physiological Measurement	3

#### Note:

- Students are urged to discuss their program of courses with members of the instructional staff before the end of their third year to obtain advice concerning the best choice of electives for their needs.

## Concentrations

### Electrical Engineering Focus Areas

Students wishing to pursue more focused studies in an Electrical Engineering subject/research area have the choice of doing so through a recognized Focus Area. Courses taken towards a Focus Area take the place of some or all of the Technical Electives required in the Electrical Engineering program. Please refer to the Faculty website ([http://umanitoba.ca/ece/curr\\_students/undergrad/ee-focus-areas.html](http://umanitoba.ca/ece/curr_students/undergrad/ee-focus-areas.html)) for a detailed description of each area and the courses required.

#### Power and Energy Systems Focus Area

To complete the Power and Energy Systems Focus the four prescribed courses must be taken. One of the three Power and Energy Systems Technical Elective courses must also be taken. To complete the program requirements two additional courses must be selected from the elective courses listed in the Electrical Engineering Standard Program. (p. 481)

### Prescribed Power and Energy Systems Courses

Course	Title	Hours
ECE 3650	Electric Machines	5
ECE 4300	Electrical Energy Systems 1	4
ECE 4370	Power Electronics	4
One additional course from the list of Group A Qualified Design Elective Courses found in the Electrical Engineering Standard Program		4
<b>Electives</b>		
One Power and Energy Systems Technical Elective		4
Two additional courses from the Elective Courses found in the Electrical Engineering Standard Program		6-9
<b>Total Hours</b>		<b>27-30</b>

### Power and Energy Systems Technical Electives

Course	Title	Hours
ECE 4310	Electrical Energy Systems 2	4
ECE 4360	High Voltage Engineering	4

### Communication Devices Focus Area

To complete the Communication Devices Focus the three prescribed courses must be taken. Two of the five Communication Devices Technical Elective courses must also be taken. To complete the program requirements two additional courses must be selected from the elective courses listed in the Electrical Engineering Standard Program. (p. 481)

### Prescribed Communication Devices Courses

Course	Title	Hours
ECE 4270	Antennas	4
ECE 4290	Microwave Engineering	4
ECE 4250	Digital Communications	4
or ECE 4830	Signal Processing 2	
<b>Electives</b>		
Two Communication Devices Technical Electives		8
Two additional courses from the Elective Courses found in the Electrical Engineering Standard Program		6-9
<b>Total Hours</b>		<b>26-29</b>

### Communication Devices Technical Electives

Course	Title	Hours
ECE 4250	Digital Communications	4
ECE 4280	Engineering Electromagnetics	4
ECE 4430	Design of RF Devices and Wireless Systems	4
ECE 4580	Optoelectronics	4
ECE 4830	Signal Processing 2	4
<b>Total Hours</b>		<b>20</b>

### Biomedical Focus Area

To complete the focus area, students are required to take a total of six (6) courses as indicated below. Of these, five (5) replace general technical electives and one (1) is in place of the Natural Science Elective in the Electrical Engineering program. To complete the program requirements two (2) additional courses must be selected from the technical electives listed in the Electrical Engineering Standard Program. (p. 481)

**Biomedical Courses**

Course	Title	Hours
ECE 4610	Biomedical Instrumentation and Signal Processing	4
ECE 4830	Signal Processing 2	4
BIOL 1410	Anatomy of the Human Body	3
<b>Electives</b>		
One Biomedical Group A Elective Course		3-4
One Biomedical Group A or Group B Elective Course		3-4
One additional course from the list of Group A Qualified Design Elective Courses found in the Electrical Engineering Standard Program		4
Two additional courses from the list of Technical Elective Courses found in the Electrical Engineering Standard Program		6-9
<b>Total Hours</b>		<b>27-32</b>

**Biomedical Group A Elective Courses**

Course	Title	Hours
ECE 4860	Topics in Electrical and Computer Engineering 2 <sup>1</sup>	4
PHYS 3220	Medical Physics and Physiological Measurement	3
PHYS 4300	Topics in Physics	3

<sup>1</sup> Topic Title: ECE 4860 Biomedical Optics

**Biomedical Group B Elective Courses**

Course	Title	Hours
BIOL 1412	Physiology of the Human Body	3
MBIO 1220	Essentials of Microbiology	3
BIOE 3320	Engineering Properties of Biological Materials	4
BIOE 4610	Design of Assistive Technology Devices	4

**Engineering Physics Focus Area**

In the standard Electrical Engineering program, seven Technical Elective Courses and one Natural Science Elective are required. To complete the Engineering Physics focus area, students are required to take a total of seven courses as indicated below, including the four prescribed Engineering Physics courses. Three further courses must be taken from the list of Engineering Physics Elective courses. To complete the program requirements a course must be selected from the technical electives listed in the Electrical Engineering Standard Program (p. 481).

**Prescribed Engineering Physics Courses**

Course	Title	Hours
ECE 4270	Antennas	4
ECE 4580	Optoelectronics	4
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2650	Classical Mechanics 1	3
<b>Electives</b>		
Three Engineering Physics Technical Elective Courses		9-13
One additional course from the list of Technical Elective Courses found in the Electrical Engineering Standard Program		3-5
<b>Total Hours</b>		<b>26-32</b>

**Engineering Physics Technical Elective Courses**

Course	Title	Hours
ECE 4860	Topics in Electrical and Computer Engineering 2 <sup>1</sup>	4
PHYS 2260	Optics	3
PHYS 3220	Medical Physics and Physiological Measurement	3

PHYS 3386	Quantum Mechanics 2	3
PHYS 3430	Honours Physics Laboratory	6
PHYS 3570	Physics of Materials 1	3
PHYS 4646	Electro - and Magnetodynamics and Special Relativity	3
PHYS 3650	Classical Mechanics 2	3
PHYS 3670	Classical Thermodynamics	3
PHYS 4680	Statistical Mechanics	3
PHYS 4520	Introduction to Solid State Physics	3
PHYS 4590	Advanced Optics	3

<sup>1</sup> Topic Title: ECE 4860 Materials Characterization

**Preliminary Engineering Program**

**Campus Address/General Office:** E1-262 EITC

**Telephone:** (204) 474 9807

**Email Address:** eng\_info@umanitoba.ca (eng\_info@%20umanitoba.ca)

**Website:** umanitoba.ca/engineering (<https://umanitoba.ca/engineering/>)

The Preliminary Engineering Program is common to all programs in engineering. Students must complete a minimum of eight (**excluding CHEM 1122**) to be eligible to apply to one of the five degree granting engineering programs. A student must complete the following list of 13 courses as part of their engineering program in order to graduate with a BSc degree in engineering.

Course	Title	Hours
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1122	Introduction to Chemistry Techniques for Engineering 1 <sup>1</sup>	1.5
COMP 1012	Computer Programming for Scientists and Engineers	3
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
MATH 1510	Applied Calculus 1 <sup>3</sup>	3
MATH 1710	Applied Calculus 2 <sup>3</sup>	3
PHIL 1290	Critical Thinking <sup>4</sup>	3
PHYS 1050	Physics 1: Mechanics	3
Written English Course <sup>5,6</sup>		3
<b>Total Hours</b>		<b>37.5</b>

<sup>1</sup> The former CHEM 1300 may be used in lieu of the combination of CHEM 1100 and CHEM 1122.

<sup>2</sup> MATH 1300 is not an acceptable equivalent to MATH 1210

<sup>3</sup> Students intending to obtain a degree in Engineering are strongly advised to complete MATH 1510 and MATH 1710. However, MATH 1500 or MATH 1230 may be taken in lieu of MATH 1510; MATH 1700 or MATH 1232 may be taken in lieu of MATH 1710. MATH 1690 fulfills the requirement of both MATH 1510 and MATH 1710.

<sup>4</sup> PHIL 1290 Critical Thinking is the recommended complementary studies elective. Students may, however, select any course from the Faculties of Arts or Management (Asper School of Business) at the 1000 level or above, except for ARTS 1110 Introduction to University.

- <sup>5</sup> Course selected from the list of approved Written English Courses for Engineering students.
- <sup>6</sup> Three credit hours are required to satisfy the written English course requirement. Should a student complete a six credit hour course, the additional three credit hours may be used to satisfy general complementary studies requirements within a student's program.
- <sup>7</sup> Equivalent courses offered through Université de Saint-Boniface may be used to satisfy program requirements.

## Co-operative Education and Industrial Internship Programs

### Contact and Program Information

**Director:** Carolyn Geddert, P.Eng., Engineer-in-Residence

**Tel.** 204 474 8948

**Email:** carolyn.geddert@umanitoba.ca

**Cooperative Education Administrator:** Megan Johnson

**Telephone:** 204 480 1069

**Email:** megan.johnson@umanitoba.ca

The Price Faculty of Engineering offers a Co-operative education and Industrial Internship Program (Co-op/IIP) designed to complement and enrich the academic program with work experience. The work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

Applications are accepted for Co-op/IIP every fall. Co-op/IIP supports the application and participation of all students who meet the requirements and wish to apply. Application to Co-op/IIP is a process. The Co-op/IIP Office will work with you. Please connect with our staff via email: [engineeringcoop@umanitoba.ca](mailto:engineeringcoop@umanitoba.ca) and refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>) for the benefits of Co-op/IIP.

Successful applicants to Co-op/IIP have:

- Attended an information session.
- Been accepted as an undergraduate student into an Engineering Department.
- Completed all 13 first year Engineering courses before their first work term.
- Completed 42 but not more than 90 credit hours towards your degree by the end of the Fall term. (This will support the completion of 3 work terms.)
- Been assessed as in Good Academic standing (GPA above 2.0). I.E. not on Probation or Academic Warning.
- Agree to follow all rules and regulations of the program as detailed in the Rules and Regulations

In addition to students following regular departmental programs, Internationally Educated Engineers Qualification (<http://umanitoba.ca/engineering/ieeq/>) (IEEQ) Program participants may also be approved for participation in Co-op/IIP upon written approval of the IEEQ Director.

Work placements must be confirmed to be appropriate by the Co-op/IIP office in order to be credited as a Co-op/IIP work term.

Upon securing a job placement, Engineering students enroll in the course ENG 4800 and subsequently the specific work term of employment ENG 4810, ENG 4820, ENG 4830, ENG 4840.

Students who are unable to maintain the standards of the Co-op/IIP will be transferred back into the regular program.

The course and grade requirements for completion of the Co-op/IIP are the same as those required for the regular program. However, in order to satisfy course prerequisite requirements, timetables may differ from the regular program. Co-op/IIP students are evaluated in the same manner as regular students and all rules and regulations of the Price Faculty of Engineering apply.

Students who are placed on Academic Warning or Academic Probation may either be removed from Co-op/IIP or have their acceptance deferred until they have completed two consecutive terms with an Academic Standing of "Satisfactory".

Students who are Required to Withdraw will immediately become ineligible for Co-op/IIP and will remain ineligible after re-instatement to the Price Faculty of Engineering.

Written reports must be completed at the end of each four month work term. Each successfully completed four month work term and its corresponding report receives a Pass/Fail grade and is rated at one credit hour. Graduates who successfully complete at least three work terms and the required work term reports will have the Co-operative Education Option acknowledged on their B.Sc. graduation parchment.

For more information regarding the Co-op/IIP rules, benefits, regulations and requirements, please refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>).

# Mechanical Engineering

**Head:** Dr. Olanrewaju Ojo, P.Eng.

**Associate Head:** Dr. Sean O'Brien, P. Eng., (Undergraduate Programs); Dr. Yunhua Luo, P.Eng. (Graduate Programs)

**Campus Address/General Office:** E2-327 EITC

**Telephone:** 204 474 7358/ 6630

**Fax:** 204 275 7507

**Website:** <https://umanitoba.ca/explore/programs-of-study/mechanical-engineering-bsc> (<https://umanitoba.ca/explore/programs-of-study/mechanical-engineering-bsc/>)

**Academic Staff:** <https://umanitoba.ca/engineering/faculty-staff/mechanical-engineering> (<https://umanitoba.ca/engineering/faculty-staff/mechanical-engineering/>)

The Department of Mechanical Engineering offers a fully accredited degree program. Students entering the Mechanical Engineering program may specialize with an option in Aerospace, or a stream in Aerospace, Materials, Solid Mechanics, or Thermofluids. Students are urged to consult appropriate program requirements shown for each option/stream.

The Mechanical Engineering program provides the education required by those who wish to practice in Mechanical Engineering that embraces, among other subdivisions, the design of mechanical devices and systems, manufacturing engineering and management, computer-aided design and computer-aided manufacturing, power generation and utilization, air conditioning, the material sciences, and the aeronautical sciences.

The Mechanical Engineering Program offers basic training in the sciences, mathematics and fundamental engineering subjects followed by more specialized discipline-related subjects. Students are allowed to choose technical electives to suit their career objectives and are also required to take complementary studies electives related to social issues.

## Co-operative Education Program in Mechanical Engineering

Please refer Co-operative Education (p. 466) and Industrial Internship Programs (p. 476)

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Mechanical Engineering, B.Sc. (p. 485)	4	157-162	Yes

## Mechanical Engineering, B.Sc.

### Degree Requirements

#### Mechanical Engineering Departmental Program

Course	Title	Hours
Students must complete the Preliminary Engineering Program requirements for graduation.		37.5
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1126	Introduction to Chemistry Techniques for Engineering 2	1.5
ENG 3000	Engineering Economics	3
ENG 3020	Technology, Society and the Future	3
ECE 3010	Elements of Electric Machines and Digital Systems	4
ENG 2030	Engineering Communication: Strategies for the Profession	3
or ENG 2040	Engineering Communication: Strategies, Practice and Design	
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3
MATH 3132	Engineering Mathematical Analysis 3	3
MECH 2112	Fundamentals of Mechanical and Computer Aided Design	5
MECH 2150	Mechanical Engineering Modelling and Numerical Methods	4
MECH 2202	Thermodynamics	4
MECH 2222	Mechanics of Materials	4
MECH 2262	Fundamentals of Fluid Mechanics	4
MECH 2272	Engineering Materials 1	4

MECH 3170	Project Management	4
MECH 3420	Vibrations and Acoustics	4
MECH 3430	Measurements and Control	4
MECH 3460	Heat Transfer	4
MECH 3482	Kinematics and Dynamics	4
MECH 3492	Fluid Mechanics and Applications	4
MECH 3502	Stress Analysis and Design	4
MECH 3542	Engineering Materials 2	4
MECH 3652	Machine Design	4
MECH 3982	Mechanical Laboratories in Solid Mechanics	2
MECH 3992	Mechanical Laboratories in Thermofluids	2
MECH 4860	Engineering Design	5
PHYS 1070	Physics 2: Waves and Modern Physics	3
STAT 2220	Contemporary Statistics for Engineers	3
Five Technical Electives (TE) <sup>1, 2</sup>		20-22
One Course from the list of Indigenous Knowledge Courses <sup>3</sup>		3
<b>Total Hours</b>		<b>163-165</b>

**Note:** The former CHEM 1310 may be used in lieu of the combination of CHEM 1110 and CHEM 1126.

#### Indigenous Knowledge Courses<sup>4</sup>

Course	Title	Hours
INDG 1200	Indigenous Peoples in Canada	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
INDG 2012	Indigenous History in Canada	6
INDG 2020	The Métis in Canada	3

POLS 2802	Introduction to Indigenous Politics	3
POLS 3870	Politics of Indigenous-Settler Relations	3

<sup>1</sup> A minimum of 20 credit hours of technical electives is required with 18 hours required if completing MECH 4162 (5 courses at 4 credit hours each or 3 courses at 4 credit hours each plus MECH 4162 at 6 credit hours).

<sup>2</sup> For courses continuing through both terms, credit is given on completion of course

<sup>3</sup> Students admitted to Mechanical Engineering in Fall 2021 who have completed two complementary studies elective courses prior to admission to the program, may use one of those courses in place of the Indigenous knowledge course. A complementary studies course is any course from the Faculty of Arts or the Faculty of Management at the 1000 level or above, with the exception of ARTS 1110 Introduction to the University which may not be used for credit in the Price Faculty of Engineering.

<sup>4</sup> Student must select one course from the list of Indigenous Knowledge Courses

## Concentrations

### Aerospace Option

Complete all 3 TEs in List A. Choose the remaining two TEs from List B. Some courses in List B will be offered in alternating years.

#### List A

Course	Title	Hours
MECH 3520	Aerodynamics	4
MECH 4182	Aerospace Structures: Analysis and Design	4
MECH 4192	Aerospace Materials and Manufacturing Processes	4

#### List B

Course	Title	Hours
MECH 4200	Gas Turbine Propulsion Systems	4
MECH 4452	Aircraft Performance, Dynamics and Design	4
MECH 3582	Manufacturing Planning and Quality Control	4
MECH 4482	Applied Aerospace Instrumentation	4
MECH 4432	Systems Engineering	4
ENG 4110	Operational Excellence	4

### Aerospace Stream

Choose 3 TEs from the following 5 courses. Choose the remaining two TEs from the same stream, other TEs, or thesis. Some courses will be offered in alternating years.

Course	Title	Hours
MECH 3520	Aerodynamics	4
MECH 4182	Aerospace Structures: Analysis and Design	4
MECH 4192	Aerospace Materials and Manufacturing Processes	4
MECH 4200	Gas Turbine Propulsion Systems	4
MECH 4452	Aircraft Performance, Dynamics and Design	4

### Manufacturing Stream

Choose three (3) technical electives from the following courses. Some courses may be offered in alternate years.

Course	Title	Hours
MECH 3550	Robotics and Computer Numerical Control	4
MECH 3570	Manufacturing Automation	4
MECH 3582	Manufacturing Planning and Quality Control	4
MECH 3592	Simulation Modeling and Facility Planning	4
MECH 4192	Aerospace Materials and Manufacturing Processes	4
MECH 4330	Contemporary Topics in Manufacturing Engineering I	4
MECH 4342	Contemporary Topics in Manufacturing Engineering II	4

### Materials Stream

Choose 3 from the following 5 courses. Choose the remaining two TEs from the same stream, other TEs, or thesis. Some courses will be offered in alternating years.

Course	Title	Hours
MECH 4192	Aerospace Materials and Manufacturing Processes	4
MECH 4350	Topics in Engineering Material 1	4
MECH 4360	Topics in Engineering Materials 2	4
MECH 4620	Corrosion of Metals and Alloys	4
MECH 4870	Fracture and Failure of Engineering Materials	4

### Solid Mechanics Stream

Choose 3 from the following 6 courses. Choose the remaining two TEs from the same stream, other TEs, or thesis. Some courses will be offered in alternating years.

Course	Title	Hours
MECH 4182	Aerospace Structures: Analysis and Design	4
MECH 4472	Mechanical Vibration	4
MECH 4510	Fundamentals of Finite Element Analysis	4
MECH 4532	Advanced Strength of Materials	4
MECH 4550	Noise Control	4
MECH 4672	Advanced Mechanism Design	4

### Thermofluids Stream

Choose 3 from the following 8 courses. Choose the remaining two TEs from the same stream, other TEs, or thesis. Some courses will be offered in alternating years.

Course	Title	Hours
MECH 4292	IC Engines	4
MECH 4412	Heating, Ventilation and Air Conditioning	4
MECH 4560	Selected Topics in Fluid Mechanics 4M	4
MECH 4680	Energy Conservation and Utilization	4
MECH 4692	Renewable Energy	4
MECH 4694	Advanced Topics in Heat Transfer	4
MECH 4702	Design of Thermal Systems	4
MECH 4822	Numerical Heat Transfer in Fluid Flow	4

## Technical Electives in Mechanical Engineering <sup>1</sup>

Course	Title	Hours
MECH 3520	Aerodynamics	4
MECH 3550	Robotics and Computer Numerical Control	4
MECH 3562	Introduction to Optimization	4
MECH 3570	Manufacturing Automation	4
MECH 3582	Manufacturing Planning and Quality Control	4
MECH 3592	Simulation Modeling and Facility Planning	4
MECH 4162	Thesis <sup>2</sup>	6
MECH 4182	Aerospace Structures: Analysis and Design	4
MECH 4192	Aerospace Materials and Manufacturing Processes	4
MECH 4200	Gas Turbine Propulsion Systems	4
MECH 4240	Course no longer offered	4
MECH 4292	IC Engines	4
MECH 4310	Contemporary Topics in Mechanical Engineering I	4
MECH 4322	Contemporary Topics in Mechanical Engineering II	4
MECH 4330	Contemporary Topics in Manufacturing Engineering I	4
MECH 4342	Contemporary Topics in Manufacturing Engineering II	4
MECH 4350	Topics in Engineering Material 1	4
MECH 4360	Topics in Engineering Materials 2	4
MECH 4412	Heating, Ventilation and Air Conditioning	4
MECH 4432	Systems Engineering	4
MECH 4452	Aircraft Performance, Dynamics and Design	4
MECH 4472	Mechanical Vibration	4
MECH 4482	Applied Aerospace Instrumentation	4
MECH 4510	Fundamentals of Finite Element Analysis	4
MECH 4532	Advanced Strength of Materials	4
MECH 4542	Principles of Turbomachinery	4
MECH 4550	Noise Control	4
MECH 4560	Selected Topics in Fluid Mechanics 4M	4
MECH 4582	Vehicle Testing, Condition Monitoring, and Fault Analysis	4
MECH 4620	Corrosion of Metals and Alloys	4
MECH 4672	Advanced Mechanism Design	4
MECH 4680	Energy Conservation and Utilization	4
MECH 4692	Renewable Energy	4
MECH 4694	Advanced Topics in Heat Transfer	4
MECH 4702	Design of Thermal Systems	4
MECH 4812	Automotive Engineering	4
MECH 4822	Numerical Heat Transfer in Fluid Flow	4
MECH 4832	Biomaterials in Biomedical Engineering	4
MECH 4870	Fracture and Failure of Engineering Materials	4
MECH 4900	Mechatronics System Design	4

<sup>1</sup> The Department of Mechanical Engineering may not be able to offer all technical electives listed above. Students are urged to consult the Mechanical Engineering office for a current list of technical electives.

<sup>2</sup> Students must be in their graduating year to register for MECH 4162.

<sup>3</sup> Students may NOT use the same technical elective to count toward multiple streams.

## Preliminary Engineering Program

**Campus Address/General Office:** E1-262 EITC

**Telephone:** (204) 474 9807

**Email Address:** eng\_info@umanitoba.ca (eng\_info@%20umanitoba.ca)

**Website:** umanitoba.ca/engineering (<https://umanitoba.ca/engineering/>)

The Preliminary Engineering Program is common to all programs in engineering. Students must complete a minimum of eight (**excluding CHEM 1122**) to be eligible to apply to one of the five degree granting engineering programs. A student must complete the following list of 13 courses as part of their engineering program in order to graduate with a BSc degree in engineering.

Course	Title	Hours
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1122	Introduction to Chemistry Techniques for Engineering I <sup>1</sup>	1.5
COMP 1012	Computer Programming for Scientists and Engineers	3
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
MATH 1510	Applied Calculus 1 <sup>3</sup>	3
MATH 1710	Applied Calculus 2 <sup>3</sup>	3
PHIL 1290	Critical Thinking <sup>4</sup>	3
PHYS 1050	Physics 1: Mechanics	3
Written English Course <sup>5,6</sup>		3
<b>Total Hours</b>		<b>37.5</b>

<sup>1</sup> The former CHEM 1300 may be used in lieu of the combination of CHEM 1100 and CHEM 1122.

<sup>2</sup> MATH 1300 is not an acceptable equivalent to MATH 1210

<sup>3</sup> Students intending to obtain a degree in Engineering are strongly advised to complete MATH 1510 and MATH 1710. However, MATH 1500 or MATH 1230 may be taken in lieu of MATH 1510; MATH 1700 or MATH 1232 may be taken in lieu of MATH 1710. MATH 1690 fulfills the requirement of both MATH 1510 and MATH 1710.

<sup>4</sup> PHIL 1290 Critical Thinking is the recommended complementary studies elective. Students may, however, select any course from the Faculties of Arts or Management (Asper School of Business) at the 1000 level or above, except for ARTS 1110 Introduction to University.

<sup>5</sup> Course selected from the list of approved Written English Courses for Engineering students.

<sup>6</sup> Three credit hours are required to satisfy the written English course requirement. Should a student complete a six credit hour course, the additional three credit hours may be used to satisfy general complementary studies requirements within a student's program.

<sup>7</sup> Equivalent courses offered through Université de Saint-Boniface may be used to satisfy program requirements.



# Co-operative Education and Industrial Internship Programs

## Contact and Program Information

**Director:** Carolyn Geddert, P.Eng., Engineer-in-Residence

**Tel.** 204 474 8948

**Email:** carolyn.geddert@umanitoba.ca

**Cooperative Education Administrator:** Megan Johnson

**Telephone:** 204 480 1069

**Email:** megan.johnson@umanitoba.ca

The Price Faculty of Engineering offers a Co-operative education and Industrial Internship Program (Co-op/IIP) designed to complement and enrich the academic program with work experience. The work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

Applications are accepted for Co-op/IIP every fall. Co-op/IIP supports the application and participation of all students who meet the requirements and wish to apply. Application to Co-op/IIP is a process. The Co-op/IIP Office will work with you. Please connect with our staff via email: [engineeringcoop@umanitoba.ca](mailto:engineeringcoop@umanitoba.ca) and refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>) for the benefits of Co-op/IIP.

Successful applicants to Co-op/IIP have:

- Attended an information session.
- Been accepted as an undergraduate student into an Engineering Department.
- Completed all 13 first year Engineering courses before their first work term.
- Completed 42 but not more than 90 credit hours towards your degree by the end of the Fall term. (This will support the completion of 3 work terms.)
- Been assessed as in Good Academic standing (GPA above 2.0). I.E. not on Probation or Academic Warning.
- Agree to follow all rules and regulations of the program as detailed in the Rules and Regulations

In addition to students following regular departmental programs, Internationally Educated Engineers Qualification (<http://umanitoba.ca/engineering/ieeq/>) (IEEQ) Program participants may also be approved for participation in Co-op/IIP upon written approval of the IEEQ Director.

Work placements must be confirmed to be appropriate by the Co-op/IIP office in order to be credited as a Co-op/IIP work term.

Upon securing a job placement, Engineering students enroll in the course ENG 4800 and subsequently the specific work term of employment ENG 4810, ENG 4820, ENG 4830, ENG 4840.

Students who are unable to maintain the standards of the Co-op/IIP will be transferred back into the regular program.

The course and grade requirements for completion of the Co-op/IIP are the same as those required for the regular program. However, in order to satisfy course prerequisite requirements, timetables may differ from the regular program. Co-op/IIP students are evaluated in the same manner as regular students and all rules and regulations of the Price Faculty of Engineering apply.

Students who are placed on Academic Warning or Academic Probation may either be removed from Co-op/IIP or have their acceptance deferred until they have completed two consecutive terms with an Academic Standing of "Satisfactory".

Students who are Required to Withdraw will immediately become ineligible for Co-op/IIP and will remain ineligible after re-instatement to the Price Faculty of Engineering.

Written reports must be completed at the end of each four month work term. Each successfully completed four month work term and its corresponding report receives a Pass/Fail grade and is rated at one credit hour. Graduates who successfully complete at least three work terms and the required work term reports will have the Co-operative Education Option acknowledged on their B.Sc. graduation parchment.

For more information regarding the Co-op/IIP rules, benefits, regulations and requirements, please refer to the web site (<https://umanitoba.ca/engineering/co-operative-education/>).

# Internationally Educated Engineers Qualification Program (IEEQ) – Post-Baccalaureate Diploma in Engineering

**Telephone:** 204 474 8961

**Email Address:** [ieeq@umanitoba.ca](mailto:ieeq@umanitoba.ca)

**Website:** <http://umanitoba.ca/engineering/ieeq> (<https://umanitoba.ca/faculties/engineering/programs/ieeq/>)

## Introduction

The Price Faculty of Engineering offers the IEEQ Program, designed for international engineering graduates (IEGs) pursuing foreign credentials recognition with Engineers Geoscientists Manitoba (<http://www.enggeomb.ca/>), the regulatory body for engineering in Manitoba. Through the IEEQ Program, IEGs:

- Meet requirements for academic qualification with Engineers Geoscientists Manitoba and, upon successful completion of IEEQ Program requirements, become registered with Engineers Geoscientists Manitoba as Engineering Intern; and,
- May earn a Post-Baccalaureate Diploma in Engineering from the University of Manitoba.

The provisions of Academic Regulations (p. 460) apply to all students. In addition, the IEEQ Program has regulations and requirements that apply specifically to its students that may differ from the faculty academic regulations. Details on regulations and requirements not included below are provided to students upon their admission into the IEEQ Program. (<https://umanitoba.ca/engineering/internationally-educated-engineers-qualification/#applying-to-ieeq>)

## Admission Requirements and Application Procedures

The IEEQ Program can accept applicants whose Confirmatory Exam assignments by Engineers Geoscientists Manitoba correspond to one of the five accredited undergraduate engineering programs offered in the Price Faculty of Engineering.

Program entrance is in September of any given year. In order to be admitted to the IEEQ Program, the student must:

- Be an IEG with an earned undergraduate engineering degree obtained from a university outside of Canada;
- Have obtained the results of an Assessment of Academic Credentials from Engineers Geoscientists Manitoba, with a result of five or fewer Confirmatory Exams assigned by Engineers Geoscientists Manitoba in order to be considered academically qualified;
- Be a Permanent Resident or Canadian Citizen; and,
- Demonstrate proficiency in the English language by meeting the minimum standard in one of the University of Manitoba approved proficiency tests or achieve Canadian Language Benchmark (CLB) Placement Test scores of level eight (8) and no more than one seven (7) in the four language areas (for example, 8/8/8/7 or similar combination).

## Degree Requirements

### Program Requirements

The Post-Baccalaureate Diploma in Engineering consists of a minimum of 24 hours of coursework, subject to the following regulations:

Course	Title	Hours
ENG 3000	Engineering Economics	3
ENG 4020	Professional Engineering Practice in Manitoba	4
ENG 4800	Co-operative Work 1	1
Select 16 credit hours in Technical Courses <sup>1</sup>		16
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Technical courses are taken from the 3000 and 4000 levels of the student's engineering discipline, corresponding to the topic areas of Confirmatory Exams assigned by Engineers Geoscientists Manitoba.

The total number of courses required in the IEEQ Program is generally as shown in the table below:

Number of Technical Confirmatory Exams <sup>1</sup> Assigned by EGM	Number of Courses in IEEQ <sup>2</sup>
One (1) or two (2)	5
Three (3)	7
Four (4)	9
Five (5)	11

<sup>1</sup> Technical exams refer to exams assigned from Group A or Group B of the Discipline Examinations please refer to [engineerscanada \(https://engineerscanada.ca/become-an-engineer/examination-syllabi/\)](https://engineerscanada.ca/become-an-engineer/examination-syllabi/). Technical Exams do not include exams assigned from the Basic Studies (BS) or Complementary Studies (CS) syllabi, such as 11-CS-1 Engineering Economics.

<sup>2</sup> Including ENG 3000, ENG 4020, and ENG 4800.

If the courses required in the IEEQ Program total less than 24 credit hours, the student may apply for a transfer of credit from the original earned undergraduate engineering degree (obtained outside of Canada).

All courses must be completed with a grade of C or better. Failed courses may only be repeated once, and are subject to the limits outlined in the IEEQ Student Handbook and on the IEEQ Program website.

### Maximum Time Limits

Students can choose a full-time or part-time option in the IEEQ Program. Students will be asked to declare their status upon their acceptance to the IEEQ Program.

Number of Courses in IEEQ	Full-time	Part-time
Seven (7) or fewer	1 yrs	2 yrs
More than seven (7)	2 yrs	3 yrs

### Approved Program Variations

While it is the expectation that students will complete their individual programs, it is recognized that, in certain limited circumstances, course substitutions approved by the Price Faculty of Engineering may be made where the content of alternative course(s) have been deemed to be equivalent.

Students are required to consult with their corresponding program advisors and declare their intention of taking the alternate course(s). The calculations of TGPAs must include the alternate course(s), and they cannot be excluded from the calculation of the TGPAs.

The following is a list of approved substitutions:

1. The combination of STAT 1000 and STAT 2000 is considered equivalent to STAT 2220.

# Clayton H. Riddell Faculty of Environment, Earth, and Resources

## General Office

**Dean:** Dr. Stephan Pflugmacher Lima

**Associate Dean(s):** Andrew Frederiksen (Academic), Feiyue Wang (Research and Innovation)

**Campus Address/General Office:** 440 Wallace Building

**Telephone:** (204) 474-7252

**Fax:** (204) 275-3147

**Email Address:** Riddell.Faculty@umanitoba.ca

**Website:** <https://umanitoba.ca/environment-earth-resources/>

**Academic Staff:** Please refer to the Clayton H. Riddell Faculty of Environment, Earth, and Resources Academic Staff Academic

Staff website (<https://umanitoba.ca/environment-earth-resources/faculty-staff/>)

## Degree Programs Offered

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers degree programs in Earth Sciences, Environmental Science, Environmental Studies, Geography, Physical Geography, Geology and Geophysics. All students are advised to examine their interests and future goals carefully to make appropriate program choices. Consultation with Riddell Faculty student advisors and/or department representatives is strongly encouraged.

## Programs

Minors (optional or required) are part of degree programs - for program length, refer to the Years to Completion.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Earth Sciences, B.Sc. General (p. 514)	3	90	
Earth Sciences Minor (p. 516)		18	
Environmental Geoscience, B.Sc. Honours (p. 499)	4	120	
Environmental Geoscience, B.Sc. Major (p. 501)	4	120	
Environmental Science, B.Env.Sc. General (p. 529)	3	90	
Environmental Science, B.Env.Sc. Honours (p. 517)	4	120	Yes
Environmental Science, B.Env.Sc. Major (p. 523)	4	120	Yes
Environmental Science Minor (p. 534)		18	
Environmental Studies, B.Env.St. General (p. 545)	3	90	
Environmental Studies, B.Env.St. Honours (p. 534)	4	120	Yes
Environmental Studies, B.Env.St. Major (p. 539)	4	120	Yes
Environmental Studies Minor (p. 550)		18	
Geography, B.A. Advanced (p. 553)	4	120	
Geography, B.A. General (p. 557)	3	90	
Geography, B.A. Honours (p. 550)	4	120	
Geography Minor (p. 560)		18	
Geology, B.Sc. Honours (p. 504)	4	120	
Geology, B.Sc. Major (p. 506)	4	120	
Geophysics, B.Sc. Honours (p. 508)	4	120	
Geophysics, B.Sc. Major (p. 512)	4	120	
Physical Geography, B.Sc. Honours (p. 560)	4	120	Yes
Physical Geography, B.Sc. Major (p. 566)	4	120	Yes
Physical Geography Minor (p. 571)		18	

## Available Focus Areas and Streams

### FOCUS AREAS (ENVIRONMENTAL STUDIES AND ENVIRONMENTAL SCIENCE)

Conservation & Biodiversity, Environmental Assessment, Environmental Health, Toxicology, Land Systems, Natural Resource Management, Northern Studies, Policy & Law, Stewardship, Sustainable Building, Sustainable Development, Water Resources, Wildlife Management, and Individualized Study.

### STREAMS (PHYSICAL GEOGRAPHY)

Atmosphere and Hydrological Sciences, General Physical Geography, and Geomatics.

## Units

- Earth Sciences (p. 498)
- Environment and Geography (p. 516)

## Faculty Academic Regulations

### Admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources

Admission information, rules, regulations and requirements are subject to change from year to year; those found in this publication are specific to the academic year for which it was written.

The following is a summary of the admission requirements. All admission requirements, as well as application deadline dates and forms, are included in the Clayton H. Riddell Faculty of Environment, Earth, and Resources Applicant Information Bulletin that is available from the Admissions Office (<http://umanitoba.ca/student/admissions/>), 424 University Centre; this information is also posted on the University of Manitoba website.

Other than Direct Entry students, completion of a minimum of 24 credit hours of university level courses is required. Please refer to Admission from University 1 (p. 492) and Admission as a Special Student (p. 493).

Faculty admission is determined on the basis of a 2.00 Cumulative Grade Point Average on a minimum of 24 credit hours of course work from a recognized institution. Note: For students completing the Bachelor of Arts in Geography, entry is based on a Degree Standards Table (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/environment-geography/geography-ba-general/#Degree-standard>).

Degree programs may define additional entrance requirements and students are referred to the appropriate section of this *Chapter* for further details as follows:

Bachelor of Arts in Geography Degree Regulations and Program Descriptions (p. 553).

Bachelor of Science in Physical Geography Degree Regulations and Program Descriptions (p. 560).

Bachelor of Environmental Science and Bachelor of Environmental Studies Degree Regulations and Program Descriptions (p. 534).

Department of Earth Sciences: Bachelor of Science in Geology, Geophysics and Environmental Geoscience, and General Degree Regulations and Program Descriptions (<https://catalog.umanitoba.ca/>

[undergraduate-studies/environment-earth-resources/geological-sciences/](https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/)).

Students must apply to be considered eligible for admission to the Riddell Faculty. Application information is available from the Admissions Office, Enrolment Services, 424 University Centre. This information is also available in the Riddell Faculty Dean's Office, 440 Wallace Building, and is posted on the University's Admissions website (<https://umanitoba.ca/admissions/>).

### Direct Entry from Highschool

Eligible students may apply to enter the Clayton H. Riddell Faculty of Environment, Earth, and Resources upon completion of a high school diploma. Eligible students must meet the criteria listed in the Direct Entry Programs Bulletin.

For the most current admission requirements, refer to the Direct Entry Programs Bulletin ([https://umanitoba.ca/student/admissions/media/environment\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/environment_bulletin.pdf)).

### Admission from University 1

University 1 students are encouraged to apply for admission to a degree program in the Clayton H. Riddell Faculty of Environment, Earth, and Resources once they have completed 24 credit hours of course work and have met the minimum entrance requirements of their intended degree program.

### Admission as a Transfer Student

Students applying for admission from other recognized universities or colleges are called 'transfer students'. For the University of Manitoba's general policy on transfer of credit and advanced standing, refer to the Admissions website (<https://umanitoba.ca/admissions/>).

To be eligible for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources, transfer students must have completed no fewer than 24 credit hours of university level course work and satisfied the minimum performance requirements of the intended degree program. Transfer students who have completed less than 24 credit hours must register in University 1 (p. 138) or Extended Education (p. 572) to complete the required credit hours of course work. Students with more than 24 credit hours who are not admissible to the Riddell Faculty should consider applying to Extended Education (p. 572) as their alternative choice.

Students on academic suspension as a result of work completed at another post-secondary institution or another Faculty will not normally be considered for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources until the suspension has been served.

### Transfer of Credit

The University of Manitoba assesses transfer credit as a part of the application process. Assessment of prior course work for admissions or transfer credit will only take place after an application has been submitted. The University of Manitoba transfer credit equivalencies database (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>) is now available as a reference tool to look up current course assessments. Please take note of the guidelines outlined on the database access page as these course assessments are subject to change.

See the Admissions section (p. 129) of the Calendar. Courses completed at an external institution ten years prior to registration in the Clayton H. Riddell Faculty of Environment, Earth, and Resources are not considered

for transfer of credit. Students should contact a Riddell Faculty student advisor (Riddell.faculty@umanitoba.ca) regarding transfer credit.

### University College of the North and the University of Manitoba Articulation Agreement NRM Technology Diploma (UCN)/ Bachelor of Environmental Science (U of M)

Graduates of the 2 Year Natural Resource Management Technology Diploma from University College of the North may apply for admission into the Bachelor of Environmental Science program in the Clayton H. Riddell Faculty of Environment, Earth, and Resources at the University of Manitoba. Successful applicants will be granted 60 credit hours on admission towards the completion of the 120 credit hour Bachelor of Environmental Science degree.

Students should contact a Riddell Faculty student advisor regarding more information.

### Admission as a Visiting Student

Visiting students may apply for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources on the basis of a Letter of Permission (<https://umanitoba.ca/registrar/letter-permission/>) from the Registrar or appropriate Dean of her/his home institution. Certain restrictions may be placed on the kind and number of courses in which a student will be allowed to register. Visiting students may wish to contact a Riddell Faculty student advisor (Riddell.faculty@umanitoba.ca) in the Faculty Dean's Office for further information.

### Admission as a Second Degree Student

Students possessing a first degree from a recognized university program with a minimum Cumulative Grade Point Average of 2.00 on their first degree may be eligible for admission as a Second Degree student provided they have completed the minimum coursework entrance requirements for their intended degree program.

Second Degree requirements may be shortened by up to 60 credit hours and, once admitted, students will be expected to satisfy all continuation and graduation requirements in the degree program. Second Degree students are not required to satisfy the University Written English and Mathematics requirement. See a Riddell Faculty student advisor for specific information on degree requirements following completion of the first degree.

### Admission as a Special Student (After Degree Students)

#### After Degree Special Student

Students who have successfully completed a first degree from a recognized university program with a cumulative Grade Point Average of 2.00 or better are eligible for admission as Special Students.

Prospective applicants who hold a previously completed degree may enroll in degree credit courses in the Faculty as a Special Student provided that they are not at the time interested in pursuing a degree. As noted in the university admission requirements (<https://umanitoba.ca/admissions/undergraduate/requirements/>), such courses may subsequently be accepted as credit towards a degree, diploma or certificate at the discretion of program deans or directors.

### Auditing Students

Students who wish to audit courses must have written permission from the instructor of the desired course before they can register. Auditing students must register in-person in their Faculty of registration. The Clayton H. Riddell Faculty of Environment, Earth, and Resources prohibits auditors from registering in courses until after the initial access period.

## Degree Regulations and Services Applicable to all Programs in the Clayton H. Riddell Faculty of Environment, Earth, and Resources

### Courses Offered in Other Faculties and Schools Acceptable for Credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources

Students who are registered in the Clayton H. Riddell Faculty of Environment, Earth, and Resources may take any course offered by another faculty or school for credit towards their degree, subject to permission from the department head (or designate) and/or a Riddell Faculty student advisor.

### Available Minors in Departments and Faculties

Students in the B.A. Geography (Honours), Bachelor of Environmental Science, Bachelor of Environmental Studies, Bachelor of Science in Geology, Geophysics and Environmental Geoscience, and Bachelor of Science in Physical Geography degree programs may, if they wish, declare and complete a Minor from departments and interdisciplinary programs in which a Minor is offered. Students registered in the B.A. Geography (General; Advanced) and B.Sc. Earth Sciences (General) are required to complete a Minor prior to graduation. Students may not, however, declare both their Major and Minor from the same subject area. For example: a student in B.A. Geography program may not declare a minor in physical geography; a student in Environmental Science program may not declare a minor in Environmental Studies, etc.. Students can declare only one minor. For specific requirements to complete a Minor, please refer to the relevant Faculty/School's chapter in the Academic Calendar.

It should be noted that for Honours students any consideration of completing a Minor should be made early due to restricted opportunities in later years in their programs.

A Minor will normally consist of at least 18 credit hours, with a minimum of 12 credit hours being at the 2000-, 3000-, and 4000-levels (although there are some exceptions). Courses required in a student's specific degree program are acceptable for use in a chosen Minor, subject to the Riddell Faculty regulation stating that students may not declare both their Major and Minor from the same department or interdisciplinary program.

Students planning to enrol in the I.H. Asper School of Business [Management Minor] must consult a Riddell Faculty student advisor as enrolment in these minor programs is limited. *The Management Minor consists of any 18 credit hours in courses offered by the Asper School of Business.*

### University Written English and Mathematics Requirement

Students are required to complete the University Written English and Mathematics requirement within their first 60 credit hours as outlined in the General Academic Regulations, Residence and Written English and Mathematics Requirements (p. 118).

A list of all courses that satisfy the Written English and Mathematics requirements can be found in Approved English and Mathematics Courses (p. 118). Course numbers of designated written English courses are marked with a 'W' and designated Mathematics courses are marked with an 'M'.

Students may wish to consider GEOG 2900W, ENVR 2810W, GEOL 3130W, and/or GEOG 3810M to satisfy these requirements. In addition, the Department of Environment and Geography offers several courses annually through Distance Education that satisfy the 'W' requirement.

### Science and Faculty of Arts Course Requirements

Students are required to take 6 credit hours from the Faculty of Arts and 6 credit hours of science coursework.

For course subjects taught by the Faculty of Arts refer to the Faculty of Arts (p. 206) for a complete listing.

Students may complete any combination of the courses listed below adding up to six credit hours to satisfy the 6 credit hours science requirement.

#### Clayton H. Riddell Faculty of Environment, Earth, and Resources

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1290	Introduction to Physical Geography	3
GEOG 1291	Introduction à la géographie physique	3
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2272	Natural Hazards (PS)	3
GEOG 2520	Geography of Natural Resources (HS)	3
GEOG 2540	Weather and Climate (PS)	3
GEOG 2541	Météorologie et climatologie (PS)	3
GEOG 2550	Geomorphology (PS)	3
GEOG 2551	Géomorphologie (PS)	3
GEOG 2700	Introduction to Arctic System Science	3
GEOG 2930	Introduction to Oceanography	3
GEOG 3390	Introduction to Climate Change and Its Causes (PS)	3
GEOG 3730	Geographic Information Systems (TS)	3
GEOL 1340	The Dynamic Earth	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
GEOL 1410	Natural Disasters and Global Change	3
GEOL 1420	Exploring the Planets	3
GEOL 2350	Canada Rocks: The Geology of Canada	3
GEOL 2390	Environmental Geology	3
GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2570	Energy and Mineral Resources	3

#### Faculty of Science

All courses offered by the Faculty of Science.

#### Faculty of Agricultural and Food Sciences

Course	Title	Hours
AGRI 1600	Introduction to Agrifood Systems	3
ENTM 1000	World of Bugs	3
ENTM 2050	Introductory Entomology	3
PLNT 1000	Urban Agriculture	3
PLNT 2500	Crop Production	3
SOIL 3060	Introduction to Agrometeorology	3
SOIL 3520	Pesticides: Environment, Economics and Ethics	3
SOIL 3600	Soils and Landscapes in Our Environment	3

For course titles and descriptions see the relevant faculty entries in this Calendar.

### Changes in Program Requirements

Once students have successfully completed any portion of a degree program, they will not be required to meet new course requirements subsequently stipulated for that portion of the program, whether the requirements be for the Faculty or for an individual degree program. Students are required to complete their program in its entirety as outlined in the Calendar effective upon the point of admission to the Faculty and program.

### Prerequisite and Corequisite Courses

#### Prerequisite

Minimum grades of "C" are required in all courses listed as prerequisites, except as otherwise noted in the course descriptions published in each department and program section of this chapter. If a course is a prerequisite for a second course, the prerequisite must be met in order to continue in the second course.

Some course descriptions will indicate that a specific course is a pre- or corequisite for the course in which you wish to register. If you have not previously taken the specific course, you may register for it in the same term.

#### Corequisite

Where a course identifies another course as a corequisite, both courses must be taken at the same time.

### Course Availability

All courses listed in this Calendar are not offered every year. Students are referred to the Class Schedule ([http://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](http://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)) for current information.

The Department of Environment and Geography offers numerous courses under the following course numbers: GEOG 3770, GEOG 4670, GEOG 3740, GEOG 3750, GEOG 3760, ENVR 2010, ENVR 2020, ENVR 3000, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020.

The Department of Earth Sciences offers a course under the following course number: GEOL 4270. Students are referred to the Class Schedule ([http://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](http://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)) for current information.

### Repeated Courses and Attempted Credit Hours

Clayton H. Riddell Faculty of Environment, Earth, and Resources students are subject to the University of Manitoba regulations, General Academic Regulations, Academic Evaluation, Repeating a Course (p. 122) and the Riddell Faculty degree regulations regarding eligibility to repeat a course. Repeating a course will not result in the removal of the first attempt and grade in that course from the student's record. The course will appear on the transcript as many times as it has been repeated. When a course has been repeated or an equivalent course is taken, only the attempt in which the highest grade was achieved shall be counted towards a student's degree. Grades from all course completions will be used in the calculation of the DGPA, TGPA and CGPA.

There is no limit to the number of credit hours permitted in the degree programs in the Faculty provided a student does not exceed the credit hour limit of failed courses stated for specific programs.

### Limited Access

**Limited Access (see University Policy and Procedures- Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>) will not affect registration for the 2022-2023 (including Summer Term 2023).**

#### Effective 2018 Winter Term - Limited Access in Effect

Limited Access is a registration rule that allows students who have never before completed, or voluntarily withdrawn, from a course (or its equivalent) the opportunity to register for the course before students who are repeating or have previously withdrawn from the course.

If a student has previously taken a course and received a final grade, or voluntarily withdrawn from the course (VW)<sup>1</sup>, any future attempt to take that course or its equivalent is considered a repeated course.

Effective Winter 2018, Limited Access will prevent a student from registering or placing themselves on the waitlist for a course (or equivalent) being repeated until the "Limited Access Term Expiry Date" has passed.

Limited Access applies for three consecutive terms following the term that the course in question was last completed or voluntarily withdrawn (VW).

During these three terms of Limited Access, a student may register to repeat a course, without permission, only when the Limited Access Term Expiry Date has passed.

Once the three terms of Limited Access has expired, any student wishing to repeat a course must request permission to do so from the Riddell Faculty Dean's Office prior to registration in order to register or place themselves on the waitlist for a course prior to the "Limited Access Term Expiry Date".

<sup>1</sup> A previous VW is only considered a repeat if the student voluntarily withdrew in Winter 2017 or later.

### Voluntary Withdrawals

The responsibility for initiating withdrawals rests solely with the student. When eligible to do so, Voluntary Withdrawals must be done through Aurora Student. No withdrawals will be permitted after the deadlines posted in the Academic Schedule (p. 28).

There is currently no limit on the number of Voluntary Withdrawal hours a student can accumulate.

### Authorized Withdrawals

Students who have valid and documented reasons for withdrawal, such as medical illness or compassionate circumstances, may be authorized to withdraw without penalty. Requests for authorized withdrawals must be submitted in writing to a Riddell Faculty student advisor ([Riddell.faculty@umanitoba.ca](mailto:Riddell.faculty@umanitoba.ca)). The Office of Student Advocacy located at 520 University Centre (204 474-7423, or email ([student\\_advocacy@umanitoba.ca](mailto:student_advocacy@umanitoba.ca))) is available to provide information and assistance.

### Residence Requirement

Students are required to complete a minimum number of credit hours at the University of Manitoba. Students should refer to their degree program for further information:

- Bachelor of Arts in Geography Degree Regulations and Program Description and Courses Offered by
- Bachelor of Science in Physical Geography Degree Regulations and Program Description and Courses Offered by

- Bachelor of Environmental Science and Bachelor of Environmental Studies Degree Regulations and Program Descriptions and Courses Offered by
- Department of Earth Sciences: Bachelor of Science in Geology, Geophysics and Environmental Geoscience, and General Degree Regulations and Program Descriptions and Courses Offered by

The courses used to satisfy the residence requirement must be acceptable for credit by the degree program in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply to both first and second degree students.

### Letter of Permission to Take Courses at Another University

Students wishing to complete courses at another institution for credit at this university must obtain written permission (Letter of Permission ([http://umanitoba.ca/student/records/leave\\_return/lop.htm](http://umanitoba.ca/student/records/leave_return/lop.htm))) from the Registrar's Office prior to registering at the other institution or no credit will be permitted. Any earned grades are transferred and form part of the degree Grade Point Average, when applicable. Students who register for courses elsewhere without a Letter of Permission must reapply to the Faculty.

Students who are on academic suspension may not elect courses at another institution for credit toward an Environment, Earth, and Resources degree at this university.

### Attendance at Other Institutions

Students who attend other post-secondary institutions without a Letter of Permission must reapply for admission to the Faculty before the application deadline and be academically competitive for admission. Similarly, students registered in the Clayton H. Riddell Faculty of Environment, Earth, and Resources may not be registered at another academic institution at the same time unless they are registered elsewhere on a Letter of Permission. The penalty for unauthorized or undisclosed attendance may be disciplinary withdrawal or academic suspension.

### Dean's Honour List

A student's eligibility for the Dean's Honour List designation is evaluated after each term.

Students enrolled in a minimum of 12 credit hours of course work during a term and who achieve a term Grade Point Average of 3.50 or higher will be placed on the Dean's Honour List. The Dean's Honour List designation will appear on the student's transcript.

### Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing)

Students shall be evaluated after each academic term in which they receive a final grade in a minimum of 4 credit hours, with the assessment being based on the resulting Degree Grade Point Average (DGPA). This assessment will determine a student's academic standing to be: faculty minimum met, academic warning, on probation, suspension warning, or academic suspension.

### Degree Grade Point Average (DGPA)

The Degree Grade Point Average (DGPA) is computed from the final grades obtained in all courses attempted that are part of the degree requirements, including applicable courses transferred from other faculties and institutions. Where a course has been repeated or replaced by an approved substitution or equivalent course, all attempts shall be included in the computation.



### Faculty Minimum Met

To be in good standing, a student must achieve a 2.00 Degree Grade Point Average at each point of assessment and the notation 'Faculty Minimum Met' will be recorded on the student's transcript. Note: For students completing the Bachelor of Arts in Geography, Faculty Minimum Met is based on a Degree Standards Table (p. 558).

**Degree programs may define additional performance requirements for continuation and graduation. Students should refer to the appropriate section for further details as follows:**

- Bachelor of Arts in Geography (p. 557)
- Bachelor of Science in Physical Geography (p. 560)
- Bachelor of Environmental Science (p. 517) and Bachelor of Environmental Studies (p. 534)
- Bachelor of Science in Geology, Geophysics, Environmental Geoscience - Major (p. 501)
- Bachelor of Science in Geology, Geophysics, Environmental Geoscience - Honours (p. 504)
- Bachelor of Science in Earth Sciences - General (p. 514)

### Academic Warning

Students will receive an academic warning if, at the point of assessment following a term, s/he fails to achieve the required minimum performance level. The notation 'Academic Warning' will be recorded on the student's transcript.

### On Probation

Those who fail to meet the required minimum performance level following an Academic Warning assessment will be placed **on probation**. The notation 'On Probation' will be recorded on the student's transcript.

### Suspension Warning

Those who fail to meet the required minimum performance level following an On Probation assessment will be placed on **Suspension Warning**. The notation, 'Suspension Warning' will be recorded on the student's transcript.

### Academic Suspension

Those who fail to meet the required minimum performance level following a Suspension Warning assessment will be placed on **Academic Suspension for One Year**. The notation, 'Academic Suspension for One Year' will be recorded on the student's transcript. A student placed on academic suspension is not allowed to register in the Clayton H. Riddell Faculty of Environment, Earth, and Resources during the duration of the suspension.

A student will be placed on **academic suspension for two years** under the following circumstances:

- Upon return from one year suspension, the student fails to attain a 2.00 degree grade point average in the following two terms after the probationary assessment (see a Riddell Faculty student advisor (<https://umanitoba.ca/environment-earth-resources/student-experience/>) for information).
- The Faculty calculates that it is mathematically impossible for the student to clear his/her probationary standing by the following assessment period.
- The student exceeds the maximum number of credit hours of failed courses.

The notation, 'Academic Suspension for Two Years', will be recorded on the student's transcript of marks. Those serving two-year suspensions

are required to start the degree afresh should they choose to return to the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Students may appeal for transfer of credit up to 30 credit hours in courses in which a minimum grade of 'C' was achieved.

Students should consult with a Riddell Faculty student advisor (<https://umanitoba.ca/environment-earth-resources/student-experience/>) for further assistance in clearing their academic warning, on probation, suspension warning, or academic suspension academic standing.

### Special Students

Special students that have successfully completed at least 15 credit hours of course work in the Riddell Faculty will be notified by mail / email that given the extent of their studies to date, they are strongly encouraged to consider application to a degree, diploma or certificate program, perhaps through Extended Education or as a Second Degree Student.

- If 6 or more credit hours of coursework in the first 15 are failed course attempts (grades of F or D) students will receive notice by mail / email encouraging them to seek guidance from the Academic Learning Centre and /or from Riddell Faculty student advisors.

Special students that have earned (includes earning F grades) 30 credit hours of course work in the Riddell Faculty will be notified by mail / email that given the extent of their studies that they must either transfer into a degree, diploma or certificate program, or should they wish to continue their studies as non-degree students, to enroll with Extended Education. **Special Student status will not be granted by the Riddell Faculty past the 30 credit hour level.**

### Academic Misconduct

Academic misconduct is intentional cheating, fabrication, impersonation, or plagiarism. It is also knowingly helping or attempting to help others to be dishonest. Academic dishonesty lowers scholastic quality and defrauds others who will eventually depend on their own knowledge and integrity.

Plagiarism or any other form of cheating on examinations, term tests, or assignments is subject to academic penalty as serious as suspension or expulsion from the Faculty or University.

Students who are unsure of what constitutes academic misconduct should refer to the regulations in the General Academic Regulations, Academic Integrity (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations//#Academic-Integrity>) and consult with your professor or instructor.

### Termwork and Debarment

A student is responsible for the completion of laboratory work, assignments, tests and other class work as prescribed by the course syllabus. A student who does not meet termwork requirements to the satisfaction of the Associate Dean (Academic) will receive a warning to this effect. If this warning is ignored, a student may be debarred from the course. Any student debarred from a course receives an automatic grade of 'F' in that course.

### Deferred (missed) Examinations

A student who is unable to write a final examination because of illness or other incapacity or compassionate reasons should contact a student advisor in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. The appropriate documentation (i.e. a medical certificate or otherwise appropriate documentation certifying the reason for the missed exam) will be required. Students are reminded to contact

their home faculty (and not the faculty through which the course is offered). Please see the missed exam information (<http://umanitoba.ca/faculties/environment/undergraduate/advice/missedexams.html>) on the faculty website. For information on Incomplete Coursework, Deferred Examinations, Debarment, Academic Dishonesty, etc., refer to the General Academic Regulations (p. 118).

A complete copy of the Deferred and Supplemental Examinations Procedures can be found in the University Policies and Procedures (p. 48).

It should in particular be noted that there are no Supplemental Examinations in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

### Challenge for Credit

Some departments at the University of Manitoba offer courses by means of challenge of credit. Since the courses offered in this manner may vary from year to year, any student wishing to challenge a course for credit should contact a Riddell Faculty student advisor (<https://umanitoba.ca/environment-earth-resources/student-experience/>) in the Clayton H. Riddell Faculty of Environment, Earth, and Resources general office. The Academic Schedule (p. 28) of this Calendar contains the relevant registration deadline dates appropriate to challenge for credit.

### Appeals Involving Academic Regulations

The Student Appeals and Discipline Committee in the Faculty considers appeals from students who request special consideration with respect to the rules and regulations governing their degree program and qualifications for graduation.

Appeals should be addressed to: Student Advisor, Secretary Student Appeals and Discipline Committee, General Office, Clayton H. Riddell Faculty of Environment, Earth, and Resources, 440 Wallace Building.

### Riddell Faculty Student Advisor Office Hours

**Monday through Friday:** 9:00 a.m. to 4:00 p.m.

**Email:** [Riddell.Faculty@umanitoba.ca](mailto:Riddell.Faculty@umanitoba.ca)  
([faculty\\_environment@umanitoba.ca](mailto:faculty_environment@umanitoba.ca))

Students may schedule an appointment with an Academic Advisor (<https://umanitoba.ca/environment-earth-resources/student-experience/>) here.

## Student Responsibility & Application to Graduate

It is your responsibility to be familiar with the regulations, courses, and graduation requirements of your degree program. You are advised to review the appropriate sections of this Calendar carefully when selecting your courses to ensure compliance with degree program requirements. If you are not sure of how regulations and requirements apply to your case, please consult a Riddell Faculty student advisor (<https://umanitoba.ca/environment-earth-resources/student-experience/>). Since a complete graduation check is not done until you have declared your intention to graduate, you are encouraged to make an appointment with a Riddell Faculty student advisor (<https://umanitoba.ca/environment-earth-resources/student-experience/>) prior to your initial registration access date to confirm you are meeting the degree requirements. Ultimately you are responsible to ensure compliance with degree program requirements.

Every candidate for a degree must make a formal application at the beginning of the term in which they expect to complete graduation requirements, before the last date of the registration revision period.

Undergraduate students need to declare their intent to graduate.

This can be done on-line through Aurora. (Log into Aurora, select "Enrolment and Academic Records", select "Declarations", and follow the instructions. If the date you wish to graduate does not appear, you will need to contact a Student Advisor in the Dean's Office, 440 Wallace, for assistance.; you may have missed the online application deadline)

**Note:** While we welcome the opportunity to assist you, it is important for you to realize that it is your responsibility to be familiar with university and Riddell Faculty academic regulations and registration procedures as they are described in this calendar.

### Maximum Number of Courses During a Term

You may attempt a maximum of 15 credit hours in any one term unless otherwise stipulated by your program. If you wish to exceed the normal load you may apply in-person at the Faculty Dean's Office, or complete the Application to Exceed Credit Hours ([http://umanitoba.ca/faculties/environment/media/App\\_exceed\\_chrs.pdf](http://umanitoba.ca/faculties/environment/media/App_exceed_chrs.pdf)) form available on the Riddell Faculty web page (<https://umanitoba.ca/environment/>).

### Time Away from the Clayton H. Riddell Faculty of Environment, Earth, and Resources

#### Have you been away for a While?

Have you attended any other post-secondary institution or another Faculty at the U of M since your last registration in the Riddell Faculty?

If your answer to the above question is **no**, then you follow these procedures:

Former Riddell Faculty students that have not registered in courses for more than one calendar year and have not attended any other post-secondary institution or faculty at the University of Manitoba will contact a Riddell Faculty student advisor to complete and submit the Request for Permission to Re-Register form to have their record reactivated.

Former Riddell Faculty students previously placed on academic suspension may not re-register until they have served their term of suspension. Upon completion of their suspension, students must contact a Riddell Faculty student advisor in order to have their records updated and activated.

If you answered **yes** to the above question and you have attended another post-secondary institution or another Faculty at the U of M since your last registration in the Riddell Faculty, you follow these procedures:

Students who have registered in another Faculty or School at the University of Manitoba since their last registration in the Riddell Faculty must apply through the Admissions Office in accordance with the application deadlines and be readmitted before they are eligible to register in the Riddell Faculty again.

Students who have attended another university or institution since their last registration in the Riddell Faculty must apply through the Admissions Office in accordance with the application deadlines and be readmitted before they are eligible to register in the Riddell Faculty again.

- This does not apply to Riddell students who have taken courses at another university or college on the basis of a Letter of Permission granted by this university.

### Admitted to the Riddell Faculty - but Never Registered

Students previously admitted to the Riddell Faculty that did not register in the Riddell Faculty in the term of admission must re-apply to the Riddell Faculty if they wish to register as a student in the Riddell Faculty.

## Cooperative Education Option

A Cooperative Education Option (<https://umanitoba.ca/environment-earth-resources/student-experience/#learning-outside-the-classroom>) is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work term placements. Further information about Cooperative Education and student eligibility is available from the Coop Placement Coordinator (<https://umanitoba.ca/faculties/environment/undergraduate/coop/contact.html>) available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree program. Students complete ENVR 2900, ENVR 3900, work term placements ENVR 3980, ENVR 3990, and the work term report courses ENVR 3910 and ENVR 3920. Additional work terms are available to interested students. Each academic term and each employment term commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program (<http://umanitoba.ca/faculties/environment/undergraduate/coop/>) webpage

## Earth Sciences

**Head:** Alfredo Camacho

**Campus Address/General Office:** 240 Wallace Building

**Telephone:** (204) 474-9371

**Fax:** (204) 474-7623

**Website:** [umanitoba.ca/geoscience/](http://umanitoba.ca/geoscience/) (<http://umanitoba.ca/geoscience/>)

**Academic Staff:** Please refer to the Clayton H. Riddell Faculty of Environment, Earth, and Resources website at: [umanitoba.ca/environment-earth-resources/faculty-staff/](http://umanitoba.ca/environment-earth-resources/faculty-staff/) (<https://umanitoba.ca/environment-earth-resources/faculty-staff/>)

## Program Information

The Earth Sciences deal with the history of the Earth and its life, especially that which is recorded in rocks. Different component parts of the Earth system, the *lithosphere, biosphere, atmosphere and hydrosphere*, operate at different length and time scales. During interactions between the spheres there is feedback between the component parts as energy and mass are exchanged, transferred and redistributed. In a geological context, the feedback can occur on a global scale, or on very small scales such as that which we see in minerals. More recently humans have become a major force in this Earth system because we have intervened in many of these exchanges.

Considering the Earth's past, earth scientists typically work with long time scales (in the order of millions to billions of years). We also use Hutton's original philosophy of *uniformitarianism*, stated as the *present is the key to the past*, to solve geological problems. However, as we see changes at the Earth's surface (our environment) occurring on very short time scales we need to learn how to extract the anthropogenic signal. Once we understand and quantify the nature and extent of the Earth's natural evolution as well as our more recent environmental impact, earth scientists can help predict future changes to the Earth.

Earth Sciences provides the sciences that provide the quantitative data on the physical and chemical behaviour and characteristics of Earth materials - rocks, minerals, fluids and gases. These data are needed to model the behaviour of minerals in natural as well as many industrial systems. The theoretical and instrumental expertise needed to tackle many resource extraction, mineral processing and environmental problems is resident in geo science departments. From a broad Earth, environmental and resource perspective our collective future will depend on sustainable use of our Earth's resources and care of the environment.

The three-year General program (comprising 90 credit hours) in Earth Sciences is designed to give students a basic understanding of the discipline in combination with a concentration of courses in a second subject area. The General Program is intended for those students who do not seek a career in the geosciences. Rather, it is a useful consideration for students planning to enter the Bachelor of Education program (see the Faculty of Education (p. 447) in this calendar) or other programs that require an undergraduate degree for admission. Students intending to pursue a career in the Earth Sciences or graduate study should hold an Honours or Major degree (comprising at least 120 credit hours) in Geology, Geophysics or Environmental Geoscience.

## Professional Registration

The professional practice of geoscience in Canada is governed by provincial/territorial law and is regulated by professional geoscience associations. In Manitoba, Engineers Geoscientists Manitoba (EGM) regulates professional practice. The requirements for professional registration are acceptable academic preparation and a subsequent period of acceptable geoscience experience. Students considering professional registration should take the B.Sc. Honours or Major degree and make appropriate course selections, particularly in the basic sciences. Graduates who do not meet the academic requirements may be required by the professional association to take additional courses or examinations. Current registration information for EGM is available in the department or from the association's web site: [www.enggeomb.ca](http://www.enggeomb.ca) (<http://www.enggeomb.ca>)

## Earth Sciences Prerequisite Information

To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as a prerequisite to a further course in Earth Sciences

unless otherwise stated. Please note that some GEOL courses require a minimum grade of 'C+' in the prerequisite course.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Earth Sciences, B.Sc. General (p. 514)	3	90	
Earth Sciences Minor (p. 516)		18	
Environmental Geoscience, B.Sc. Honours (p. 499)	4	120	
Environmental Geoscience, B.Sc. Major (p. 501)	4	120	
Geology, B.Sc. Honours (p. 504)	4	120	
Geology, B.Sc. Major (p. 506)	4	120	
Geophysics, B.Sc. Honours (p. 508)	4	120	
Geophysics, B.Sc. Major (p. 512)	4	120	

## Environmental Geoscience, B.Sc. Honours

### Degree Regulations for B.Sc. (Honours) in Geology, Geophysics or Environmental Geoscience

The Honours programs are the most heavily concentrated programs offered and lead most directly to graduate studies. A student is required to achieve higher grade standards than in the Major degree program. The Honours degree may be pursued on a part-time basis, although it must be recognized that students will require additional terms to complete degree requirements. Students must complete the degree program within 8 years of gaining initial admission to the Honours program. Failure to complete the Honours degree within the 8-year time limit may require a student to transfer into the Major program.

Students admitted to the Honours program will normally have completed six credit hours of courses from the Faculty of Arts. Students who do not meet this requirement within their first 30 credit hours must do so within the Honours program.

A student will normally begin the Honours program in second year and must meet the entrance requirements set out below. Students in full-time study can expect to complete the prescribed courses in four years. Honours programs lead to either the B.Sc. (Hons.) in Geology, the B.Sc. (Hons.) in Geophysics or the B.Sc. (Hons.) in Environmental Geoscience.

To be eligible for any award granted exclusively on the basis of academic performance, a student must normally be enrolled in a full-time program as defined by the department.

Students must complete the University Written English and Mathematics requirement (p. 118) as described in the, General Academic Regulations, of this Calendar.

### Entrance to Honours

To enter the Honours program in Geology, Geophysics or Environmental Geoscience, a student must have completed at least 24 credit hours with the minimum Degree Grade Point Average as stipulated in the Entrance and Continuation Requirements Table. In addition, the student must

attain the minimum grade requirements specified for individual Year 1 courses according to the degree requirements for Honours Geology (p. 505), Honours Geophysics (p. 510) or Honours Environmental Geoscience (p. 499). Students who are ineligible to enter Honours with their admission to the Riddell Faculty may establish eligibility the following year on the basis of their second year of academic performance.

### Continuation in Honours

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in **good standing** and permitted to continue in the degree program, a student must maintain the performance requirement as stipulated in the Entrance and Continuation Requirements Table. Students who do not meet the minimum performance requirements will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations (p. 492); Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter. Students who do not maintain this minimum average to remain in the program will be required to withdraw from the Honours program and, if eligible, will be placed in the Major program. Students will have the notation 'Required to Withdraw from the Honours Program' recorded on their transcript.

**Failed courses:** Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

**Repeating GEOL 4870:** The course may be repeated only once after a grade of F.

### Program Approval

A Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty Dean's Office must approve a student's Honours program each term. Students must also obtain departmental approval for all revisions to their programs. The Advanced/Major/Honours Program Approval forms are available on the Riddell Faculty web page (<https://umanitoba.ca/environment-earth-resources/>).

### Residence Requirement for Honours Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement

must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

## Graduation from Honours

In order to graduate from the Honours Geology, Geophysics or Environmental Geoscience programs, students must complete all degree program and faculty requirements as stipulated in Faculty Regulations (p. 492) and in the additional regulations for Earth Sciences. Students must also achieve the minimum performance requirements as outlined in the Geological Sciences Graduation Requirements (p. 500). This is defined for the Honours Geology program as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree, for Honours Geophysics as a minimum Degree Grade Point Average of 2.80 on the 120 credit hours which constitute the degree and for Honours Environmental Geoscience as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree.

## Recognition of Academic Merit

### FIRST CLASS HONOURS

To graduate with **First Class Honours**, a student must achieve a Degree Grade Point Average of 3.50. The term 'First Class Honours' will appear both on the parchment and on the student's transcript.

### HONOURS PROGRAM NOTES

#### Double Honours Programs

Double Honours programs may be available. The program must be arranged in consultation with the departments concerned.

#### Honours Requirements and Options

Students who do not obtain the entrance requirements for the Honours program in their first year but who are interested in obtaining an Honours degree should consult with the department before registering for their second year.

#### Honours Geology Options

For students who wish to increase the focus of their knowledge, recommended electives are listed below:

#### Environmental Geoscience:

Course	Title	Hours
BIOL 2300 or AGECE 2370	Principles of Ecology	3
CIVL 4250	Groundwater Hydrology	4
SOIL 4060	Physical Properties of Soils	3
SOIL 4130	Soil Chemistry and Mineralogy	3
SOIL 4500	Remediation of Contaminated Land	3
GEOL 4370	Global Change	3
GEOG 3390	Introduction to Climate Change and Its Causes (PS)	3
ENVR 2180 or BIOL 2380/ AGRI 2180	Introductory Toxicology	3
ENVR 3110	Environmental Conservation and Restoration	3
ENVR 3250	Environmental Assessment	3

Or others approved by the department

(Students are responsible for completion of prerequisites for these courses.)

## Honours Geophysics Option

Students who wish to enter the Honours Geophysics Option and have not taken 6 credit hours of introductory Earth Sciences (eg., GEOL 1340 and one of GEOL 1400, GEOL 1410, or GEOL 1420) may arrange with the department to make up this credit. Students must contact the department during the spring preceding entrance to the Honours program. All course choices in the Honours program should be made after consultation with the coordinator of the Geophysics program.

## Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Geology, Environmental Geoscience)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Major (Geophysics)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Honours (Geology, Environmental Geoscience)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Honours (Geophysics)	2.80 <sup>1</sup>	2.80 <sup>1</sup>
General (Earth Sciences)	2.00 <sup>1</sup>	2.00 <sup>1</sup>

<sup>1</sup> In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

## Earth Sciences Graduation Requirements

Degree Program	Minimum Degree Grade Point Average
Major (Geology, Environmental Geoscience) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, Environmental Geoscience) (120)	3.00
Honours (Geophysics) (120)	2.80
General (Earth Sciences) (90)	2.00

### Degree Requirements<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
GEOL 1340	The Dynamic Earth (B)	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
ENVR 1000	Environmental Science 1 - Concepts (B)	3
MATH 1500	Introduction to Calculus (C) <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
PHYS 1020	General Physics 1 <sup>4</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>5</sup>	3
Select 6 credit hours from the Faculty of Arts, including a required "W" course		6

**Hours 30**

<b>Year 2</b>		
GEOL 2390	Environmental Geology	3

GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
GEOL 2060	Introductory Geophysics	3
6 credit hours of electives		6
<b>Hours</b>		<b>30</b>

**Year 3**

GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3420	Engineering Geology	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3910	Introduction to Field Mapping <sup>6</sup>	3
SOIL 3600	Soils and Landscapes in Our Environment	3
GEOG 3730	Geographic Information Systems (TS)	3
9 credit hours of electives		9
<b>Hours</b>		<b>30</b>

**Year 4**

GEOL 3810	Applied Geophysics	3
GEOL 4260	Applied Geophysics Field Course <sup>6</sup>	3
GEOL 4870	Honours Thesis	6
Select 9 credit hours of Earth Science Environmental Geoscience Electives		9
9 credit hours of electives		9
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The courses required in this program will satisfy the University Mathematics requirement.

<sup>2</sup> MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700.

<sup>3</sup> CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>4</sup> PHYS 1050 may be used in lieu of PHYS 1020.

<sup>5</sup> STAT 1150 may be used in lieu of STAT 1000.

<sup>6</sup> Students will register for GEOL 3910 and GEOL 4260 in Summer term. NOTE: Students should be aware that they are expected to contribute to transportation and accommodation costs. See the department office at the beginning of each year for information.

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing in a specific course required for entry to the program).

GEOL 1400 is highly recommended to be taken in Year 1, but will not be considered when assessing entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

**Notes:**

• To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Earth Sciences, unless a higher prerequisite is stipulated in a course description.

• All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.

• Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.

• Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the degree program chart.

**Earth Sciences Environmental Geoscience Electives****Course List**

Course	Title	Hours
GEOL 3900	Sedimentology	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4280	Instrumental Techniques in Geology	3
GEOL 4370	Global Change	3
GEOL 4810	Geophysical Data Analysis	3
ENVR 2180	Introductory Toxicology	3
ENVR 2550	Environmental Chemistry	3
ENVR 3160	Environmental Responsibilities and the Law	3
ENVR 3250	Environmental Assessment	3
ENVR 4180	Ecotoxicological Risk Characterization	3
ENVR 4550	Aquatic Chemistry	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2930	Introduction to Oceanography	3
GEOG 3200	Introduction to Remote Sensing (TS)	3

## Environmental Geoscience, B.Sc. Major

### Degree Regulations for B.Sc. (Major) in Geology, Geophysics or Environmental Geoscience

To qualify for the degree, a student must complete a minimum of 120 credit hours with passing grades ('D' or better) in each course and with a minimum degree grade point average of 2.50 as indicated in the Graduation Requirements Table (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/#Geological%20Sciences%20Graduation%20Requirements>). Students must complete all Faculty requirements as well as the University Written English and Mathematics requirement (p. 118) in the General Academic Regulations (p. 118), in this Calendar.

Students admitted to the Major program will normally have completed six credit hours of courses from the Faculty of Arts. Students who do not meet this requirement within their first 30 credit hours must do so within the Major program.

## Minor in Another Department

Students in the B.Sc. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consists of 18 credit hours from a department offering this option at the University of Manitoba. Students in the B.Sc. are not permitted to complete a Minor in Earth Sciences. The Minor requirements are found in the Faculty Regulations (p. 492). Contact the department and/or a Riddell Faculty student advisor ([https://umanitoba.ca/faculties/environment/about/deans\\_office/](https://umanitoba.ca/faculties/environment/about/deans_office/)) in the Faculty Dean's Office for further information about eligible Minors.

## Entrance to the Major

To enter a Major program in Geology, Geophysics or Environmental Geoscience, a student must have completed at least 24 credit hours with a minimum Degree Grade Point Average of 2.50 as stipulated in Entrance and Continuation Requirements Table. (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/geology-bscgsc-major/#Entrance-Continuation>) In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the program tables for the Major in Geology (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/geology-bscgsc-major/#degreerequirementstext>), the Major in Geophysics (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/geophysics-bscgsc-major/#degreerequirementstext>) or the Major in Environmental Geoscience.

## Continuation in the Major

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in **good standing** and permitted to continue in the degree program, a student must maintain a minimum degree Grade Point Average of 2.50 as stipulated in the Entrance and Continuation Requirements Table (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/geology-bscgsc-major/#Entrance-Continuation>). Students who do not meet the minimum performance requirement will be required to withdraw from the Major program and will be placed in the General program provided their Degree Grade Point Average is 2.00 or above. Students will have the notation 'Required to Withdraw from the Major Program', recorded on their transcript.

If below 2.00, students will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations (p. 492).

**Failed courses:** Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

**Repeating GEOL 4920:** The course may be repeated only once after a grade of F.

## Program Approval

A Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty Dean's Office must approve a student's Major program each term. Students must also obtain departmental approval for all revisions to their programs. The Advanced/Major/Honours Program Approval ([http://umanitoba.ca/faculties/environment/media/majors\\_honors\\_approval.pdf](http://umanitoba.ca/faculties/environment/media/majors_honors_approval.pdf)) forms are available on the Riddell Faculty web page (<https://umanitoba.ca/faculties/environment/>).

## Graduation in the Major

In order to graduate from the Geology, Geophysics or Environmental Geoscience Major program, students must complete all degree program and faculty requirements as stipulated in the Faculty Regulations (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/undergraduate-studies/environment-earth-resources/#facultyacademicregulationstext>) and in the additional regulations for Earth Sciences (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/#Degree%20Regulations>) Students must also achieve the minimum performance requirements as outlined in the Graduation Requirements Table. (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/geological-sciences/geology-bscgsc-major/#Entrance-Continuation>) This is defined as a minimum Degree Grade Point Average of 2.50 on 120 credit hours which constitute the degree.

## Residence Requirement for Major Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

## Recognition of Academic Merit

### DEGREE WITH DISTINCTION

To obtain a degree with distinction a student must achieve a minimum 3.50 Degree Grade Point Average on all courses constituting the Major degree. The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

## Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Geology, Environmental Geoscience)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Major (Geophysics)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Honours (Geology, Environmental Geoscience)	3.00 <sup>1</sup>	3.00 <sup>1</sup>
Honours (Geophysics)	2.80 <sup>1</sup>	2.80 <sup>1</sup>
General (Earth Sciences)	2.00 <sup>1</sup>	2.00 <sup>1</sup>

## Earth Sciences Graduation Requirements

Degree Program	Minimum Degree Grade Point Average
Major (Geology, Environmental Geoscience) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, Environmental Geoscience) (120)	3.00
Honours (Geophysics) (120)	2.80
General (Geological Earth Sciences) (90)	2.00

**Degree Requirements<sup>1</sup>**

Course	Title	Hours
<b>Year 1</b>		
GEOL 1340	The Dynamic Earth (C+)	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
ENVR 1000	Environmental Science 1 - Concepts (C+)	3
MATH 1500	Introduction to Calculus (C) <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics (C)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
PHYS 1020	General Physics 1 <sup>4</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>5</sup>	3
Select 6 credit hours from the Faculty of Arts, including a required "W" course		6
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
GEOL 2390	Environmental Geology	3
GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
GEOL 2060	Introductory Geophysics	3
6 credit hours of electives		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3420	Engineering Geology	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3910	Introduction to Field Mapping <sup>6</sup>	3
SOIL 3600	Soils and Landscapes in Our Environment	3
GEOG 3730	Geographic Information Systems (TS)	3
9 credit hours of electives		9
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
GEOL 3810	Applied Geophysics	3
GEOL 4260	Applied Geophysics Field Course <sup>6</sup>	3
Select 15 credit hours of Earth Science Environmental Geoscience Electives		15
9 credit hours of electives		9
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>4</sup> PHYS 1050 may be used in lieu of PHYS 1020.

<sup>5</sup> STAT 1150 may be used in lieu of STAT 1000.

<sup>6</sup> Students will register for GEOL 3910 and GEOL 4260 in Summer term. NOTE: Students should be aware that they are expected to contribute to transportation and accommodation costs. See the department office at the beginning of each year for information.

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing in a specific course required for entry to the program).

GEOL 1400 is highly recommended to be taken in Year 1, but will not be considered when assessing entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

**Notes:**

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Earth Sciences, unless a higher prerequisite is stipulated in a course description.

- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.

- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.

- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the degree program chart.

**Earth Sciences Environmental Geoscience Electives****Course List**

Course	Title	Hours
GEOL 3900	Sedimentology	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4280	Instrumental Techniques in Geology	3
GEOL 4370	Global Change	3
GEOL 4810	Geophysical Data Analysis	3
ENVR 2180	Introductory Toxicology	3
ENVR 2550	Environmental Chemistry	3
ENVR 3160	Environmental Responsibilities and the Law	3
ENVR 3250	Environmental Assessment	3
ENVR 4180	Ecotoxicological Risk Characterization	3
ENVR 4550	Aquatic Chemistry	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2930	Introduction to Oceanography	3
GEOG 3200	Introduction to Remote Sensing (TS)	3

<sup>1</sup> The courses required in this program will satisfy the University Mathematics requirement.

<sup>2</sup> MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700.

<sup>3</sup> CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.



# Geology, B.Sc. Honours

## Degree Regulations for B.Sc. (Honours) in Geology, Geophysics or Environmental Geoscience

The Honours programs are the most heavily concentrated programs offered and lead most directly to graduate studies. A student is required to achieve higher grade standards than in the Major degree program. The Honours degree may be pursued on a part-time basis, although it must be recognized that students will require additional terms to complete degree requirements. Students must complete the degree program within 8 years of gaining initial admission to the Honours program. Failure to complete the Honours degree within the 8-year time limit may require a student to transfer into the Major program.

Students admitted to the Honours program will normally have completed six credit hours of courses from the Faculty of Arts. Students who do not meet this requirement within their first 30 credit hours must do so within the Honours program.

A student will normally begin the Honours program in second year and must meet the entrance requirements set out below. Students in full-time study can expect to complete the prescribed courses in four years. Honours programs lead to either the B.Sc. (Hons.) in Geology, the B.Sc. (Hons.) in Geophysics or the B.Sc. (Hons.) in Environmental Geoscience.

To be eligible for any award granted exclusively on the basis of academic performance, a student must normally be enrolled in a full-time program as defined by the department.

Students must complete the University Written English and Mathematics requirement (p. 118) as described in the, General Academic Regulations, of this Calendar.

### Entrance to Honours

To enter the Honours program in Geology, Geophysics or Environmental Geoscience, a student must have completed at least 24 credit hours with the minimum Degree Grade Point Average as stipulated in the Entrance and Continuation Requirements Table. In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the degree requirements for Honours Geology (p. 504), Honours Geophysics (p. 508) or Honours Environmental Geoscience (p. 499). Students who are ineligible to enter Honours with their admission to the Riddell Faculty may establish eligibility the following year on the basis of their second year of academic performance.

### Continuation in Honours

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in **good standing** and permitted to continue in the degree program, a student must maintain the performance requirement as stipulated in the Entrance and Continuation Requirements Table (at the bottom of this page). Students who do not meet the minimum performance requirements will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations (p. 492); Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter. Students who do not maintain this minimum average to remain in the program will be required to withdraw from the Honours program and, if eligible, will be placed in the Major program. Students will have the

notation 'Required to Withdraw from the Honours Program' recorded on their transcript.

**Failed courses:** Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

**Repeating GEOL 4870:** The course may be repeated only once after a grade of F.

### Program Approval

A Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty Dean's Office must approve a student's Honours program each term. Students must also obtain departmental approval for all revisions to their programs. The Advanced/Major/Honours Program Approval forms are available on the Riddell Faculty web page (<https://umanitoba.ca/environment-earth-resources/>).

### Residence Requirement for Honours Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

### Graduation from Honours

In order to graduate from the Honours Geology, Geophysics or Environmental Geoscience programs, students must complete all degree program and faculty requirements as stipulated in Faculty Regulations (p. 492) and in the additional regulations for Earth Sciences. Students must also achieve the minimum performance requirements as outlined in the Earth Sciences Graduation Requirements (at the bottom of this page). This is defined for the Honours Geology program as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree, for Honours Geophysics as a minimum Degree Grade Point Average of 2.80 on the 120 credit hours which constitute the degree and for Honours Environmental Geoscience as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree.

### Recognition of Academic Merit

#### First Class Honours

To graduate with **First Class Honours**, a student must achieve a Degree Grade Point Average of 3.50. The term 'First Class Honours' will appear both on the parchment and on the student's transcript.

#### Honours Program Notes

##### Double Honours Programs

Double Honours programs may be available. The program must be arranged in consultation with the departments concerned.

##### Honours Requirements and Options

Students who do not obtain the entrance requirements for the Honours program in their first year but who are interested in obtaining an Honours degree should consult with the department before registering for their second year.

##### Honours Geology Options

For students who wish to increase the focus of their knowledge, recommended electives are listed below:

**Environmental Geoscience:**

Course	Title	Hours
BIOL 2300 or AGEC 2370	Principles of Ecology	3
CIVL 4250	Groundwater Hydrology	4
SOIL 4060	Physical Properties of Soils	3
SOIL 4130	Soil Chemistry and Mineralogy	3
SOIL 4500	Remediation of Contaminated Land	3
GEOL 4370	Global Change	3
GEOG 3390	Introduction to Climate Change and Its Causes (PS)	3
ENVR 2180 or BIOL 2380/ AGRI 2180	Introductory Toxicology	3
ENVR 3110	Environmental Conservation and Restoration	3
ENVR 3250	Environmental Assessment	3
Or others approved by the department		

(Students are responsible for completion of prerequisites for these courses.)

**Honours Geophysics Option**

Students who wish to enter the Honours Geophysics Option and have not taken 6 credit hours of introductory Earth Sciences (eg., GEOL 1340 and one of GEOL 1400, GEOL 1410, or GEOL 1420) may arrange with the department to make up this credit. Students must contact the department during the spring preceding entrance to the Honours program. All course choices in the Honours program should be made after consultation with the coordinator of the Geophysics program.

**Earth Sciences Advanced Entry Entrance and Continuation Requirements**

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Geology, Environmental Geoscience)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Major (Geophysics)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Honours (Geology, Environmental Geoscience)	3.00 <sup>1</sup>	3.00 <sup>1</sup>
Honours (Geophysics)	2.80 <sup>1</sup>	2.80 <sup>1</sup>
General (Earth Sciences)	2.00 <sup>1</sup>	2.00 <sup>1</sup>

<sup>1</sup> In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

**Earth Sciences Graduation Requirements (p. )**

Degree Program	Minimum Degree Grade Point Average
Major (Geology, Environmental Geoscience) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, Environmental Geoscience) (120)	3.00

Honours (Geophysics) (120)	2.80
General (Earth Sciences) (90)	2.00

**Degree Requirements**

Course	Title	Hours
<b>Year 1</b>		
GEOL 1340	The Dynamic Earth (B)	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
MATH 1500	Introduction to Calculus (C) <sup>1</sup>	3
PHYS 1020	General Physics 1 <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics (C) <sup>3</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
Select 6 credit hours from the Faculty of Arts		6
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 3910	Introduction to Field Mapping <sup>4</sup>	3
<b>Hours</b>		<b>21</b>
<b>Year 3</b>		
GEOL 2060	Introductory Geophysics	3
GEOL 3110	Petrogenesis of Igneous Rocks	3
GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3310	Paleontology	3
GEOL 3440	Structure and Metamorphism	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3900	Sedimentology	3
GEOL 4910	Advanced Field Mapping <sup>4</sup>	3
Select 3 credit hours of Geological Sciences Geology Electives – Group A		3
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
GEOL 4300	Mineral Deposits	3
GEOL 4520	Petroleum Geology	3
GEOL 4670	Global Tectonics	3
GEOL 4870	Honours Thesis	6
Select 6 credit hours of Geological Sciences Geology Electives – Group A		6
Enough elective credit to total 120 credit hours for the program		24
<b>Hours</b>		<b>45</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> MATH 1230 or MATH 1510 or MATH 1520 may be used in lieu of MATH 1500.

<sup>2</sup> PHYS 1050 may be used in lieu of PHYS 1020.

- <sup>3</sup> The former CHEM 1300 may be used in lieu of CHEM 1100 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.
- <sup>4</sup> Students will register for GEOL 3910 and GEOL 4910 in Summer term. NOTE: Students should be aware that they are expected to contribute to transportation and accommodation costs. See the department office at the beginning of each year for information.

The courses required in this program will satisfy the University Mathematics requirement (p. 118) and the University Written English requirement (p. 118).

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing in a specific course required for entry to the program.)

GEOL 1400 is highly recommended to be taken in Year 1, but will not be considered when assessing entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

**Notes:**

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological Sciences, unless a higher prerequisite is stipulated in a course description.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.
- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the degree program chart.

### Geological Sciences Geology Electives

- Honours students are required to complete a minimum of 9 credit hours from Group A;
- Major students must complete 18 credit hours consisting of 3 credit hours from Group B with the remaining 15 credit hours from Group A or B.

#### Group A

Course	Title	Hours
GEOL 2390	Environmental Geology	3
GEOL 2570	Energy and Mineral Resources	3
GEOL 3140	Gemology	3
GEOL 3420	Engineering Geology	3
GEOL 3740	Exploration Seismology	3
GEOL 3750	Geology and Geophysics of the Planets	3
GEOL 3810	Applied Geophysics	3
GEOL 4260	Applied Geophysics Field Course	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4280	Instrumental Techniques in Geology	3
GEOL 4310	Paleontologic Principles	3
GEOL 4360	Mineral Exploration Techniques	3
GEOL 4370	Global Change	3

GEOL 4380	Mineral Resource Development	3
GEOL 4740	Geophysics Field Course	6
GEOL 4890	Basin Analysis	3
GEOL 4920	Technical Report	3
ENVR 2180	Introductory Toxicology	3
ENVR 2550	Environmental Chemistry	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2930	Introduction to Oceanography	3
GEOG 3200	Introduction to Remote Sensing (TS)	3
GEOG 3730	Geographic Information Systems (TS)	3

#### Group B

Course	Title	Hours
GEOL 3450	Hydrogeology	3
GEOL 4300	Mineral Deposits	3
GEOL 4520	Petroleum Geology	3

**Note:** With departmental approval, up to 6 credit hours of 2000-level or higher courses from Science departments may be substituted to satisfy professional registration (EGM) requirements.

## Geology, B.Sc. Major

### Degree Regulations for B.Sc. (Major) in Geology, Geophysics or Environmental Geoscience

To qualify for the degree, a student must complete a minimum of 120 credit hours with passing grades ('D' or better) in each course and with a minimum degree grade point average of 2.50 as indicated in the Graduation Requirements Table (p. 507). Students must complete all Faculty requirements as well as the University Written English and Mathematics requirement (p. 118) in the General Academic Regulations (p. 118), in this *Calendar*.

Students admitted to the Major program will normally have completed six credit hours of courses from the Faculty of Arts. Students who do not meet this requirement within their first 30 credit hours must do so within the Major program.

#### Minor in Another Department

Students in the B.Sc. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consists of 18 credit hours from a department offering this option at the University of Manitoba. Students in the B.Sc. are not permitted to complete a Minor in Earth Sciences. The Minor requirements are found in the Faculty Regulations (p. 492). Contact the department and/or a Riddell Faculty student advisor (<https://umanitoba.ca/environment-earth-resources/student-experience/#support-for-students>) in the Faculty Dean's Office for further information about eligible Minors.

#### Entrance to the Major

To enter a Major program in Geology, Geophysics or Environmental Geoscience, a student must have completed at least 24 credit hours with a minimum Degree Grade Point Average of 2.50 as stipulated in Entrance and Continuation Requirements Table (p. 507). In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the program tables for the Major

in Geology (p. 506), the Major in Geophysics (p. 512) or the Major in Environmental Geoscience (p. 501).

## Continuation in the Major

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in **good standing** and permitted to continue in the degree program, a student must maintain a minimum degree Grade Point Average of 2.50 as stipulated in the Entrance and Continuation Requirements Table (p. 507). Students who do not meet the minimum performance requirement will be required to withdraw from the Major program and will be placed in the General program provided their Degree Grade Point Average is 2.00 or above. Students will have the notation 'Required to Withdraw from the Major Program', recorded on their transcript.

If below 2.00, students will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations (p. 492).

**Failed courses:** Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

**Repeating GEOL 4920:** The course may be repeated only once after a grade of F.

## Program Approval

A Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty Dean's Office must approve a student's Major program each term. Students must also obtain departmental approval for all revisions to their programs. The Advanced/Major/Honours Program Approval ([http://umanitoba.ca/faculties/environment/media/majors\\_honors\\_approval.pdf](http://umanitoba.ca/faculties/environment/media/majors_honors_approval.pdf)) forms are available on the Riddell Faculty web page (<https://umanitoba.ca/faculties/environment/>).

## Graduation in the Major

In order to graduate from the Geology, Geophysics or Environmental Geoscience Major program, students must complete all degree program and faculty requirements as stipulated in the Faculty Regulations (p. 492) and in the additional regulations for Earth Sciences (p. 507), students must also achieve the minimum performance requirements as outlined in the Earth Sciences Graduation Requirements. This is defined as a minimum Degree Grade Point Average of 2.50 on 120 credit hours which constitute the degree.

## Residence Requirement for Major Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

## Recognition of Academic Merit

### Degree with Distinction

To obtain a degree with distinction a student must achieve a minimum 3.50 Degree Grade Point Average on all courses constituting the Major degree. The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

## Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Geology, Environmental Geoscience)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Major (Geophysics)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Honours (Geology, Environmental Geoscience)	3.00 <sup>1</sup>	3.00 <sup>1</sup>
Honours (Geophysics)	2.80 <sup>1</sup>	2.80 <sup>1</sup>
General (Earth Sciences)	2.00 <sup>1</sup>	2.00 <sup>1</sup>

<sup>1</sup> In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

## Earth Sciences Graduation Requirements (p. 507)

Degree Program	Minimum Degree Grade Point Average
Major (Geology, Environmental Geoscience) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, Environmental Geoscience) (120)	3.00
Honours (Geophysics) (120)	2.80
General (Earth Sciences) (90)	2.00

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
GEOL 1340	The Dynamic Earth (C+)	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
MATH 1500	Introduction to Calculus (C) <sup>1</sup>	3
PHYS 1020	General Physics 1 <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>3</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
Select 6 credit hours from the Faculty of Arts		6
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 3910	Introduction to Field Mapping <sup>4</sup>	3
<b>Hours</b>		<b>21</b>
<b>Year 3</b>		
GEOL 2060	Introductory Geophysics	3

GEOL 3110	Petrogenesis of Igneous Rocks	3
GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3310	Paleontology	3
GEOL 3440	Structure and Metamorphism	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3900	Sedimentology	3
GEOL 4910	Advanced Field Mapping <sup>4</sup>	3
Select 3 credit hours of Geological Sciences Geology Electives <sup>5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Year 4</b>		
GEOL 4670	Global Tectonics	3
Select 15 credit hours of Geological Sciences Geology Electives <sup>5</sup>		15
Enough elective credit to total 120 credit hours for the program		30
<b>Hours</b>		<b>48</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> MATH 1230 or MATH 1510 or MATH 1520 may be used in lieu of MATH 1500.

<sup>2</sup> PHYS 1050 may be used in lieu of PHYS 1020.

<sup>3</sup> The former CHEM 1300 may be used in lieu of CHEM 1100 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>4</sup> Students will register for GEOL 3910 and GEOL 4910 in Summer term. NOTE: Students should be aware that they are expected to contribute to transportation and accommodation costs. See the department office at the beginning of each year for information.

<sup>5</sup> Among the Geological Sciences Electives, Major students must complete 18 credit hours consisting of 3 credit hours from Group B with the remaining 15 credit hours from Group A or B.

The courses required in this program will satisfy the University Mathematics requirement (p. 118) and the University Written English requirement (p. 118).

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing in a specific course required for entry to the program.)

GEOL 1400 is highly recommended to be taken in Year 1, but will not be considered when assessing entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

#### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological Sciences, unless a higher prerequisite is stipulated in a course description.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.

- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the degree program chart.

## Geological Sciences Geology Electives

- Honours students are required to complete a minimum of 9 credit hours from Group A;
- Major students must complete 18 credit hours consisting of 3 credit hours from Group B with the remaining 15 credit hours from Group A or B.

### Group A

Course	Title	Hours
GEOL 2390	Environmental Geology	3
GEOL 2570	Energy and Mineral Resources	3
GEOL 3140	Gemology	3
GEOL 3420	Engineering Geology	3
GEOL 3740	Exploration Seismology	3
GEOL 3750	Geology and Geophysics of the Planets	3
GEOL 3810	Applied Geophysics	3
GEOL 4260	Applied Geophysics Field Course	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4280	Instrumental Techniques in Geology	3
GEOL 4310	Paleontologic Principles	3
GEOL 4360	Mineral Exploration Techniques	3
GEOL 4370	Global Change	3
GEOL 4380	Mineral Resource Development	3
GEOL 4740	Geophysics Field Course	6
GEOL 4890	Basin Analysis	3
GEOL 4920	Technical Report	3
ENVR 2180	Introductory Toxicology	3
ENVR 2550	Environmental Chemistry	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2930	Introduction to Oceanography	3
GEOG 3200	Introduction to Remote Sensing (TS)	3
GEOG 3730	Geographic Information Systems (TS)	3

### Group B

Course	Title	Hours
GEOL 3450	Hydrogeology	3
GEOL 4300	Mineral Deposits	3
GEOL 4520	Petroleum Geology	3

**Note:** With departmental approval, up to 6 credit hours of 2000-level or higher courses from Science departments may be substituted to satisfy professional registration (EGM) requirements.

## Geophysics, B.Sc. Honours Degree Regulations for B.Sc. (Honours) in Geology, Geophysics or Environmental Geoscience

The Honours programs are the most heavily concentrated programs offered and lead most directly to graduate studies. A student is required to achieve higher grade standards than in the Major degree program. The

Honours degree may be pursued on a part-time basis, although it must be recognized that students will require additional terms to complete degree requirements. Students must complete the degree program within 8 years of gaining initial admission to the Honours program. Failure to complete the Honours degree within the 8-year time limit may require a student to transfer into the Major program.

Students admitted to the Honours program will normally have completed six credit hours of courses from the Faculty of Arts. Students who do not meet this requirement within their first 30 credit hours must do so within the Honours program.

A student will normally begin the Honours program in second year and must meet the entrance requirements set out below. Students in full-time study can expect to complete the prescribed courses in four years. Honours programs lead to either the B.Sc. (Hons.) in Geology, the B.Sc. (Hons.) in Geophysics or the B.Sc. (Hons.) in Environmental Geoscience.

To be eligible for any award granted exclusively on the basis of academic performance, a student must normally be enrolled in a full-time program as defined by the department.

Students must complete the University Written English and Mathematics requirement (p. 118) as described in the, General Academic Regulations, of this Calendar.

## Entrance to Honours

To enter the Honours program in Geology, Geophysics or Environmental Geoscience, a student must have completed at least 24 credit hours with the minimum Degree Grade Point Average as stipulated in the Entrance and Continuation Requirements Table. In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the degree requirements for Honours Geology (p. 504), Honours Geophysics (p. 508) or Honours Environmental Geoscience (p. 499). Students who are ineligible to enter Honours with their admission to the Riddell Faculty may establish eligibility the following year on the basis of their second year of academic performance.

## Continuation in Honours

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in **good standing** and permitted to continue in the degree program, a student must maintain the performance requirement as stipulated in the Entrance and Continuation Requirements Table (at the bottom of this page). Students who do not meet the minimum performance requirements will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations (p. 492); Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter. Students who do not maintain this minimum average to remain in the program will be required to withdraw from the Honours program and, if eligible, will be placed in the Major program. Students will have the notation 'Required to Withdraw from the Honours Program' recorded on their transcript.

**Failed courses:** Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

**Repeating** GEOL 4870: The course may be repeated only once after a grade of F.

## Program Approval

A Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty Dean's Office must approve a student's Honours program each term. Students must also obtain departmental approval for all revisions to their programs. The Advanced/Major/Honours Program Approval forms are available on the Riddell Faculty web page (<https://umanitoba.ca/environment-earth-resources/>).

## Residence Requirement for Honours Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

## Graduation from Honours

In order to graduate from the Honours Geology, Geophysics or Environmental Geoscience programs, students must complete all degree program and faculty requirements as stipulated in Faculty Regulations (p. 492) and in the additional regulations for Earth Sciences. Students must also achieve the minimum performance requirements as outlined in the Earth Sciences Graduation Requirements (at the bottom of this page). This is defined for the Honours Geology program as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree, for Honours Geophysics as a minimum Degree Grade Point Average of 2.80 on the 120 credit hours which constitute the degree and for Honours Environmental Geoscience as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree.

## Recognition of Academic Merit

### First Class Honours

To graduate with **First Class Honours**, a student must achieve a Degree Grade Point Average of 3.50. The term 'First Class Honours' will appear both on the parchment and on the student's transcript.

### Honours Program Notes

#### Double Honours Programs

Double Honours programs may be available. The program must be arranged in consultation with the departments concerned.

### Honours Requirements and Options

Students who do not obtain the entrance requirements for the Honours program in their first year but who are interested in obtaining an Honours degree should consult with the department before registering for their second year.

### Honours Geology Options

For students who wish to increase the focus of their knowledge, recommended electives are listed below:

#### Environmental Geoscience:

Course	Title	Hours
BIOL 2300 or AGECE 2370	Principles of Ecology	3
CIVL 4250	Groundwater Hydrology	4
SOIL 4060	Physical Properties of Soils	3
SOIL 4130	Soil Chemistry and Mineralogy	3
SOIL 4500	Remediation of Contaminated Land	3
GEOL 4370	Global Change	3

GEOG 3390	Introduction to Climate Change and Its Causes (PS)	3
ENVR 2180	Introductory Toxicology	3
or BIOL 2380/ AGRI 2180	Introductory Toxicology	
ENVR 3110	Environmental Conservation and Restoration	3
ENVR 3250	Environmental Assessment	3
Or others approved by the department		

(Students are responsible for completion of prerequisites for these courses.)

### Honours Geophysics Option

Students who wish to enter the Honours Geophysics Option and have not taken 6 credit hours of introductory Earth Sciences (eg., GEOL 1340 and one of GEOL 1400, GEOL 1410, or GEOL 1420) may arrange with the department to make up this credit. Students must contact the department during the spring preceding entrance to the Honours program. All course choices in the Honours program should be made after consultation with the coordinator of the Geophysics program.

## Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Geology, Environmental Geoscience)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Major (Geophysics)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Honours (Geology, Environmental Geoscience)	3.00 <sup>1</sup>	3.00 <sup>1</sup>
Honours (Geophysics)	2.80 <sup>1</sup>	2.80 <sup>1</sup>
General (Earth Sciences)	2.00 <sup>1</sup>	2.00 <sup>1</sup>

<sup>1</sup> In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

## Earth Sciences Graduation Requirements (p. 511)

Degree Program	Minimum Degree Grade Point Average
Major (Geology, Environmental Geoscience) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, Environmental Geoscience) (120)	3.00
Honours (Geophysics) (120)	2.80
General (Earth Sciences) (90)	2.00

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
GEOL 1340	The Dynamic Earth (B)	3
Select one of the following: <sup>1</sup>		3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	

GEOL 1410	Natural Disasters and Global Change	
GEOL 1420	Exploring the Planets	
Select one of the following:		3
PHYS 1050	Physics 1: Mechanics (B)	
PHYS 1020	General Physics 1 (B+)	
Select one of the following:		3
PHYS 1070	Physics 2: Waves and Modern Physics (B)	
PHYS 1030	General Physics 2 (B+)	
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques	3
Select one of the following:		3
MATH 1510	Applied Calculus 1 (B) <sup>2</sup>	
MATH 1500	Introduction to Calculus (B)	
Select one of the following:		3
MATH 1710	Applied Calculus 2 (B) <sup>2</sup>	
MATH 1700	Calculus 2 (B)	

**Hours 27**

### Year 2

GEOL 2060	Introductory Geophysics	3
GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
MATH 2130	Engineering Mathematical Analysis 1 <sup>4</sup>	3
MATH 2132	Engineering Mathematical Analysis 2 <sup>4</sup>	3
3 credit hours from the Faculty of Arts <sup>6</sup>		3

**Hours 27**

### Years 3-4

GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3740	Exploration Seismology	3
GEOL 3810	Applied Geophysics	3
GEOL 4250	Theory and Application of Geophysical Inversion Methods	3
GEOL 4320	Physics of the Earth: Seismology and Heat Flow	3
GEOL 4330	Physics of the Earth: Geomagnetism and Gravity	3
GEOL 4670	Global Tectonics	3
GEOL 4740	Geophysics Field Course <sup>5</sup>	6
GEOL 4810	Geophysical Data Analysis	3
GEOL 4870	Honours Thesis	6
COMP 1012	Computer Programming for Scientists and Engineers	3
PHYS 2600	Electromagnetic Field Theory	3
MATH 3132	Engineering Mathematical Analysis 3 <sup>4</sup>	3
Select 3 credit hours from Physical Science Course Electives List		3
Select 6 credit hours from Earth Science Course Electives List		6

3 credit hours from the Faculty of Arts <sup>6</sup>	3
Enough elective credit to total 120 credit hours for the program	9
<b>Hours</b>	<b>66</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> GEOL 1400 is highly recommended to be taken in Year 1, but GEOL 1410 or GEOL 1420 may be substituted.

<sup>2</sup> MATH 1690 may be taken in place of MATH 1230 or MATH 1500 (or MATH 1510) and MATH 1700 (or MATH 1710); MATH 1300 may be taken in place of MATH 1210. Selection of MATH 1300 or MATH 1210 will determine the prerequisite background for Mathematics courses required in years 2, 3 and 4.

<sup>3</sup> The former CHEM 1300 may be used in lieu of CHEM 1100 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>4</sup> MATH 2720 may be taken in place of MATH 2130. PHYS 2496 may be taken in place of MATH 2132. PHYS 3496 may be taken in place of MATH 3132. Normally, students select (MATH 2130, MATH 2132, and MATH 3132) or (MATH 2720, PHYS 2496, and PHYS 3496).

<sup>5</sup> GEOL 4740 will normally be taken immediately following the Winter term examinations and will continue for approximately three weeks. Registration will show as Summer Term. **Note:** Students are expected to contribute to the costs of transportation, lodging, and food. Contact the Department for further information.

<sup>6</sup> The course selected must meet the University's Written English requirement (p. 118).

The courses required in this program will satisfy the University Mathematics Requirement (p. 118).

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing required for further study)

#### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Earth Sciences, unless a higher prerequisite grade is stipulated in a course description.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)) in Aurora
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

## Geophysics Electives Lists

### Geophysics Course Electives List

- Major students must complete a minimum of 9 credit hours from the following courses:

Course	Title	Hours
GEOL 4250	Theory and Application of Geophysical Inversion Methods	3
GEOL 4320	Physics of the Earth: Seismology and Heat Flow	3
GEOL 4330	Physics of the Earth: Geomagnetism and Gravity	3
GEOL 4920	Technical Report	3

### Earth Science Course Electives List

- Honours students are required to complete a minimum of 6 credit hours;
- Major students must complete a minimum of 6 credit hours from the following courses:

Course	Title	Hours
GEOL 2390	Environmental Geology	3
GEOL 2570	Energy and Mineral Resources	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 3110	Petrogenesis of Igneous Rocks	3
GEOL 3420	Engineering Geology	3
GEOL 3440	Structure and Metamorphism	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3750	Geology and Geophysics of the Planets	3
GEOL 3900	Sedimentology	3
GEOL 3910	Introduction to Field Mapping	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4300	Mineral Deposits	3
GEOL 4360	Mineral Exploration Techniques	3
GEOL 4370	Global Change	3
GEOL 4380	Mineral Resource Development	3
GEOL 4520	Petroleum Geology	3
GEOL 4890	Basin Analysis	3
GEOL 4910	Advanced Field Mapping	3
ENVR 2550	Environmental Chemistry	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2930	Introduction to Oceanography	3
GEOG 3200	Introduction to Remote Sensing (TS)	3
GEOG 3310	Atmospheric Dynamics, Storms and Radar (PS)	3
GEOG 3320	Introduction to Microclimates and Micrometeorology (PS)	3
GEOG 3730	Geographic Information Systems (TS)	3
Any course from the Geophysics Course Electives List or the Physical Science Course Electives List not already taken, or any advanced level Geological Sciences, Physics or Mathematics course(s) approved by department		

### Physical Science Course Electives List

Course	Title	Hours
ASTR 2000	Foundations of Astrophysics	3
ASTR 3180	Stars	3
CHEM 2600	Physical Chemistry 1	3
CHEM 3600	Physical Chemistry 2	3



PHYS 2152	Modern Physics for Engineers	3
PHYS 2260	Optics	3
PHYS 2610	Circuit Theory and Introductory Electronics	3
PHYS 2650	Classical Mechanics 1	3
PHYS 3630	Electro - and Magnetostatic Theory	3
PHYS 3670	Classical Thermodynamics	3
MECH 2262	Fundamentals of Fluid Mechanics	4
Or alternate physical science course(s) approved by department		

## Geophysics, B.Sc. Major

### Degree Regulations for B.Sc. (Major) in Geology, Geophysics or Environmental Geoscience

To qualify for the degree, a student must complete a minimum of 120 credit hours with passing grades ('D' or better) in each course and with a minimum degree grade point average of 2.50 as indicated in the Graduation Requirements Table (p. 512). Students must complete all Faculty requirements as well as the University Written English and Mathematics requirement (p. 118) in the General Academic Regulations (p. 118), in this *Calendar*.

Students admitted to the Major program will normally have completed six credit hours of courses from the Faculty of Arts. Students who do not meet this requirement within their first 30 credit hours must do so within the Major program.

#### Minor in Another Department

Students in the B.Sc. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consists of 18 credit hours from a department offering this option at the University of Manitoba. Students in the B.Sc. are not permitted to complete a Minor in Earth Sciences. The Minor requirements are found in the Faculty Regulations (p. 492). Contact the department and/or a Riddell Faculty student advisor (<https://umanitoba.ca/environment-earth-resources/student-experience/#support-for-students>) in the Faculty Dean's Office for further information about eligible Minors.

#### Entrance to the Major

To enter a Major program in Geology, Geophysics or Environmental Geoscience, a student must have completed at least 24 credit hours with a minimum Degree Grade Point Average of 2.50 as stipulated in Entrance and Continuation Requirements Table (p. 512). In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the program tables for the Major in Geology (p. 506), the Major in Geophysics (p. 512) or the Major in Environmental Geoscience (p. 501).

#### Continuation in the Major

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in **good standing** and permitted to continue in the degree program, a student must maintain a minimum degree Grade Point Average of 2.50 as stipulated in the Entrance and Continuation Requirements Table (p. 512). Students who do not meet the minimum performance requirement will be required to withdraw from the Major program and will be placed in the General

program provided their Degree Grade Point Average is 2.00 or above. Students will have the notation 'Required to Withdraw from the Major Program', recorded on their transcript.

If below 2.00, students will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations (p. 492).

**Failed courses:** Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

**Repeating GEOL 4920:** The course may be repeated only once after a grade of F.

#### Program Approval

A Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty Dean's Office must approve a student's Major program each term. Students must also obtain departmental approval for all revisions to their programs. The Advanced/Major/Honours Program Approval ([http://umanitoba.ca/faculties/environment/media/majors\\_honors\\_approval.pdf](http://umanitoba.ca/faculties/environment/media/majors_honors_approval.pdf)) forms are available on the Riddell Faculty web page (<https://umanitoba.ca/faculties/environment/>).

#### Graduation in the Major

In order to graduate from the Geology, Geophysics or Environmental Geoscience Major program, students must complete all degree program and faculty requirements as stipulated in the Faculty Regulations (p. 492) and in the additional regulations for Earth Sciences (p. 512), students must also achieve the minimum performance requirements as outlined in the Earth Sciences Graduation Requirements. This is defined as a minimum Degree Grade Point Average of 2.50 on 120 credit hours which constitute the degree.

#### Residence Requirement for Major Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

#### Recognition of Academic Merit

##### Degree with Distinction

To obtain a degree with distinction a student must achieve a minimum 3.50 Degree Grade Point Average on all courses constituting the Major degree. The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

#### Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Geology, Environmental Geoscience)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Major (Geophysics)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Honours (Geology, Environmental Geoscience)	3.00 <sup>1</sup>	3.00 <sup>1</sup>
Honours (Geophysics)	2.80 <sup>1</sup>	2.80 <sup>1</sup>

General (Earth Sciences) 2.00<sup>1</sup> 2.00<sup>1</sup>

<sup>1</sup> In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

## Earth Sciences Graduation Requirements (p. 512)

Degree Program	Minimum Degree Grade Point Average
Major (Geology, Environmental Geoscience) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, Environmental Geoscience) (120)	3.00
Honours (Geophysics) (120)	2.80
General (Earth Sciences) (90)	2.00

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
GEOL 1340	The Dynamic Earth (C+)	3
Select one of the following: <sup>1</sup>		3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	
GEOL 1410	Natural Disasters and Global Change	
GEOL 1420	Exploring the Planets	
Select one of the following:		3
PHYS 1050	Physics 1: Mechanics (C)	
PHYS 1020	General Physics 1 (C+)	
Select one of the following:		3
PHYS 1070	Physics 2: Waves and Modern Physics (C)	
PHYS 1030	General Physics 2 (C+)	
MATH 1210	Techniques of Classical and Linear Algebra <sup>2</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques	3
Select one of the following:		3
MATH 1510	Applied Calculus 1 (C+) <sup>2</sup>	
MATH 1500	Introduction to Calculus (C+)	
Select one of the following:		3
MATH 1710	Applied Calculus 2 (C) <sup>2</sup>	
MATH 1700	Calculus 2 (C)	

**Hours** **27**

### Year 2

GEOL 2060	Introductory Geophysics	3
GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
MATH 2130	Engineering Mathematical Analysis 1 <sup>4</sup>	3
MATH 2132	Engineering Mathematical Analysis 2 <sup>4</sup>	3

Select 3 credit hours from the Faculty of Arts<sup>6</sup> 3

**Hours** **27**

### Years 3-4

GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3740	Exploration Seismology	3
GEOL 3810	Applied Geophysics	3
GEOL 4670	Global Tectonics	3
GEOL 4740	Geophysics Field Course <sup>5</sup>	6
GEOL 4810	Geophysical Data Analysis	3
COMP 1012	Computer Programming for Scientists and Engineers	3
PHYS 2600	Electromagnetic Field Theory	3
MATH 3132	Engineering Mathematical Analysis 3 <sup>4</sup>	3
Select 9 credit hours from the Geophysics Course Electives List		9
Select 3 credit hours from the Physical Science Course Electives List		3
Select 6 credit hours from the Earth Science Course Electives List		6
Select 3 credit hours from the Faculty of Arts <sup>6</sup>		3
Select enough elective credit to total 120 credit hours for the program		15

**Hours** **66**

**Total Hours** **120**

<sup>1</sup> GEOL 1400 is highly recommended to be taken in Year 1, but GEOL 1410 or GEOL 1420 may be substituted.

<sup>2</sup> MATH 1690 may be taken in place of MATH 1230 or MATH 1500 (or MATH 1510) and MATH 1700 (or MATH 1710); MATH 1300 may be taken in place of MATH 1210. Selection of MATH 1300 or MATH 1210 will determine the prerequisite background for Mathematics courses required in years 2, 3 and 4.

<sup>3</sup> The former CHEM 1300 may be used in lieu of CHEM 1100 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>4</sup> MATH 2720 may be taken in place of MATH 2130. PHYS 2496 may be taken in place of MATH 2132. PHYS 3496 may be taken in place of MATH 3132. Normally, students select (MATH 2130, MATH 2132, and MATH 3132) or (MATH 2720, PHYS 2496, and PHYS 3496).

<sup>5</sup> GEOL 4740 will normally be taken immediately following the Winter term examinations and will continue for approximately three weeks. Registration will show as Summer Term. **Note:** Students are expected to contribute to the costs of transportation, lodging, and food. Contact the Department for further information.

<sup>6</sup> The course selected must meet the University's Written English requirement (p. 118).

The courses required in this program will satisfy the University Mathematics Requirement (p. 118).

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing required for further study)

**Notes:**

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Earth Sciences, unless a higher prerequisite grade is stipulated in a course description.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)) in Aurora
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

**Geophysics Electives Lists****Geophysics Course Electives List**

- Major students must complete a minimum of 9 credit hours from the following courses:

Course	Title	Hours
GEOL 4250	Theory and Application of Geophysical Inversion Methods	3
GEOL 4320	Physics of the Earth: Seismology and Heat Flow	3
GEOL 4330	Physics of the Earth: Geomagnetism and Gravity	3
GEOL 4920	Technical Report	3

**Earth Science Course Electives List**

- Honours students are required to complete a minimum of 6 credit hours;
- Major students must complete a minimum of 6 credit hours from the following courses:

Course	Title	Hours
GEOL 2390	Environmental Geology	3
GEOL 2570	Energy and Mineral Resources	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 3110	Petrogenesis of Igneous Rocks	3
GEOL 3420	Engineering Geology	3
GEOL 3440	Structure and Metamorphism	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3750	Geology and Geophysics of the Planets	3
GEOL 3900	Sedimentology	3
GEOL 3910	Introduction to Field Mapping	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4300	Mineral Deposits	3
GEOL 4360	Mineral Exploration Techniques	3
GEOL 4370	Global Change	3
GEOL 4380	Mineral Resource Development	3
GEOL 4520	Petroleum Geology	3
GEOL 4890	Basin Analysis	3
GEOL 4910	Advanced Field Mapping	3
ENVR 2550	Environmental Chemistry	3

GEOL 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOL 2310	Introduction to Process Hydrology (PS)	3
GEOL 2930	Introduction to Oceanography	3
GEOL 3200	Introduction to Remote Sensing (TS)	3
GEOL 3310	Atmospheric Dynamics, Storms and Radar (PS)	3
GEOL 3320	Introduction to Microclimates and Micrometeorology (PS)	3
GEOL 3730	Geographic Information Systems (TS)	3

Any course from the Geophysics Course Electives List or the Physical Science Course Electives List not already taken, or any advanced level Earth Sciences, Physics or Mathematics course(s) approved by department

**Physical Science Course Electives List**

Course	Title	Hours
ASTR 2000	Foundations of Astrophysics	3
ASTR 3180	Stars	3
CHEM 2600	Physical Chemistry 1	3
CHEM 3600	Physical Chemistry 2	3
PHYS 2152	Modern Physics for Engineers	3
PHYS 2260	Optics	3
PHYS 2610	Circuit Theory and Introductory Electronics	3
PHYS 2650	Classical Mechanics 1	3
PHYS 3630	Electro - and Magnetostatic Theory	3
MECH 2262	Fundamentals of Fluid Mechanics	4

Or alternate physical science course(s) approved by department

**Earth Sciences, B.Sc. General****Degree Regulations in B.Sc. in Earth Sciences (General)****Degree Program Structure**

- A Geological Sciences component consisting of a minimum of 30 credit hours.
- A Minor of 18 credit hours (minimum) in a different department or an interdisciplinary program. e.g. in the Clayton H. Riddell Faculty of Environment, Earth, and Resources, or the Faculty of Arts, or the Faculty of Science. The Minor requirements are described in the Faculty Regulations. (p. 492) Contact the department and/or a Riddell Faculty student advisor in the Faculty Dean's Office for further information about eligible Minors.
- Students will normally complete the Faculty of Arts courses requirement which include 6 credit hours from the Faculty of Arts. Students who have not met this requirement in their first year must meet the requirement prior to graduation.

**Entrance to the General**

To be admitted to the General program, a student must have completed at least 24 credit hours with a minimum Degree Grade Point Average of 2.00. In addition, a student must have completed GEOL 1340 with the grade of 'C+'. Refer to the Bachelor of Science in Earth Sciences (General) (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/earth-sciences/earth-sciences-bsc-general/>) for degree requirements.

## Continuation in the General

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in good standing and permitted to continue in the degree program, a student must maintain a minimum Degree Grade Point Average of 2.00 as stipulated in the Entrance and Continuation Requirements Table. Students who do not meet the minimum performance requirement will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations; (p. 118) Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter.

**Failed courses:** A student is required to repeat those failed courses that are specified as required courses for the program. Students are subject to the University of Manitoba regulations (see General Academic Regulations, Academic Evaluations, Repeating a Course) (p. 118) and the Riddell Faculty degree regulations regarding eligibility to repeat a course. Students who need to repeat a course more than once to fulfil degree requirements must contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) for approval prior to registration. Students cannot exceed 30 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

## Graduation in the General

To qualify for the degree, students must complete 90 credit hours, inclusive of Geological Sciences courses, a minor in a second department or program, and any University 1 requirements. Minimum performance requirements include passing grades ("D" or better) in each course, a minimum degree grade point average of 2.00 in Geological Sciences courses, and an overall degree grade point average of 2.00 on the 90 credit hours which constitute the degree. Note: Where a Geological Sciences course listed in the calendar has required prerequisites, a student must hold a minimum grade of "C+" or "C" in each prerequisite course as stipulated in the course description.

## Residence Requirement for General Students

Students must complete a total of 48 credit hours at the University of Manitoba, or they must complete their final 30 credit hours at the University of Manitoba in order to satisfy the residency requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

## Recognition of Academic Merit

### Degree with Distinction

To obtain a degree with distinction, a student must achieve a minimum 3.50 Degree Grade Point Average on all courses constituting the General degree. The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

## Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Geology, Environmental Geoscience)	2.50 <sup>1</sup>	2.50 <sup>1</sup>
Major (Geophysics)	2.50 <sup>1</sup>	2.50 <sup>1</sup>

Honours (Geology, Environmental Geoscience)	3.00 <sup>1</sup>	3.00 <sup>1</sup>
Honours (Geophysics)	2.80 <sup>1</sup>	2.80 <sup>1</sup>
General (Earth Sciences)	2.00 <sup>1</sup>	2.00 <sup>1</sup>

<sup>1</sup> In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

## Earth Sciences Graduation Requirements (p. )

Degree Program	Minimum Degree Grade Point Average
Major (Geology, Environmental Geoscience) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, Environmental Geoscience) (120)	3.00
Honours (Geophysics) (120)	2.80
General (Earth Sciences) (90)	2.00

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
GEOL 1340	The Dynamic Earth (C+)	3
Select one of the following:		3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth <sup>1</sup>	
GEOL 1410	Natural Disasters and Global Change	
GEOL 1420	Exploring the Planets	
Select 6 credit hours from the Faculty of Arts		6
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
GEOL 2500	Introduction to Mineralogy	3
Select 21 credit hours in Geological Sciences courses numbered at the 2000-level or above		21
Select enough elective credit to total 90 credit hours for the program		54
<b>Hours</b>		<b>78</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> GEOL 1400 is highly recommended to be taken in Year 1, but GEOL 1410 and GEOL 1420 may be substituted. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

The M and W course requirements (p. 118) must be met within the first 60 credit hours of the program.

### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological Sciences.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class

Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/))

- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.

Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

## Earth Sciences Minor

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
GEOL 1340	The Dynamic Earth	3
Select one of the following:		3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	1
GEOL 1410	Natural Disasters and Global Change	
GEOL 1420	Exploring the Planets	
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
Select 12 credit hours chosen from 2000- and 3000-level courses		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

#### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological Sciences.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/))
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.

Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

## Environment and Geography

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**Academic Staff:** Please refer to the Clayton H. Riddell Faculty of Environment, Earth, and Resources website at: [umanitoba.ca/environment-earth-resources/faculty-staff](https://umanitoba.ca/environment-earth-resources/faculty-staff) (<https://umanitoba.ca/environment-earth-resources/faculty-staff/>)

### Undergraduate Programming in the Department of Environment and Geography

The fields of study in this department can be divided into four overlapping areas: environmental sciences, environmental studies, human geography and physical geography. These areas are built on a diverse range of academic frameworks or foundations, including: natural, physical and social sciences, education, law, agriculture, management, medicine, humanities and architecture.

Environmental Science applies scientific knowledge from many disciplines to issues and questions relating to an increasing human population, the sustainability of resource use, degradation caused by pollution and disturbance, and the endangerment and extinction of species and natural systems. Environmental Studies applies the theory and practice of group and organizational communication, understanding public policies and programs that underscore environmental concerns, and the need to integrate diverse social, institutional, political and legal considerations inherent in attaining environmental objectives. (Students have the opportunity to focus advanced studies in one of several areas, defined through consultation with a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)). (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>))

"Human Geography examines how people have been influenced by the environment and how, in turn, they have left their mark on the environment," Dr. Daniel Todd, Human Geographer. Students may choose to focus their studies into one of several areas including *Human-Environment Relations, Urban and Rural Development, Social Cultural Geography, Population, Resources and Development, and Area Studies*.

Areas of physical geography include the study of the environment through aspects of atmospheric science, geomatics, biogeography, and hydrology. Streams are currently available in *Atmospheric and Hydrological Sciences, Geomatics* (an emerging subfield, referring to the techniques of spatial data acquisition, handling and analysis) and *Physical Geography*.

Potential careers for graduates of these programs include a diverse array of possibilities in the natural sciences, social sciences, or a combination of both. Graduates are poised to assume positions where they identify and analyze the local, regional, national, and global patterns that shape our lives. As well, technical skills such as geographic information systems and remote sensing are demanded in several of the environmental sectors. Graduates of these programs can expect to enter the workforce in private, government, research, or not-for-profit sectors.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Environmental Science, B.Env.Sc. General (p. 529)	3	90	
Environmental Science, B.Env.Sc. Honours (p. 517)	4	120	Yes
Environmental Science, B.Env.Sc. Major (p. 523)	4	120	Yes
Environmental Science Minor (p. 534)		18	
Environmental Studies, B.Env.St. General (p. 545)	3	90	
Environmental Studies, B.Env.St. Honours (p. 534)	4	120	Yes
Environmental Studies, B.Env.St. Major (p. 539)	4	120	Yes
Environmental Studies Minor (p. 550)		18	
Geography, B.A. Advanced (p. 553)	4	120	
Geography, B.A. General (p. 557)	3	90	
Geography, B.A. Honours (p. 550)	4	120	
Geography Minor (p. 560)		18	
Physical Geography, B.Sc. Honours (p. 560)	4	120	Yes
Physical Geography, B.Sc. Major (p. 566)	4	120	Yes
Physical Geography Minor (p. 571)		18	

## Cooperative Education Option

A Cooperative Education Option (<https://umanitoba.ca/environment-earth-resources/student-experience/#learning-outside-the-classroom>) is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work term placements. Further information about Cooperative Education and student eligibility is available from the Coop Placement Coordinator (<https://umanitoba.ca/faculties/environment/undergraduate/coop/contact.html>) available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree

program. Students complete ENVR 2900, ENVR 3900, work term placements ENVR 3980, ENVR 3990, and the work term report courses ENVR 3910 and ENVR 3920. Additional work terms are available to interested students. Each academic term and each employment term commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program (<http://umanitoba.ca/faculties/environment/undergraduate/coop/>) webpage

## Environmental Science, B.Env.Sc. Honours

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## Program Information

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers General, Major, and Honours degree programs leading to a Bachelor of Environmental Science (B.Env.Sc.) and Bachelor of Environmental Studies (B.Env.St.). Through an interdisciplinary approach, environmental issues relating to human populations, sustainable resource development, pollution and conservation, environmental health, and endangerment and preservation of species are explored in conjunction with alternative conditions that have the potential to reverse current trends and contribute to ecological sustainability. Students have access to undergraduate courses offered by the Clayton H. Riddell Faculty of Environment, Earth, and Resources as well as the Faculties of Agricultural and Food Sciences, Arts, Law, Engineering, Architecture, and Science in order to complete their education. They are expected to take many courses outside the Riddell Faculty enabling them to obtain a truly interdisciplinary education.

The Major and Honours degree programs serve students who desire advanced study in an environmental field. The programs are intended for students interested in professional training and the opportunity for advanced research. Honours degree programs demand higher academic performance and lead most directly to graduate studies. Students who are ineligible to enter the Honours degree program in their third year may establish this in the following year on the basis of their improved scholastic performance. See a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for information. The degree programs may be pursued on a full- or part-time basis.

The B.Env.Sc. and B.Env.St. degree programs share a general structure that includes a foundation of either introductory Sciences or Social Sciences/ Humanities. Students complete an environmental core and a Focus Area that is defined through consultation with a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty general office. Students completing the General degree program are required to complete 9 credit hours in a Focus Area; Major, Major Coop, Honours and Honours Coop students complete 33 credit hours in a Focus Area. Other Focus Area requirements are defined in the graduation requirements (p. ). You may also refer to the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)) for further information.

## GENERAL

To qualify for the degree Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General), students must complete 90 credit hours including all faculty and degree requirements (including the foundation, environmental core and 9 credit hours of minimum 2000-level courses in a Focus Area). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00. There is no limit to the number of credit hours a student completes provided he/she does not exceed 48 credit hours of failed courses.

## MAJOR

To qualify for the degree Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major), a student must complete 120 credit hours with a minimum degree grade point average of 2.00. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000 or 4000- level; 2.00 Grade Point Average and minimum "C+" grades. There is no limit to the number of credit hours

a student completes provided he/she does not exceed 18 credit hours of failed courses

## HONOURS

To qualify for the degree Bachelor of Environmental Science (Honours) or Bachelor of Environmental Studies (Honours), a student must complete 120 credit hours with a minimum degree grade point average of 3.25. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000- or 4000-level; 3.00 Grade Point Average and minimum 'C+' grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

## MINOR IN ANOTHER DEPARTMENT

Students in the B.Env.Sc. and B.Env.St. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students are not permitted to complete a Minor in Environmental Science or Environmental Studies. Contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for further information about eligible Minors.

## ECO-CANADA ACCREDITATION

The Environmental Science program is accredited to the National Standard of Environmental Programs (<http://www.eco.ca/public/services/educator/accreditation-environmental-programs/331/>) in Canada by ECO Canada.

## Advanced Entry Entrance Requirements

Advanced Entry students are placed in the Major degree program in either the Bachelor of Environmental Science or Bachelor of Environmental Studies until they have completed a minimum of 48 credit hours after which they can transfer to the General or Honours program or remain in the Major. To make a program transfer students must consult with a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

## BACHELOR OF ENVIRONMENTAL SCIENCE ADVANCED ENTRY ENTRANCE REQUIREMENTS

### Degree: Honours

**Minimum Number of Credit Hours:** 48

**Minimum Degree Grade Point Average:** 3.25

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; a grade of 'B' or better in ENVR 1000 and ENVR 2000 as well as a minimum 'C+' in 6 hours of BIOL 1020<sup>3</sup>, BIOL 1030<sup>3</sup> or CHEM 1110<sup>3</sup> and 'C' in the other course.

### Degree: Honours (Coop)<sup>2</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 3.25

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; ENVR 2900; students must satisfy the requirements for entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3

ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 3160	Environmental Responsibilities and the Law	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
BIOL 2300	Principles of Ecology <sup>3</sup>	3
or AGECE 2370	Principles of Ecology	
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

**Degree: Major****Minimum Number of Credit Hours:** 24**Minimum Degree Grade Point Average:** 2.00

**Additional Advanced Entry Entrance Requirements:** 12 credit hours taken from the following with a grade of 'C+' or better in six of the 12 credit hours, and a grade of 'C' or better in the remaining six credit hours:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>3</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>3</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
MATH 1500	Introduction to Calculus <sup>3</sup>	3
or MATH 1200	Elements of Discrete Mathematics	
or MATH 1300	Vector Geometry and Linear Algebra	
or MATH 1310	Matrices for Management and Social Sciences	
or MATH 1510	Applied Calculus 1	
or MATH 1520	Introductory Calculus for Management and Social Sciences	
PHYS 1020	General Physics 1 <sup>3</sup>	3
or PHYS 1050	Physics 1: Mechanics	
PHYS 1030	General Physics 2 <sup>3</sup>	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

**Degree: Major (Coop)<sup>2</sup>****Minimum Number of Credit Hours:** 60**Minimum Degree Grade Point Average:** 2.50

**Additional Advanced Entry Entrance Requirements:** ENVR 2900; students must satisfy the requirements for continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 3160	Environmental Responsibilities and the Law	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
BIOL 2300	Principles of Ecology <sup>3</sup>	3
or AGECE 2370	Principles of Ecology	
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

**Degree: General****Minimum Number of Credit Hours:** 48**Minimum Degree Grade Point Average:** 2.00

- Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with a Student Advisor for further information.
- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the entrance requirements chart. Université de Saint- Boniface courses end in the number "1" (e.g. GEOG 1281)
- Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.

**Minimum Performance Requirements for Continuation and Graduation**

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.



Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

### Degree Program (Credit Hours): Honours (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

### Degree Program (Credit Hours): Honours Coop (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (Optional)	
ENVR 4980	Work Term 3 (Optional)	

### Degree Program (Credit Hours): Major (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

### Degree Program (Credit Hours): Major (Coop) (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	
ENVR 4980	Work Term 3 (optional)	

### Degree Program (Credit Hours): General(90)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

<sup>1</sup> Students must satisfy the residence requirement for the degree program in order to be eligible for graduation. This is defined as either a total of 48 or at least 24 credit hours at the University of Manitoba.

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>4</sup>	3
ENVR 3160	Environmental Responsibilities and the Law <sup>5</sup>	3
BIOL 2300/ AGEC 2370	Principles of Ecology	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
PHYS 1020	General Physics 1 <sup>6</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
Select one of the following:		3
PHYS 1030	General Physics 2 <sup>6</sup>	
MATH 1200	Elements of Discrete Mathematics	
MATH 1300	Vector Geometry and Linear Algebra <sup>7</sup>	
MATH 1700	Calculus 2 <sup>7</sup>	
Select one of the following:		3
GEOG 1290	Introduction to Physical Geography	
GEOL 1340	The Dynamic Earth	
GEOL 1440	Course no longer offered	
Select 3 credit hours from the Faculty of Arts		3
<b>Hours</b>		<b>27</b>
<b>Years 3-4</b>		
ENVR 4110	Critical Thinking and the Environment	3
ENVR 4500	Thesis Project in Environmental Science and Studies	6
Select 33 credit hours in an approved Focus Area <sup>8</sup>		33
21 credit hours of electives		21
<b>Hours</b>		<b>63</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The former CHEM 1300 and CHEM 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>2</sup> MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500 (or equivalent).

<sup>3</sup> STAT 1150 and STAT 2150 may be used in lieu of STAT 1000 and STAT 2000.

<sup>4</sup> The former ENVR 2170 or the former ENVR 2270 may be used in lieu of ENVR 2810.

<sup>5</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.

<sup>6</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030.

<sup>7</sup> MATH 1310 and MATH 1710 may be taken in place of MATH 1300 and MATH 1700 (or equivalent).

<sup>8</sup> Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in the Minimum Performance Requirements for Continuation and Graduation (p. 519). Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).

Advanced Entry into the degree programs are summarized in the Overview (p. 517).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

### Honours Cooperative Option

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>4</sup>	3
ENVR 3160	Environmental Responsibilities and the Law <sup>5</sup>	3
BIOL 2300/ AGEC 2370	Principles of Ecology	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
PHYS 1020	General Physics 1 <sup>6</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
Select one of the following:		3
PHYS 1030	General Physics 2 <sup>6</sup>	

MATH 1200	Elements of Discrete Mathematics	
MATH 1300	Vector Geometry and Linear Algebra <sup>7</sup>	
MATH 1700	Calculus 2 <sup>7</sup>	
Select one of the following:		3
GEOG 1290	Introduction to Physical Geography	
GEOL 1340	The Dynamic Earth	
GEOL 1440	Course No Longer Offered	
Select 3 credit hours from the Faculty of Arts		3
ENVR 3980	Coop Work Term 1	0
ENVR 3910	Coop Work Term Report 1	1.5
<b>Hours</b>		<b>30</b>
<b>Years 3-4</b>		
ENVR 4110	Critical Thinking and the Environment	3
ENVR 4500	Thesis Project in Environmental Science and Studies	6
Select 33 credit hours in an approved Focus Area <sup>8</sup>		33
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 4980	Work Term 3 (Optional) <sup>9</sup>	
ENVR 4910	Coop Work Term Report 3 (Optional) <sup>9</sup>	
15 credit hours of electives		15
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> The former CHEM 1300 and CHEM 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.
- <sup>2</sup> MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500 (or equivalent).
- <sup>3</sup> STAT 1150 and STAT 2150 may be used in lieu of STAT 1000 and STAT 2000.
- <sup>4</sup> The former ENVR 2170 or the former ENVR 2270 may be used in lieu of ENVR 2810.
- <sup>5</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.
- <sup>6</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030.
- <sup>7</sup> MATH 1310 and MATH 1710 may be taken in place of MATH 1300 and MATH 1700 (or equivalent).
- <sup>8</sup> Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation (p. 519). Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).
- <sup>9</sup> Students in the cooperative education option who complete ENVR 4980 and ENVR 4910 will graduate with an additional 1.5 degree credits for a total of 121.5 credits hours.

Advanced Entry into the degree programs is summarized in the Overview (p. 517).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

#### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through ENVR 2010, ENVR 2020, ENVR 3000, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020 as well as those offered through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office ([environment\\_geography@umanitoba.ca](mailto:environment_geography@umanitoba.ca)).
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the program requirements chart.

## Cooperative Education Option

A Cooperative Education Option (<https://umanitoba.ca/environment-earth-resources/student-experience/#learning-outside-the-classroom>) is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work term placements. Further information about Cooperative Education and student eligibility is available from the Coop Placement Coordinator (<https://umanitoba.ca/faculties/environment/undergraduate/coop/contact.html>) available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree program. Students complete ENVR 2900, ENVR 3900, work term placements ENVR 3980, ENVR 3990, and the work term report courses ENVR 3910 and ENVR 3920. Additional work terms are available to interested students. Each academic term and each employment term

commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program (<http://umanitoba.ca/faculties/environment/undergraduate/coop/>) webpage

## Environmental Science, B.Env.Sc. Major

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### Program Information

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers General, Major, and Honours degree programs leading to a Bachelor of Environmental Science (B.Env.Sc.) and Bachelor of Environmental Studies (B.Env.St.). Through an interdisciplinary approach, environmental issues relating to human populations, sustainable resource development, pollution and conservation, environmental health, and endangerment and preservation of species are explored in conjunction with alternative conditions that have the potential to reverse current trends and contribute to ecological sustainability. Students have access to undergraduate courses offered by the Clayton H. Riddell Faculty of Environment, Earth, and Resources as well as the Faculties of Agricultural and Food Sciences, Arts, Law, Engineering, Architecture, and Science in order to complete their education. They are expected to take many courses outside the Riddell Faculty enabling them to obtain a truly interdisciplinary education.

The Major and Honours degree programs serve students who desire advanced study in an environmental field. The programs are intended for students interested in professional training and the opportunity for advanced research. Honours degree programs demand higher academic performance and lead most directly to graduate studies. Students who are ineligible to enter the Honours degree program in their third year may establish this in the following year on the basis of their improved scholastic performance. See a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for information. The degree programs may be pursued on a full- or part-time basis.

The B.Env.Sc. and B.Env.St. degree programs share a general structure that includes a foundation of either introductory Sciences or Social Sciences/ Humanities. Students complete an environmental core and a Focus Area that is defined through consultation with a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty general office. Students completing the General degree program are required to complete 9 credit hours in a Focus Area; Major, Major Coop, Honours and Honours Coop students complete 33 credit hours in a Focus Area. Other

Focus Area requirements are defined in the graduation requirements (p. ). You may also refer to the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)) for further information.

### GENERAL

To qualify for the degree Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General), students must complete 90 credit hours including all faculty and degree requirements (including the foundation, environmental core and 9 credit hours of minimum 2000-level courses in a Focus Area). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00. There is no limit to the number of credit hours a student completes provided he/she does not exceed 48 credit hours of failed courses.

### MAJOR

To qualify for the degree Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major), a student must complete 120 credit hours with a minimum degree grade point average of 2.00. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000 or 4000- level; 2.00 Grade Point Average and minimum "C+" grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses

### HONOURS

To qualify for the degree Bachelor of Environmental Science (Honours) or Bachelor of Environmental Studies (Honours), a student must complete 120 credit hours with a minimum degree grade point average of 3.25. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000- or 4000-level; 3.00 Grade Point Average and minimum 'C+' grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

### MINOR IN ANOTHER DEPARTMENT

Students in the B.Env.Sc. and B.Env.St. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students are not permitted to complete a Minor in Environmental Science or Environmental Studies. Contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for further information about eligible Minors.

### ECO-CANADA ACCREDITATION

The Environmental Science program is accredited to the National Standard of Environmental Programs (<http://www.eco.ca/public/services/educator/accreditation-environmental-programs/331/>) in Canada by ECO Canada.

### Advanced Entry Entrance Requirements

Advanced Entry students are placed in the Major degree program in either the Bachelor of Environmental Science or Bachelor of Environmental Studies until they have completed a minimum of 48 credit hours after which they can transfer to the General or Honours program or remain in the Major. To make a program transfer students must consult with

a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

### BACHELOR OF ENVIRONMENTAL SCIENCE ADVANCED ENTRY ENTRANCE REQUIREMENTS

#### Degree: Honours

**Minimum Number of Credit Hours:** 48

**Minimum Degree Grade Point Average:** 3.25

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; a grade of 'B' or better in ENVR 1000 and ENVR 2000 as well as a minimum 'C+' in 6 hours of BIOL 1020<sup>3</sup>, BIOL 1030<sup>3</sup> or CHEM 1110<sup>3</sup> and 'C' in the other course.

#### Degree: Honours (Coop)<sup>2</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 3.25

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; ENVR 2900; students must satisfy the requirements for entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 3160	Environmental Responsibilities and the Law	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
BIOL 2300	Principles of Ecology <sup>3</sup>	3
or AGECE 2370	Principles of Ecology	
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

#### Degree: Major

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00

**Additional Advanced Entry Entrance Requirements:** 12 credit hours taken from the following with a grade of 'C+' or better in six of the 12 credit hours, and a grade of 'C' or better in the remaining six credit hours:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>3</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>3</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3

STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
MATH 1500	Introduction to Calculus <sup>3</sup>	3
or MATH 1200	Elements of Discrete Mathematics	
or MATH 1300	Vector Geometry and Linear Algebra	
or MATH 1310	Matrices for Management and Social Sciences	
or MATH 1510	Applied Calculus 1	
or MATH 1520	Introductory Calculus for Management and Social Sciences	
PHYS 1020	General Physics 1 <sup>3</sup>	3
or PHYS 1050	Physics 1: Mechanics	
PHYS 1030	General Physics 2 <sup>3</sup>	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

#### Degree: Major (Coop)<sup>2</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 2.50

**Additional Advanced Entry Entrance Requirements:** ENVR 2900; students must satisfy the requirements for continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 3160	Environmental Responsibilities and the Law	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
BIOL 2300	Principles of Ecology <sup>3</sup>	3
or AGECE 2370	Principles of Ecology	
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

#### Degree: General

**Minimum Number of Credit Hours:** 48

**Minimum Degree Grade Point Average:** 2.00

- Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with a Student Advisor for further information.
- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the entrance requirements chart. Université de Saint-Boniface courses end in the number "1" (e.g. GEOG 1281)
- Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.

## Minimum Performance Requirements for Continuation and Graduation

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

### DEGREE PROGRAM (CREDIT HOURS): HONOURS (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

### DEGREE PROGRAM (CREDIT HOURS): HONOURS COOP (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

### DEGREE PROGRAM (CREDIT HOURS): MAJOR (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

### DEGREE PROGRAM (CREDIT HOURS): MAJOR (COOP) (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

- Coop Option Courses:

### DEGREE PROGRAM (CREDIT HOURS): GENERAL(90)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

## Minimum Performance Requirements for Continuation and Graduation

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration

each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

### Degree Program (Credit Hours): Honours (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

### Degree Program (Credit Hours): Honours Coop (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5

ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (Optional)	
ENVR 4980	Work Term 3 (Optional)	

### Degree Program (Credit Hours): Major (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

### Degree Program (Credit Hours): Major (Coop) (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	
ENVR 4980	Work Term 3 (optional)	

### Degree Program (Credit Hours): General(90)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

<sup>1</sup> Students must satisfy the residence requirement for the degree program in order to be eligible for graduation. This is defined as either a total of 48 or at least 24 credit hours at the University of Manitoba.

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their

degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>3</sup>	3
ENVR 3160	Environmental Responsibilities and the Law <sup>4</sup>	3
BIOL 2300/ AGEC 2370	Principles of Ecology	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
PHYS 1020	General Physics 1 <sup>5</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
Select one of the following:		3
PHYS 1030	General Physics 2 <sup>6</sup>	
MATH 1200	Elements of Discrete Mathematics	
MATH 1300	Vector Geometry and Linear Algebra <sup>7</sup>	
MATH 1700	Calculus 2 <sup>7</sup>	
Select one of the following:		3
GEOG 1290	Introduction to Physical Geography	
GEOL 1340	The Dynamic Earth	
GEOL 1440	Course no longer offered	
Select 3 credit hours from the Faculty of Arts		3
<b>Hours</b>		<b>27</b>

### Years 3-4

ENVR 4110	Critical Thinking and the Environment	3
Select 33 credit hours in an approved Focus Area <sup>8</sup>		33
27 credit hours of electives		27
<b>Hours</b>		<b>63</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> The former CHEM 1300 and CHEM 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.
- <sup>2</sup> MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500 (or equivalent).
- <sup>3</sup> STAT 1150 and STAT 2150 may be used in lieu of STAT 1000 and STAT 2000.
- <sup>4</sup> The former ENVR 2170 or the former ENVR 2270 may be used in lieu of ENVR 2810.
- <sup>5</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.
- <sup>6</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030.
- <sup>7</sup> MATH 1310 and MATH 1710 may be taken in place of MATH 1300 and MATH 1700 (or equivalent).
- <sup>8</sup> Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation. (p. 519) Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)). ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf))

Advanced Entry into the degree programs is summarized in the Overview (p. 523).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

### Major Cooperative Option

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>30</b>



Year 2		
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>4</sup>	3
ENVR 3160	Environmental Responsibilities and the Law <sup>5</sup>	3
BIOL 2300/ AGEC 2370	Principles of Ecology	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
PHYS 1020	General Physics 1 <sup>6</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
Select one of the following:		3
PHYS 1030	General Physics 2 <sup>6</sup>	
MATH 1200	Elements of Discrete Mathematics	
MATH 1300	Vector Geometry and Linear Algebra <sup>7</sup>	
MATH 1700	Calculus 2 <sup>7</sup>	
Select one of the following:		3
GEOG 1290	Introduction to Physical Geography	
GEOL 1340	The Dynamic Earth	
GEOL 1440	Course no longer offered	
Select 3 credit hours from the Faculty of Arts		3
ENVR 3980	Coop Work Term 1	0
ENVR 3910	Coop Work Term Report 1	1.5
<b>Hours</b>		<b>30</b>
Years 3-4		
ENVR 4110	Critical Thinking and the Environment	3
Select 33 credit hours in an approved Focus Area <sup>8</sup>		33
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 4980	Work Term 3 (optional) <sup>9</sup>	
ENVR 4910	Coop Work Term Report 3 (optional) <sup>9</sup>	
21 credit hours of electives		21
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The former CHEM 1300 and CHEM 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>2</sup> MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500 (or equivalent).

<sup>3</sup> STAT 1150 and STAT 2150 may be used in lieu of STAT 1000 and STAT 2000.

<sup>4</sup> The former ENVR 2170 or the former ENVR 2270 may be used in lieu of ENVR 2810.

<sup>5</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.

<sup>6</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030.

<sup>7</sup> MATH 1310 and MATH 1710 may be taken in place of MATH 1300 and MATH 1700 (or equivalent).

<sup>8</sup> Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation (p. 519). Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).

<sup>9</sup> Students in the cooperative education option who complete ENVR 4980 and ENVR 4910 will graduate with an additional 1.5 degree credits for a total of 121.5 credits hours.

Advanced Entry into the degree programs is summarized in the Overview (p. 523).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

#### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through ENVR 2010, ENVR 2020, ENVR 3000, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020 as well as those offered through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office ([environment\\_geography@umanitoba.ca](mailto:environment_geography@umanitoba.ca)).
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the program requirements chart.

## Cooperative Education Option

A Cooperative Education Option (<https://umanitoba.ca/environment-earth-resources/student-experience/#learning-outside-the-classroom>) is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work

term placements. Further information about Cooperative Education and student eligibility is available from the Coop Placement Coordinator (<https://umanitoba.ca/faculties/environment/undergraduate/coop/contact.html>) available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree program. Students complete ENVR 2900, ENVR 3900, work term placements ENVR 3980, ENVR 3990, and the work term report courses ENVR 3910 and ENVR 3920. Additional work terms are available to interested students. Each academic term and each employment term commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program (<http://umanitoba.ca/faculties/environment/undergraduate/coop/>) webpage

## Environmental Science, B.Env.Sc. General

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### Program Information

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers General, Major, and Honours degree programs leading to a Bachelor of Environmental Science (B.Env.Sc.) and Bachelor of Environmental Studies (B.Env.St.). Through an interdisciplinary approach, environmental issues relating to human populations, sustainable resource development, pollution and conservation, environmental health, and endangerment and preservation of species are explored in conjunction with alternative conditions that have the potential to reverse current trends and contribute to ecological sustainability. Students have access to undergraduate courses offered by the Clayton H. Riddell Faculty of Environment, Earth, and Resources as well as the Faculties of Agricultural and Food Sciences, Arts, Law, Engineering, Architecture, and Science in order to complete their education. They are expected to take many courses outside the Riddell Faculty enabling them to obtain a truly interdisciplinary education.

The Major and Honours degree programs serve students who desire advanced study in an environmental field. The programs are intended for students interested in professional training and the opportunity for

advanced research. Honours degree programs demand higher academic performance and lead most directly to graduate studies. Students who are ineligible to enter the Honours degree program in their third year may establish this in the following year on the basis of their improved scholastic performance. See a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for information. The degree programs may be pursued on a full- or part-time basis.

The B.Env.Sc. and B.Env.St. degree programs share a general structure that includes a foundation of either introductory Sciences or Social Sciences/ Humanities. Students complete an environmental core and a Focus Area that is defined through consultation with a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty general office. Students completing the General degree program are required to complete 9 credit hours in a Focus Area; Major, Major Coop, Honours and Honours Coop students complete 33 credit hours in a Focus Area. Other Focus Area requirements are defined in the graduation requirements (p. ). You may also refer to the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)) for further information.

### GENERAL

To qualify for the degree Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General), students must complete 90 credit hours including all faculty and degree requirements (including the foundation, environmental core and 9 credit hours of minimum 2000-level courses in a Focus Area). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00. There is no limit to the number of credit hours a student completes provided he/she does not exceed 48 credit hours of failed courses.

### MAJOR

To qualify for the degree Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major), a student must complete 120 credit hours with a minimum degree grade point average of 2.00. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000 or 4000- level; 2.00 Grade Point Average and minimum "C+" grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses

### HONOURS

To qualify for the degree Bachelor of Environmental Science (Honours) or Bachelor of Environmental Studies (Honours), a student must complete 120 credit hours with a minimum degree grade point average of 3.25. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000- or 4000-level; 3.00 Grade Point Average and minimum 'C+' grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

### MINOR IN ANOTHER DEPARTMENT

Students in the B.Env.Sc. and B.Env.St. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students are not permitted to complete a Minor in Environmental Science or Environmental Studies. Contact a Riddell Faculty student advisor (<https://umanitoba.ca/>)

faculties/environment/undergraduate/advice/) in the Faculty general office for further information about eligible Minors.

### ECO-CANADA ACCREDITATION

The Environmental Science program is accredited to the National Standard of Environmental Programs (<http://www.eco.ca/public/services/educator/accreditation-environmental-programs/331/>) in Canada by ECO Canada.

### Advanced Entry Entrance Requirements

Advanced Entry students are placed in the Major degree program in either the Bachelor of Environmental Science or Bachelor of Environmental Studies until they have completed a minimum of 48 credit hours after which they can transfer to the General or Honours program or remain in the Major. To make a program transfer students must consult with a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

### BACHELOR OF ENVIRONMENTAL SCIENCE ADVANCED ENTRY ENTRANCE REQUIREMENTS

#### Degree: Honours

**Minimum Number of Credit Hours:** 48

**Minimum Degree Grade Point Average:** 3.25

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; a grade of 'B' or better in ENVR 1000 and ENVR 2000 as well as a minimum 'C+' in 6 hours of BIOL 1020<sup>3</sup>, BIOL 1030<sup>3</sup> or CHEM 1110<sup>3</sup> and 'C' in the other course.

#### Degree: Honours (Coop)<sup>2</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 3.25

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; ENVR 2900; students must satisfy the requirements for entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 3160	Environmental Responsibilities and the Law	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
BIOL 2300	Principles of Ecology <sup>3</sup>	3
or AGEC 2370	Principles of Ecology	
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

#### Degree: Major

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00

**Additional Advanced Entry Entrance Requirements:** 12 credit hours taken from the following with a grade of 'C+' or better in six of the 12 credit hours, and a grade of 'C' or better in the remaining six credit hours:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>3</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>3</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
MATH 1500	Introduction to Calculus <sup>3</sup>	3
or MATH 1200	Elements of Discrete Mathematics	
or MATH 1300	Vector Geometry and Linear Algebra	
or MATH 1310	Matrices for Management and Social Sciences	
or MATH 1510	Applied Calculus 1	
or MATH 1520	Introductory Calculus for Management and Social Sciences	
PHYS 1020	General Physics 1 <sup>3</sup>	3
or PHYS 1050	Physics 1: Mechanics	
PHYS 1030	General Physics 2 <sup>3</sup>	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

#### Degree: Major (Coop)<sup>2</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 2.50

**Additional Advanced Entry Entrance Requirements:** ENVR 2900; students must satisfy the requirements for continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 3160	Environmental Responsibilities and the Law	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
BIOL 2300	Principles of Ecology <sup>3</sup>	3
or AGEC 2370	Principles of Ecology	
BIOL 1020	Biology 1: Principles and Themes <sup>3</sup>	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
or GEOL 1340	The Dynamic Earth	

**Degree: General****Minimum Number of Credit Hours: 48****Minimum Degree Grade Point Average: 2.00**

- <sup>1</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with a Student Advisor for further information.
- <sup>2</sup> Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the entrance requirements chart. Université de Saint- Boniface courses end in the number "1" (e.g. GEOG 1281)
- <sup>3</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.

**Minimum Performance Requirements for Continuation and Graduation**

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

**DEGREE PROGRAM (CREDIT HOURS): HONOURS (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18

- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

**Additional Graduation Requirements <sup>1</sup>**

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

**DEGREE PROGRAM (CREDIT HOURS): HONOURS COOP (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

**Additional Graduation Requirements <sup>1</sup>**

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

**DEGREE PROGRAM (CREDIT HOURS): MAJOR (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

**Additional Graduation Requirements <sup>1</sup>**

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

**DEGREE PROGRAM (CREDIT HOURS): MAJOR (COOP) (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

**Additional Graduation Requirements <sup>1</sup>**

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours
- Coop Option Courses:

**DEGREE PROGRAM (CREDIT HOURS): GENERAL(90)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

**Graduating with Distinction or First Class Honours WITH DISTINCTION**

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

### Minimum Performance Requirements for Continuation and Graduation

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

### Degree Program (Credit Hours): Honours (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

### Degree Program (Credit Hours): Honours Coop (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (Optional)	
ENVR 4980	Work Term 3 (Optional)	

### Degree Program (Credit Hours): Major (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

### Degree Program (Credit Hours): Major (Coop) (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours
- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0

ENVR 4910 Coop Work Term Report 3 (optional)

ENVR 4980 Work Term 3 (optional)

**Degree Program (Credit Hours): General(90)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

<sup>1</sup> Students must satisfy the residence requirement for the degree program in order to be eligible for graduation. This is defined as either a total of 48 or at least 24 credit hours at the University of Manitoba.

**Graduating with Distinction or First Class Honours****WITH DISTINCTION**

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

**FIRST CLASS HONOURS**

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

**Degree Requirements**

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>4</sup>	3
ENVR 3160	Environmental Responsibilities and the Law <sup>5</sup>	3

BIOL 2300/ AGEC 2370	Principles of Ecology	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
PHYS 1020	General Physics 1 <sup>6</sup>	3
STAT 2000	Basic Statistical Analysis 2 <sup>3</sup>	3
Select one of the following:		3
PHYS 1030	General Physics 2 <sup>6</sup>	
MATH 1200	Elements of Discrete Mathematics	
MATH 1300	Vector Geometry and Linear Algebra <sup>7</sup>	
MATH 1700	Calculus 2 <sup>7</sup>	
Select one of the following:		3
GEOG 1290	Introduction to Physical Geography	
GEOL 1340	The Dynamic Earth	
GEOL 1440	Course No Longer Offered	
Select 3 credit hours from the Faculty of Arts		3
<b>Hours</b>		<b>27</b>
<b>Years 3-4</b>		
ENVR 4110	Critical Thinking and the Environment	3
Select 9 credit hours in an approved Focus Area <sup>8</sup>		9
21 credit hours of electives		21
<b>Hours</b>		<b>33</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> The former CHEM 1300 and CHEM 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>2</sup> MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500 (or equivalent).

<sup>3</sup> STAT 1150 and STAT 2150 may be used in lieu of STAT 1000 and STAT 2000.

<sup>4</sup> The former ENVR 2170 or the former ENVR 2270 may be used in lieu of ENVR 2810.

<sup>5</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.

<sup>6</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030.

<sup>7</sup> MATH 1310 and MATH 1710 may be taken in place of MATH 1300 and MATH 1700 (or equivalent).

<sup>8</sup> Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation (p. 519). Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).

Advanced Entry into the degree programs is summarized in the Overview (p. 529).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

**Notes:**

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through ENVR 2010, ENVR 2020, ENVR 3000, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020 as well as those offered through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office ([environment\\_geography@umanitoba.ca](mailto:environment_geography@umanitoba.ca)).
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the program requirements chart.

## Environmental Science Minor

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
<b>Hours</b>		<b>6</b>
<b>Years 2-4</b>		
Select 12 credit hours of ENVR courses numbered at the 2000-level or above.		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

Advanced Entry into the degree programs is summarized in Overview. (p. 517)

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

**Notes:**

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through ENVR 2010, ENVR 2020, ENVR 3000, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020 as well as those offered through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).

- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office ([environment\\_geography@umanitoba.ca](mailto:environment_geography@umanitoba.ca)).
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the program requirements chart.

## Environmental Studies, B.Env.St. Honours

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**Telephone:** (204) 474-9667

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### Program Information

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers General, Major, and Honours degree programs leading to a Bachelor of Environmental Science (B.Env.Sc.) and Bachelor of Environmental Studies (B.Env.St.). Through an interdisciplinary approach, environmental issues relating to human populations, sustainable resource development, pollution and conservation, environmental health, and endangerment and preservation of species are explored in conjunction with alternative conditions that have the potential to reverse current trends and contribute to ecological sustainability. Students have access to undergraduate courses offered by the Clayton H. Riddell Faculty of Environment, Earth, and Resources as well as the Faculties of Agricultural and Food Sciences, Arts, Law, Engineering, Architecture, and Science in order to complete their education. They are expected to take many courses outside the Riddell Faculty enabling them to obtain a truly interdisciplinary education.

The Major and Honours degree programs serve students who desire advanced study in an environmental field. The programs are intended for students interested in professional training and the opportunity for advanced research. Honours degree programs demand higher academic performance and lead most directly to graduate studies. Students who are ineligible to enter the Honours degree program in their third year may establish this in the following year on the basis of their improved scholastic performance. See a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for information. The degree programs may be pursued on a full- or part-time basis.

The B.Env.Sc. and B.Env.St. degree programs share a general structure that includes a foundation of either introductory Sciences or Social Sciences/ Humanities. Students complete an environmental core and a Focus Area that is defined through consultation with a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty general office. Students completing the General degree program are required to complete 9 credit hours in a Focus Area; Major, Major Coop, Honours and Honours Coop students complete 33 credit hours in a Focus Area. Other Focus Area requirements are defined in the graduation requirements (<https://umanitoba-ca-curr.courseleaf.com/undergraduate-studies/environment-earth-resources/environment-geography/#Minimum%20Performance%20Requirements%20for%20Continuation%20and>

%20Graduation). You may also refer to the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)) for further information.

## GENERAL

To qualify for the degree Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General), students must complete 90 credit hours including all faculty and degree requirements (including the foundation, environmental core and 9 credit hours of minimum 2000-level courses in a Focus Area). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00. There is no limit to the number of credit hours a student completes provided he/she does not exceed 48 credit hours of failed courses.

## MAJOR

To qualify for the degree Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major), a student must complete 120 credit hours with a minimum degree grade point average of 2.00. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000 or 4000- level; 2.00 Grade Point Average and minimum "C+" grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses

## HONOURS

To qualify for the degree Bachelor of Environmental Science (Honours) or Bachelor of Environmental Studies (Honours), a student must complete 120 credit hours with a minimum degree grade point average of 3.25. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000- or 4000-level; 3.00 Grade Point Average and minimum 'C+' grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

## MINOR IN ANOTHER DEPARTMENT

Students in the B.Env.Sc. and B.Env.St. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students are not permitted to complete a Minor in Environmental Science or Environmental Studies. Contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for further information about eligible Minors.

## Advanced Entry Entrance Requirements

Advanced Entry students are placed in the Major degree program in either the Bachelor of Environmental Science or Bachelor of Environmental Studies until they have completed a minimum of 48 credit hours after which they can transfer to the General or Honours program or remain in the Major. To make a program transfer students must consult with a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

## BACHELOR OF ENVIRONMENTAL STUDIES ADVANCED ENTRY ENTRANCE REQUIREMENTS

**Degree: Honours**

**Minimum Number of Credit Hours: 48**

**Minimum Degree Grade Point Average: 3.25**

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; a grade of 'B' or better in ENVR 1000 and ENVR 2000; GEOG 1280<sup>3</sup> and GEOG 1290<sup>3</sup>, ENVR 3160, with a grade of 'C+' or better in six of the 15 credit hours, and a grade of 'C' or better in the remaining nine credit hours.

**Degree: Honours (Coop)<sup>2</sup>**

**Minimum Number of Credit Hours: 60**

**Minimum Degree Grade Point Average: 3.25**

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; ENVR 2900; students must satisfy the requirements for entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
BIOL 2390	Introductory Ecology <sup>3</sup>	3
or BIOL 2300	Principles of Ecology	
or		
AGEC 2370	Principles of Ecology	
BIOL 1010	Biology: Biological Diversity and Interaction <sup>3</sup>	3
or BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	

**Degree: Major**

**Minimum Number of Credit Hours: 24**

**Minimum Degree Grade Point Average: 2.00**

**Additional Advanced Entry Entrance Requirements:** 12 credit hours taken from the following with a grade of 'C+' or better in six of the 12 credit hours, and a grade of 'C' or better in the remaining six credit hours:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
BIOL 1010	Biology: Biological Diversity and Interaction <sup>3</sup>	3
or BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
NATV 1220	Course no longer offered	

**Degree: Major (Coop)<sup>1</sup>**

**Minimum Number of Credit Hours: 60**

**Minimum Degree Grade Point Average: 2.50**



**Additional Advanced Entry Entrance Requirements:** ENVR 2900; students must satisfy the requirements for continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
BIOL 2390	Introductory Ecology <sup>3</sup>	3
or BIOL 2300	Principles of Ecology	
or		
AGEC 2370	Principles of Ecology	
BIOL 1010	Biology: Biological Diversity and Interaction <sup>3</sup>	3
or BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	

#### Degree: General

**Minimum Number of Credit Hours:** 48

**Minimum Degree Grade Point Average:** 2.00

- <sup>1</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with a Student Advisor for further information.
- <sup>2</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.
- <sup>3</sup> Equivalent courses offered through Université de Saint- Boniface may be used in lieu of the specified courses identified in the entrance requirements chart. Université de Saint-Boniface courses end in the number "1" (e.g. GEOG 1281)

### Minimum Performance Requirements for Continuation and Graduation

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by

completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

#### Degree Program (Credit Hours): Honours (120) Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

#### Degree Program (Credit Hours): Honours Coop (120) Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (Optional)	
ENVR 4980	Work Term 3 (Optional)	

#### Degree Program (Credit Hours): Major (120) Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18

- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

### Degree Program (Credit Hours): Major (Coop) (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours
- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	
ENVR 4980	Work Term 3 (optional)	

### Degree Program (Credit Hours): General(90)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

<sup>1</sup> Students must satisfy the residence requirement for the degree program in order to be eligible for graduation. This is defined as either a total of 48 or at least 24 credit hours at the University of Manitoba.

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of

3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
NATV 1220	Indigenous Peoples in Canada, Part 1 (No longer offered) <sup>1</sup>	3
BIOL 1010	Biology: Biological Diversity and Interaction <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law <sup>3</sup>	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
BIOL 2390	Introductory Ecology <sup>2</sup>	3
Select 3 credit hours from List B <sup>4</sup>		3
<b>Hours</b>		<b>15</b>
<b>Years 3-4</b>		
GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>5</sup>	3
ENVR 4110	Critical Thinking and the Environment	3
ENVR 4500	Thesis Project in Environmental Science and Studies	6
Select 33 credit hours in an approved Focus Area <sup>6</sup>		33
Select enough elective credit to total 120 credit hours for the program		36
<b>Hours</b>		<b>81</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are permitted to substitute NATV 1220 with another 3 credit hours from the department (not a language) or approved alternative course. See the Riddell Faculty student advisor (riddell.faculty@umanitoba.ca) for assistance.

<sup>2</sup> Students with an interest in the Conservation and Biodiversity Focus Area (or other Focus Areas including advanced Biology courses) are advised to complete the combination of BIOL 1020 and BIOL 1030 as well as BIOL 2300 (or AGECE 2370) instead of BIOL 1010 and BIOL 2390.

<sup>3</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.

<sup>4</sup> Students must complete 3 credit hours of course work containing significant international content. Students are referred to List B for a list of available courses. Students may substitute with another course as approved by the student advisor.

<sup>5</sup> The former GEOG 3680 may be used in lieu of GEOG 3810.

<sup>6</sup> Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation (p. 519). Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).

Advanced Entry into the degree programs is summarized in the Overview (p. ).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118). (p. 118)

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

## Honours Cooperative Option

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
NATV 1220	Indigenous Peoples in Canada, Part 1 (No longer offered) <sup>1</sup>	3
BIOL 1010	Biology: Biological Diversity and Interaction <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law <sup>3</sup>	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
BIOL 2390	Introductory Ecology <sup>2</sup>	3
Select 3 credit hours from List B <sup>4</sup>		3
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3910	Coop Work Term Report 1	1.5
<b>Hours</b>		<b>18</b>
<b>Years 3-4</b>		
GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>5</sup>	3
ENVR 4110	Critical Thinking and the Environment	3
ENVR 4500	Thesis Project in Environmental Science and Studies	6
Select 33 credit hours in an approved Focus Area <sup>6</sup>		33
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 4980	Work Term 3 (optional)	
ENVR 4910	Coop Work Term Report 3 (optional)	

Select enough elective credit to total 120 credit hours for the program.	30
<b>Hours</b>	<b>78</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> Students are permitted to substitute NATV 1220 with another 3 credit hours from the department (not a language) or approved alternative course. See the Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) for assistance.
- <sup>2</sup> Students with an interest in the Conservation and Biodiversity Focus Area (or other Focus Areas including advanced Biology courses) are advised to complete the combination of BIOL 1020 and BIOL 1030 as well as BIOL 2300 (or AGECE 2370) instead of BIOL 1010 and BIOL 2390.
- <sup>3</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.
- <sup>4</sup> Students must complete 3 credit hours of course work containing significant international content. Students are referred to List B for a list of available courses. Students may substitute with another course as approved by the student advisor.
- <sup>5</sup> The former GEOG 3680 may be used in lieu of GEOG 3810.
- <sup>6</sup> Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation (p. 519). Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).

Advanced Entry into the degree programs is summarized in the Overview (p. ).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through ENVR 2010, ENVR 2020, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020 as well as those offered through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/#about-us>).

- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the entrance requirements chart.

## List B

Courses containing significant international content<sup>1</sup>:

Course	Title	Hours
ABIZ 1010	Economics of World Food Issues and Policies	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
ECON 3670	International Trade	3
POLS 2040	Course No Longer Offered	
POLS 3220	Course No Longer Offered	
POLS 3250	International Political Economy	3
GEOG 4260	Sacred Lands	3

<sup>1</sup> Or courses approved by a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)).

## Cooperative Education Option

A Cooperative Education Option (<https://umanitoba.ca/environment-earth-resources/student-experience/#learning-outside-the-classroom>) is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work term placements. Further information about Cooperative Education and student eligibility is available from the Coop Placement Coordinator (<https://umanitoba.ca/faculties/environment/undergraduate/coop/contact.html>) available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree program. Students complete ENVR 2900, ENVR 3900, work term placements ENVR 3980, ENVR 3990, and the work term report courses ENVR 3910 and ENVR 3920. Additional work terms are available to interested students. Each academic term and each employment term commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program (<http://umanitoba.ca/faculties/environment/undergraduate/coop/>) webpage

## Environmental Studies, B.Env.St. Major

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### Program Information

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers General, Major, and Honours degree programs leading to a Bachelor of Environmental Science (B.Env.Sc.) and Bachelor of Environmental Studies (B.Env.St.). Through an interdisciplinary approach, environmental issues relating to human populations, sustainable resource development, pollution and conservation, environmental health, and endangerment and preservation of species are explored in conjunction with alternative conditions that have the potential to reverse current trends and contribute to ecological sustainability. Students have access to undergraduate courses offered by the Clayton H. Riddell Faculty of Environment, Earth, and Resources as well as the Faculties of Agricultural and Food Sciences, Arts, Law, Engineering, Architecture, and Science in order to complete their education. They are expected to take many courses outside the Riddell Faculty enabling them to obtain a truly interdisciplinary education.

The Major and Honours degree programs serve students who desire advanced study in an environmental field. The programs are intended for students interested in professional training and the opportunity for advanced research. Honours degree programs demand higher academic performance and lead most directly to graduate studies. Students who are ineligible to enter the Honours degree program in their third year may establish this in the following year on the basis of their improved scholastic performance. See a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for information. The degree programs may be pursued on a full- or part-time basis.

The B.Env.Sc. and B.Env.St. degree programs share a general structure that includes a foundation of either introductory Sciences or Social Sciences/ Humanities. Students complete an environmental core and a Focus Area that is defined through consultation with a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty general office. Students completing the General degree program are required to complete 9 credit hours in a Focus Area; Major, Major Coop, Honours and Honours Coop students complete 33 credit hours in a Focus Area. Other Focus Area requirements are defined in the graduation requirements (<https://umanitoba-ca-curr.courseleaf.com/undergraduate-studies/environment-earth-resources/environment-geography/#Minimum%20Performance%20Requirements%20for%20Continuation%20and%20Graduation>). You may also refer to the Focus Area Brochure (<https://>

umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\_areas.pdf) for further information.

## GENERAL

To qualify for the degree Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General), students must complete 90 credit hours including all faculty and degree requirements (including the foundation, environmental core and 9 credit hours of minimum 2000-level courses in a Focus Area). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00. There is no limit to the number of credit hours a student completes provided he/she does not exceed 48 credit hours of failed courses.

## MAJOR

To qualify for the degree Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major), a student must complete 120 credit hours with a minimum degree grade point average of 2.00. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000 or 4000-level; 2.00 Grade Point Average and minimum "C+" grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses

## HONOURS

To qualify for the degree Bachelor of Environmental Science (Honours) or Bachelor of Environmental Studies (Honours), a student must complete 120 credit hours with a minimum degree grade point average of 3.25. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000- or 4000-level; 3.00 Grade Point Average and minimum 'C+' grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

## MINOR IN ANOTHER DEPARTMENT

Students in the B.Env.Sc. and B.Env.St. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students are not permitted to complete a Minor in Environmental Science or Environmental Studies. Contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for further information about eligible Minors.

## Advanced Entry Entrance Requirements

Advanced Entry students are placed in the Major degree program in either the Bachelor of Environmental Science or Bachelor of Environmental Studies until they have completed a minimum of 48 credit hours after which they can transfer to the General or Honours program or remain in the Major. To make a program transfer students must consult with a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

## BACHELOR OF ENVIRONMENTAL STUDIES ADVANCED ENTRY ENTRANCE REQUIREMENTS

**Degree: Honours**

**Minimum Number of Credit Hours: 48**

**Minimum Degree Grade Point Average: 3.25**

**Additional Advanced Entry Entrance Requirements:** No

failures on entry<sup>1</sup>; a grade of 'B' or better in ENVR 1000 and ENVR 2000; GEOG 1280<sup>3</sup> and GEOG 1290<sup>3</sup>, ENVR 3160, with a grade of 'C+' or better in six of the 15 credit hours, and a grade of 'C' or better in the remaining nine credit hours.

**Degree: Honours (Coop)<sup>2</sup>**

**Minimum Number of Credit Hours: 60**

**Minimum Degree Grade Point Average: 3.25**

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; ENVR 2900; students must satisfy the requirements for entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
BIOL 2390	Introductory Ecology <sup>3</sup>	3
or BIOL 2300	Principles of Ecology	
or		
AGEC 2370	Principles of Ecology	
BIOL 1010	Biology: Biological Diversity and Interaction <sup>3</sup>	3
or BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	

**Degree: Major**

**Minimum Number of Credit Hours: 24**

**Minimum Degree Grade Point Average: 2.00**

**Additional Advanced Entry Entrance Requirements:** 12 credit hours taken from the following with a grade of 'C+' or better in six of the 12 credit hours, and a grade of 'C' or better in the remaining six credit hours:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
BIOL 1010	Biology: Biological Diversity and Interaction <sup>3</sup>	3
or BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
NATV 1220	Course no longer offered	

**Degree: Major (Coop)<sup>1</sup>**

**Minimum Number of Credit Hours: 60**

**Minimum Degree Grade Point Average: 2.50**

**Additional Advanced Entry Entrance Requirements:** ENVR 2900; students must satisfy the requirements for continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
BIOL 2390	Introductory Ecology <sup>3</sup>	3
or BIOL 2300	Principles of Ecology	
or		
AGEC 2370	Principles of Ecology	
BIOL 1010	Biology: Biological Diversity and Interaction <sup>3</sup>	3
or BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	

#### Degree: General

Minimum Number of Credit Hours: 48

Minimum Degree Grade Point Average: 2.00

- <sup>1</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with a Student Advisor for further information.
- <sup>2</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.
- <sup>3</sup> Equivalent courses offered through Université de Saint- Boniface may be used in lieu of the specified courses identified in the entrance requirements chart. Université de Saint-Boniface courses end in the number "1" (e.g. GEOG 1281)

### Minimum Performance Requirements for Continuation and Graduation

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for

credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

#### DEGREE PROGRAM (CREDIT HOURS): HONOURS (120)

##### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

##### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

#### DEGREE PROGRAM (CREDIT HOURS): HONOURS COOP (120)

##### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

##### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

#### DEGREE PROGRAM (CREDIT HOURS): MAJOR (120)

##### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

##### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

#### DEGREE PROGRAM (CREDIT HOURS): MAJOR (COOP) (120)

##### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

**Additional Graduation Requirements**<sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours
- Coop Option Courses:

**DEGREE PROGRAM (CREDIT HOURS): GENERAL(90)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

**Graduating with Distinction or First Class Honours****WITH DISTINCTION**

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

**FIRST CLASS HONOURS**

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

**Minimum Performance Requirements for Continuation and Graduation**

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined

in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

**Degree Program (Credit Hours): Honours (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

**Additional Graduation Requirements**<sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

**Degree Program (Credit Hours): Honours Coop (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

**Additional Graduation Requirements**<sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (Optional)	
ENVR 4980	Work Term 3 (Optional)	

**Degree Program (Credit Hours): Major (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

**Additional Graduation Requirements**<sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

**Degree Program (Credit Hours): Major (Coop) (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18

- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours
- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	
ENVR 4980	Work Term 3 (optional)	

### Degree Program (Credit Hours): General(90)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

<sup>1</sup> Students must satisfy the residence requirement for the degree program in order to be eligible for graduation. This is defined as either a total of 48 or at least 24 credit hours at the University of Manitoba.

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3

NATV 1220	Indigenous Peoples in Canada, Part 1 (No longer offered) <sup>1</sup>	3
BIOL 1010	Biology: Biological Diversity and Interaction <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>24</b>

### Year 2

ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law <sup>3</sup>	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
BIOL 2390	Introductory Ecology <sup>2</sup>	3
Select 3 credit hours from List B <sup>4</sup>		3
<b>Hours</b>		<b>15</b>

### Years 3-4

GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>5</sup>	3
ENVR 4110	Critical Thinking and the Environment	3
Select 33 credit hours in an approved Focus Area <sup>6</sup>		33
Select enough elective credit to total 120 credit hours for the program.		42
<b>Hours</b>		<b>81</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are permitted to substitute NATV 1220 with another 3 credit hours from the department (not a language) or approved alternative course. See the Riddell Faculty student advisor (riddell.faculty@umanitoba.ca) for assistance.

<sup>2</sup> Students with an interest in the Conservation and Biodiversity Focus Area (or other Focus Areas including advanced Biology courses) are advised to complete the combination of BIOL 1020 and BIOL 1030 as well as BIOL 2300 (or AGECE 2370) instead of BIOL 1010 and BIOL 2390.

<sup>3</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.

<sup>4</sup> Students must complete 3 credit hours of course work containing significant international content. Students are referred to List B for a list of available courses. Students may substitute with another course as approved by the student advisor.

<sup>5</sup> The former GEOG 3680 may be used in lieu of GEOG 3810.

<sup>6</sup> Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation. (p. 525) Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).

Advanced Entry into the degree programs is summarized in the Overview (p. 516).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118). (<https://catalog.umanitoba.ca/undergraduate-studies/environment-earth-resources/environment-geography/environmental-studies-benvst-major/undergraduate-studies/general-academic-regulations/#Residence-Written-English>)



The W course (p. 118) must be completed within the first 60 credit hours of coursework.

## Major Cooperative Option

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
NATV 1220	Indigenous Peoples in Canada, Part 1 (No longer offered) <sup>1</sup>	3
BIOL 1010	Biology: Biological Diversity and Interaction <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law <sup>3</sup>	3
ECON/ABIZ 2390	Introduction to Environmental Economics	3
BIOL 2390	Introductory Ecology <sup>2</sup>	3
Select 3 credit hours from List B <sup>4</sup>		3
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3910	Coop Work Term Report 1	1.5
<b>Hours</b>		<b>18</b>
<b>Years 3-4</b>		
GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>5</sup>	3
ENVR 4110	Critical Thinking and the Environment	3
Select 33 credit hours in an approved Focus Area <sup>6</sup>		33
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 4980	Work Term 3 (optional)	
ENVR 4910	Coop Work Term Report 3 (optional)	
Select enough elective credit to total 120 credit hours for the program		36
<b>Hours</b>		<b>78</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are permitted to substitute NATV 1220 with another 3 credit hours from the department (not a language) or approved alternative course. See the Riddell Faculty student advisor (riddell.faculty@umanitoba.ca) for assistance.

<sup>2</sup> Students with an interest in the Conservation and Biodiversity Focus Area (or other Focus Areas including advanced Biology courses) are advised to complete the combination of BIOL 1020 and BIOL 1030 as well as BIOL 2300 (or AGECE 2370) instead of BIOL 1010 and BIOL 2390.

<sup>3</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.

<sup>4</sup> Students must complete 3 credit hours of course work containing significant international content. Students are referred to List B for a list of available courses. Students may substitute with another course as approved by the student advisor.

<sup>5</sup> The former GEOG 3680 may be used in lieu of GEOG 3810.

<sup>6</sup> Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation (p. 525). Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).

Advanced Entry into the degree programs is summarized in the Overview (p. ).

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through ENVR 2010, ENVR 2020, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020 as well as those offered through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/#about-us>).
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the entrance requirements chart.

## List B

Courses containing significant international content<sup>1</sup>:

Course	Title	Hours
ABIZ 1010	Economics of World Food Issues and Policies	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
ECON 3670	International Trade	3
POLS 2040	Course No Longer Offered	
POLS 3220	Course No Longer Offered	

POLS 3250	International Political Economy	3
GEOG 4260	Sacred Lands	3

<sup>1</sup> Or courses approved by a Riddell Faculty student advisor (riddell.faculty@umanitoba.ca).

## Cooperative Education Option

A Cooperative Education Option (<https://umanitoba.ca/environment-earth-resources/student-experience/#learning-outside-the-classroom>) is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work term placements. Further information about Cooperative Education and student eligibility is available from the Coop Placement Coordinator (<https://umanitoba.ca/faculties/environment/undergraduate/coop/contact.html>) available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree program. Students complete ENVR 2900, ENVR 3900, work term placements ENVR 3980, ENVR 3990, and the work term report courses ENVR 3910 and ENVR 3920. Additional work terms are available to interested students. Each academic term and each employment term commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program (<http://umanitoba.ca/faculties/environment/undergraduate/coop/>) webpage

## Environmental Studies, B.Env.St. General

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### Program Information

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers General, Major, and Honours degree programs leading to a Bachelor of Environmental Science (B.Env.Sc.) and Bachelor of Environmental Studies (B.Env.St.). Through an interdisciplinary approach, environmental issues relating to human populations, sustainable resource development, pollution and conservation, environmental health, and endangerment and preservation of species are explored in conjunction with alternative conditions that have the potential to reverse current trends and contribute to ecological sustainability. Students have access to undergraduate courses offered by the Clayton H. Riddell Faculty of Environment, Earth, and Resources as well as the Faculties of Agricultural and Food Sciences, Arts, Law, Engineering, Architecture, and Science in order to complete their education. They are expected to take many courses outside the Riddell Faculty enabling them to obtain a truly interdisciplinary education.

The Major and Honours degree programs serve students who desire advanced study in an environmental field. The programs are intended for students interested in professional training and the opportunity for advanced research. Honours degree programs demand higher academic performance and lead most directly to graduate studies. Students who are ineligible to enter the Honours degree program in their third year may establish this in the following year on the basis of their improved scholastic performance. See a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for information. The degree programs may be pursued on a full- or part-time basis.

The B.Env.Sc. and B.Env.St. degree programs share a general structure that includes a foundation of either introductory Sciences or Social Sciences/ Humanities. Students complete an environmental core and a Focus Area that is defined through consultation with a Riddell Faculty student advisor (riddell.faculty@umanitoba.ca) in the Faculty general office. Students completing the General degree program are required to complete 9 credit hours in a Focus Area; Major, Major Coop, Honours and Honours Coop students complete 33 credit hours in a Focus Area. Other Focus Area requirements are defined in the graduation requirements (<https://umanitoba-ca-curr.courseleaf.com/undergraduate-studies/environment-earth-resources/environment-geography/#Minimum%20Performance%20Requirements%20for%20Continuation%20and%20Graduation>). You may also refer to the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)) for further information.

### GENERAL

To qualify for the degree Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General), students must complete 90 credit hours including all faculty and degree requirements (including the foundation, environmental core and 9 credit hours of minimum 2000-level courses in a Focus Area). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00. There is no limit to the number of credit hours a student completes provided he/she does not exceed 48 credit hours of failed courses.

### MAJOR

To qualify for the degree Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major), a student must complete 120 credit hours with a minimum degree grade point average of 2.00. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000 or 4000- level; 2.00 Grade Point Average and minimum "C+" grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses

#### HONOURS

To qualify for the degree Bachelor of Environmental Science (Honours) or Bachelor of Environmental Studies (Honours), a student must complete 120 credit hours with a minimum degree grade point average of 3.25. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000- or 4000-level; 3.00 Grade Point Average and minimum 'C+' grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

#### MINOR IN ANOTHER DEPARTMENT

Students in the B.Env.Sc. and B.Env.St. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students are not permitted to complete a Minor in Environmental Science or Environmental Studies. Contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) in the Faculty general office for further information about eligible Minors.

#### Advanced Entry Entrance Requirements

Advanced Entry students are placed in the Major degree program in either the Bachelor of Environmental Science or Bachelor of Environmental Studies until they have completed a minimum of 48 credit hours after which they can transfer to the General or Honours program or remain in the Major. To make a program transfer students must consult with a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

#### BACHELOR OF ENVIRONMENTAL STUDIES ADVANCED ENTRY ENTRANCE REQUIREMENTS

##### Degree: Honours

**Minimum Number of Credit Hours:** 48

**Minimum Degree Grade Point Average:** 3.25

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; a grade of 'B' or better in ENVR 1000 and ENVR 2000; GEOG 1280<sup>3</sup> and GEOG 1290<sup>3</sup>, ENVR 3160, with a grade of 'C+' or better in six of the 15 credit hours, and a grade of 'C' or better in the remaining nine credit hours.

##### Degree: Honours (Coop)<sup>2</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 3.25

**Additional Advanced Entry Entrance Requirements:** No failures on entry<sup>1</sup>; ENVR 2900; students must satisfy the requirements for entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
BIOL 2390	Introductory Ecology <sup>3</sup>	3
or BIOL 2300	Principles of Ecology	
or		
AGEC 2370	Principles of Ecology	
BIOL 1010	Biology: Biological Diversity and Interaction <sup>3</sup>	3
or BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	

#### Degree: Major

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00

**Additional Advanced Entry Entrance Requirements:** 12 credit hours taken from the following with a grade of 'C+' or better in six of the 12 credit hours, and a grade of 'C' or better in the remaining six credit hours:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
BIOL 1010	Biology: Biological Diversity and Interaction <sup>3</sup>	3
or BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3
NATV 1220	Course no longer offered	

#### Degree: Major (Coop)<sup>1</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 2.50

**Additional Advanced Entry Entrance Requirements:** ENVR 2900; students must satisfy the requirements for continuation in the regular program and (normally) have completed:

Course	Title	Hours
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law	3
GEOG 1280	Introduction to Human Geography <sup>3</sup>	3
GEOG 1290	Introduction to Physical Geography <sup>3</sup>	3
ECON 2390	Introduction to Environmental Economics	3
or ABIZ 2390	Introduction to Environmental Economics	
STAT 1000	Basic Statistical Analysis 1 <sup>3</sup>	3

BIOL 2390 or BIOL 2300	Introductory Ecology <sup>3</sup> Principles of Ecology	3
or		
AGEC 2370	Principles of Ecology	
BIOL 1010 or BIOL 1030	Biology: Biological Diversity and Interaction <sup>3</sup> Biology 2: Biological Diversity, Function and Interactions	3

**Degree: General****Minimum Number of Credit Hours:** 48**Minimum Degree Grade Point Average:** 2.00

- <sup>1</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with a Student Advisor for further information.
- <sup>2</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.
- <sup>3</sup> Equivalent courses offered through Université de Saint- Boniface may be used in lieu of the specified courses identified in the entrance requirements chart. Université de Saint-Boniface courses end in the number "1" (e.g. GEOG 1281)

**Minimum Performance Requirements for Continuation and Graduation**

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw

out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

**DEGREE PROGRAM (CREDIT HOURS): HONOURS (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

**Additional Graduation Requirements<sup>1</sup>**

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

**DEGREE PROGRAM (CREDIT HOURS): HONOURS COOP (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

**Additional Graduation Requirements<sup>1</sup>**

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

**DEGREE PROGRAM (CREDIT HOURS): MAJOR (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

**Additional Graduation Requirements<sup>1</sup>**

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

**DEGREE PROGRAM (CREDIT HOURS): MAJOR (COOP) (120)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

**Additional Graduation Requirements<sup>1</sup>**

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours
- Coop Option Courses:

**DEGREE PROGRAM (CREDIT HOURS): GENERAL(90)****Minimum Performance Requirements**

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

**Graduating with Distinction or First Class Honours WITH DISTINCTION**

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their

degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

## Minimum Performance Requirements for Continuation and Graduation

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (p. 492) (Academic Standing).

Students required to withdraw from the Honours degree program will have the statement 'Required to Withdraw from the Honours Program' recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement 'Required to Withdraw from the Major Program' recorded on their transcript.

### Degree Program (Credit Hours): Honours (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18

- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

### Degree Program (Credit Hours): Honours Coop (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 3.25
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum 'C+' grade in each course.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (Optional)	
ENVR 4980	Work Term 3 (Optional)	

### Degree Program (Credit Hours): Major (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000- levels: 33 credit hours

### Degree Program (Credit Hours): Major (Coop) (120)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.50
- Maximum Credit Hours of Failures: 18
- Focus Area: 33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.

#### Additional Graduation Requirements <sup>1</sup>

- Minimum credit hours of course work completed at the 3000- and 4000-levels: 39 credit hours

- Coop Option Courses:

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5

ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	
ENVR 4980	Work Term 3 (optional)	

### Degree Program (Credit Hours): General(90)

#### Minimum Performance Requirements

- Minimum Degree Grade Point Average (DGPA): 2.00
- Maximum Credit Hours of Failures: 48
- Focus Area: 9 credit hours

<sup>1</sup> Students must satisfy the residence requirement for the degree program in order to be eligible for graduation. This is defined as either a total of 48 or at least 24 credit hours at the University of Manitoba.

### Graduating with Distinction or First Class Honours

#### WITH DISTINCTION

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student's transcript.

#### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

## Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
NATV 1220	Indigenous Peoples in Canada, Part 1 (No longer offered) <sup>1</sup>	3
BIOL 1010	Biology: Biological Diversity and Interaction <sup>2</sup>	3
STAT 1000	Basic Statistical Analysis 1	3
ECON 1010	Introduction to Microeconomic Principles	3
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
ENVR 2350	Technical Communication in the Environmental Sectors	3
ENVR 3160	Environmental Responsibilities and the Law <sup>3</sup>	3

ECON/ABIZ 2390	Introduction to Environmental Economics	3
BIOL 2390	Introductory Ecology <sup>2</sup>	3
Select 3 credit hours from List B <sup>4</sup>		3
<b>Hours</b>		<b>15</b>

#### Years 3-4

GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>5</sup>	3
ENVR 4110	Critical Thinking and the Environment	3
Select 9 credit hours in an approved Focus Area <sup>6</sup>		9
Select enough elective credit to total 90 credit hours for the program.		36

**Hours** **51**

**Total Hours** **90**

- <sup>1</sup> Students are permitted to substitute NATV 1220 with another 3 credit hours from the department (not a language) or approved alternative course. See the Riddell Faculty student advisor (riddell.faculty@umanitoba.ca) for assistance.
- <sup>2</sup> Students with an interest in the Conservation and Biodiversity Focus Area (or other Focus Areas including advanced Biology courses) are advised to complete the combination of BIOL 1020 and BIOL 1030 as well as BIOL 2300 (or AGECE 2370) instead of BIOL 1010 and BIOL 2390.
- <sup>3</sup> The former ENVR 2650 may be used in lieu of ENVR 3160.
- <sup>4</sup> Students must complete 3 credit hours of course work containing significant international content. Students are referred to List B for a list of available courses. Students may substitute with another course as approved by the student advisor.
- <sup>5</sup> The former GEOG 3680 may be used in lieu of GEOG 3810.
- <sup>6</sup> Focus Area performance requirements are defined in Minimum Performance Requirements for Continuation and Graduation (p. 519). Information on Focus Areas is available in the Focus Area Brochure ([https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus\\_areas.pdf](https://umanitoba.ca/environment-earth-resources/sites/environment-earth-resources/files/2021-03/focus_areas.pdf)).

Advanced Entry into the degree programs is summarized in the Overview. (p. 545)

The courses required in this program will satisfy the University Mathematics Requirements (p. 118).

The W course (p. 118) must be completed within the first 60 credit hours of coursework.

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

#### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through ENVR 2010, ENVR 2020, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020 as well as those offered through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the

Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).

- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office ([environment\\_geography@umanitoba.ca](mailto:environment_geography@umanitoba.ca)).
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the entrance requirements chart.

## List B

Courses containing significant international content<sup>1</sup>:

Course	Title	Hours
ABIZ 1010	Economics of World Food Issues and Policies	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
ECON 3670	International Trade	3
POLS 2040	Course No Longer Offered	
POLS 3220	Course No Longer Offered	
POLS 3250	International Political Economy	3
GEOG 4260	Sacred Lands	3

<sup>1</sup> Or courses approved by a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)).

## Environmental Studies Minor

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
<b>Hours</b>		<b>6</b>
<b>Years 2-4</b>		
Select 12 credit hours of ENVR courses numbered at the 2000-level or above.		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

Advanced Entry into the degree programs is summarized in the Overview (p. 534).

The courses required in this program will satisfy the University Mathematics Requirements. (p. 118)

**Important:** The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

#### Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through ENVR 2010, ENVR 2020, ENVR 3010, ENVR 3020, ENVR 4000, ENVR 4010, and ENVR 4020 as well as those offered through

GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670.

Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).

- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office ([environment\\_geography@umanitoba.ca](mailto:environment_geography@umanitoba.ca)).
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the entrance requirements chart.

## Geography, B.A. Honours

### Bachelor of Arts in Geography

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### Program Information

There are three areas where students can focus their course work in the B.A. in Geography program:

- *Resources, Environment and Society (RS)* focuses on the geographies of natural and human induced environmental processes in the recognition that current environmental change shapes relationships across all scales of society;
- *Global Politics, Justice, and Sustainability (GPS)* a global scale, integrated assessment of the links between the economic, socio-cultural, ecological and political systems that combine to shape the world in which we live; and
- *Culture, Identity and Space (CIS)* which emphasizes the dynamics between identity, culture and landscapes, with a particular focus on cooperation and conflict that produce local landscapes.

These areas reflect the expertise of the department and are not required for students in the program. A guide to these areas, and the courses that align with them, is published by the department.

The attraction of Geography as a discipline lies in its diverse interests and approaches to knowledge building while being centred on the fundamental concepts of human-environment relations, location/place and space/ distance. Geographers see the world and want to know how physical processes and systems shape the land, air, water, flora and fauna around them and how these are influenced by human activity. We want to know how human societies, cultures, and economies work and how these human systems are interdependent with each other and with natural systems. We work at a variety of geographic scales, from the micro-scale of local communities and regions, through the macro-scale of global human and physical systems. Human geography embraces the study of topics as wide-ranging as: human-environment relationships, globalization, social justice, attachment to place, recreation and tourism, climate change, and geopolitics. Therefore, by selecting courses from within the department, as well as complementary courses from other academic units of the University, students can develop fascinating,

focused and challenging degree programs that will prepare them for careers in a variety of areas.

The General B.A. degree in Geography (90 credit hours, 30 in Geography) provides students with a basic level of understanding of the discipline and its inter-relationships. **This degree is also a useful consideration for students planning to complete the After-Degree Bachelor of Education program (see Faculty of Education (p. 447)).** The General degree program may be completed entirely by Distance Education.

The Advanced B.A. degree program in Geography (120 credit hours, 51 in Geography) provides opportunities for students who desire a broad geographical education along with a significant degree of specialization in a particular field of Geography.

Students planning a professional career, graduate school or a high degree of specialization in Geography are strongly advised to enter the Honours B.A. degree program (120 credit hours, 69 in Geography). The Honours degree demands the highest scholastic performance of all programs available. Students are strongly advised to enter an Honours degree program with their admission to the Bachelor of Arts in Geography. Consultation with the department head and Faculty academic advisors is also recommended.

### STRUCTURE OF THE B.A. GEOGRAPHY DEGREE PROGRAM

The structure of the B.A. Geography degree is summarized as follows:

A **Geography (Major)** component that varies in credit hour requirement depending on the degree program; 30 credit hours in the General; 51 credit hours in the Advanced; and 69 credit hours in the Honours.

Students are not permitted to declare a second major.

Advanced and General degree students must complete a **Minor** in a subject field that is different than that of the declared major. Honours degree students may, if they choose, complete a Minor in a subject field that is different than that of the declared major. The minor may be chosen from one of the other programs in the Clayton H. Riddell Faculty of Environment, Earth, and Resources or any program at the University that offers a Minor. Students in the B.A. Geography are not permitted to complete a Minor in Physical Geography. Refer to the Minor requirements as described in the Faculty Regulations (p. 492). Contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) i (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>)n the Faculty Dean's Office for further information about eligible Minors.

Students must complete 5 subject fields with 6 credit hours in each (30 credit hours). For example: 6 credit hours in Geography, plus 6 credit hours in Mathematics, plus 6 credit hours in Geological Sciences, plus 6 credit hours in Anthropology, plus 6 credit hours in Native Studies.

Students must also complete 6 credit hours from Humanities, and 6 credit hours offered by the Faculty of Arts, and 6 credit hours of science courses.

**Note:** Students can satisfy the requirement for Humanities, and/or Arts, or science and at the same time satisfy the Written English or Mathematics requirement and one of the 5 subject fields required with the same 6 credit hours of courses.

### Humanities

For course subjects taught by the Faculty of Arts that can be used towards the Humanities requirement, refer to the Faculty of Arts, Additional Faculty Regulations and Policies (p. 211). Music (i.e. all courses listed for Advanced Major and Minor programs except ensemble

courses) and History of Art (i.e. all courses listed with course prefix FAAH) may also be eligible courses. Students should see a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) for further information.

### B.A. IN GEOGRAPHY - GENERAL: ACADEMIC REGULATIONS

To qualify for the degree Bachelor of Arts in Geography (General), students must complete 90 credit hours including: all course requirements; a chosen minor field; the requirements in the five subject fields; and areas of Humanities, Arts, and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00 on Geography courses as well as the 90 credit hours that constitute the degree. Students cannot exceed 48 credit hours of failed courses.

### B.A. IN GEOGRAPHY - ADVANCED: ACADEMIC REGULATIONS

To qualify for the Bachelor of Arts in Geography (Advanced) degree, students must complete 120 credit hours including: all course and performance requirements; a chosen minor field; the requirements in the five subject fields; and areas of Humanities, Arts, and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00 on Geography courses and the 120 credit hours that constitute the degree. Students cannot exceed 18 credit hours of failed courses.

### B.A. IN GEOGRAPHY - HONOURS: ACADEMIC REGULATIONS

To qualify for the Bachelor of Arts in Geography (Honours) degree, students must complete 120 credit hours including: all course and performance requirements; the requirements in the five subject fields, and the areas of Humanities, Arts and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 3.00 on Geography courses and the 120 credit hours that constitute the degree. Students cannot exceed 18 credit hours of failed courses.

## Advanced Entry Requirements

Students are required to attain a minimum degree Grade Point Average of 2.00 based on the Degree Standards Table to be eligible for admission to the B.A. in Geography. Students who are admitted will be placed in the General degree program. Students may be eligible for transfer to either the Advanced or Honours degree program provided they satisfy the entrance requirements defined below. To enter the Advanced or Honours degree program, a student must consult with a Riddell Faculty student advisor in the Faculty Dean's Office.

### DEGREE PROGRAM IN B.A. GEOGRAPHY - HONOURS

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 3.00

**Maximum Credit Hours of Failed Courses:** 18

**Additional Entrance Requirements:** Grade of 'B' from GEOG 1280, GEOG 1290<sup>1</sup> and/or GEOG 1700/GPE 1700 or a GPA of 3.00 or better in all Geography courses

### DEGREE PROGRAM IN B.A. GEOGRAPHY - ADVANCED

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00

**Maximum Credit Hours of Failed Courses:** 18

**Additional Entrance Requirements:** grade of 'C' from GEOG 1280, GEOG 1290<sup>1</sup> and/or GEOG 1700/GPE 1700



## DEGREE PROGRAM IN B.A. GEOGRAPHY - GENERAL

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00<sup>1</sup>

**Maximum Credit Hours of Failed Courses:** 48

**Additional Entrance Requirements:** grade of 'C' from GEOG 1280, GEOG 1290<sup>2</sup> and/or GEOG 1700/GPE 1700

## Grade Point Average Calculation for Entrance and Continuation

General degree students in the B.A. Geography must attain a minimum 2.00 Grade Point Average at each point of assessment. The Degree Standards Table listed below is used to determine a student's eligibility for admission to the Riddell Faculty as well as evaluate a student's performance after each term.

### DEGREE STANDARDS TABLE

Credit Hours	Minimum Degree GPA
24-30	1.8
33-45	1.85
48-60	1.90
63-75	1.95
78-90	2.00
93+ hours	2.00

## Minimum Performance Requirements

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each *term* in which the student is registered in more than 4.0 credit hours. To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards outlined for his/her degree program at each point of assessment. For General degree students, this includes the Degree Standards Table, (p. 552) as well as the requirements outlined in Minimum Performance Requirements for Continuation and Graduation. (p. 552) Students in the Advanced and Honours degrees are required to satisfy the requirements listed in 5.3.1. Minimum academic performance is based on the degree Grade Point Average and number of failed courses. Prior to each registration, Advanced and Honours degree students must have their course selections approved by a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>). Students may not make any subsequent changes without receiving prior written permission.

To graduate with a B.A. Geography with the intended degree designation, a student must achieve the minimum performance standards and graduation requirements following their last term of registration and satisfy all faculty and degree requirements in Geography as defined in minimum performance standards and graduation requirements and in the B.A. Geography Honours Program. (p. 551)

Students in the Honours and Advanced degree programs who do not meet these minimum performance requirements will be withdrawn from their existing program and placed in the Advanced and General degrees respectively. Students who do not meet the minimum performance requirements for the General degree program will receive an academic warning, be placed on probation or academic suspension as defined Academic Warning, Probation, Academic Suspension and Special Students (p. 495) (Academic Standing). Students withdrawn from the Honours degree program may be eligible to enter the Advanced program and are required to obtain permission from a Riddell Faculty student

advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

Students withdrawn from the Honours degree program will have the notation, 'Required to Withdraw from the Honours Program', recorded on their transcript. Similarly, students withdrawn from the Advanced program will have the notation, 'Required to Withdraw from the Advanced Program', recorded on their transcript.

## MINIMUM PERFORMANCE REQUIREMENTS FOR CONTINUATION AND GRADUATION

Degree Program (Cr. Hrs.)	Minimum Degree Grade Point Average (DGPA)	Maximum Cr. Hrs. Failed Courses	Minimum Degree GPA in Geography Courses <sup>1</sup>	Geography Courses Cr. Hr. Requirements	Residence Requirement (Cr. Hrs.) <sup>3</sup>
Honours <sup>4,5</sup> (120)	3.00	18	3.00	69	60
Advanced <sup>1,4,5</sup> (120)	2.00	18	2.00	51	60
General <sup>1,4</sup>	2.00 <sup>6</sup>	48	2.00	30	48 cr. hrs. total or the final 30 cr. hrs.

<sup>1</sup> General and Advanced degree students are required to maintain a Degree Grade Point Average of 2.00 on the courses defining their Geography Major. **Note:** Students must complete all prerequisite courses with minimum "C" grades.

<sup>2</sup> See B.A. Geography-Honours (p. 550)

<sup>3</sup> See Faculty Requirements- Residence Requirements (p. 492)

<sup>4</sup> Within the first 60 credit hours of courses, students must have completed 6 credit hours in each of 5 subject fields (totalling 30 credit hours). See Program information in Bachelor of Arts Geography

<sup>5</sup> The courses required in this program may satisfy the university mathematics requirement (p. 118) and the science course requirement if selecting SOC 2290.

<sup>6</sup> See Grade Point Average Calculation for Entrance and Continuation

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a B.A. Geography (General) degree will have their degree granted 'With Distinction' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 60 credit hours of acceptable course work is completed at the University of Manitoba.

Students graduating with a B.A. Geography (Advanced) degree will have their degree granted 'With Distinction' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 90 credit hours of acceptable course work is completed at the University of Manitoba.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 90 credit hours of acceptable course work is completed at the University of Manitoba.

## Systematic (HS, PS, TS) and Area Studies (A) Courses

Courses numbered at the 2000- and 3000-level are arranged into Systematics (PS – Physical Geography, HS – Human Geography, TS Techniques) and Area Studies (A).

Courses offered for the current academic term are published in the Class Schedule in Aurora and can be searched by Attribute Type. To find Systematic (HS, PS, TS) courses search: 'Geography: Human', 'Geography: Physical' or 'Geography: Techniques'. To find Area Studies (A) courses search: 'Geography: Area Studies'.

## Degree Requirements

120 Credit Hours (69 credit hours in Geography)

Course	Title	Hours
<b>Year 1</b>		
Select 6 credit hours of the following:		6
GEOG 1280	Introduction to Human Geography	
GEOG 1290	Introduction to Physical Geography <sup>1</sup>	
GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	
Select 6 credits from Humanities <sup>2</sup>		6
Select 18 credit hours of Electives		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
Select 6 credit hours of the following:		6
GEOG 2520	Geography of Natural Resources (HS)	
GEOG 2640	Geography of Culture and Inequality (HS)	
GEOG 2870	Introduction to Economic Geography (HS)	
Select 12 credit hours in Geography courses numbered at the 2000- or 3000-level		12
Select 12 credit hours of Electives		12
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
GEOG 3730	Geographic Information Systems (TS) <sup>3</sup>	3
Select one of the following:		3
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>4</sup>	
WOMN 3000	Interdisciplinary Research in Women's and Gender Studies <sup>5</sup>	
ANTH 3930	Ethnographic Research Methods <sup>5</sup>	
SOC 2290	No Longer Offered	
Select 18 credit hours in Geography courses numbered at the 2000- or 3000-level		18
Select 6 credit hours of Electives		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
GEOG 4660	Honours Thesis	6
Select 18 credit hours in Geography courses numbered at the 4000- level		18
Select 6 credit hours of Electives		6
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> GEOG 1290 satisfies 3 of the required 6 credit hours of Science courses. Students in the Honours or Advanced degree programs will satisfy the Science requirement via other required course work. Students in the General degree selecting this course must complete an additional 3 credit hours of Science courses. General degree students electing GEOG 1280 or GEOG 1700 must complete 6 credit hours from science courses.

<sup>2</sup> May also satisfy the Faculty of Arts requirement.

<sup>3</sup> Students wishing to transfer from the General to the Advanced or Honours degree program are permitted to take GEOG 3730 in either third or fourth year.

<sup>4</sup> The former GEOG 2530 may be used in lieu of ENVR 2810.

<sup>5</sup> In order to register in these courses, students must have fulfilled the prerequisites.

### Notes:

- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.
- Entrance into the Honours and Advanced degree programs is summarized in Advanced Entry Requirements (p. 555).
- The W and M requirements must be completed within the first 60 credit hours.
- To fulfil prerequisite requirements, a grade of "C" must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwkschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwkschd.p_disp_dyn_sched/)).
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography ([geography\\_environment@umanitoba.ca](mailto:geography_environment@umanitoba.ca)) general office.

## Geography, B.A. Advanced Bachelor of Arts in Geography

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### Program Information

There are three areas where students can focus their course work in the B.A. in Geography program:

- *Resources, Environment and Society (RS)* focuses on the geographies of natural and human induced environmental processes in the recognition that current environmental change shapes relationships across all scales of society;
- *Global Politics, Justice, and Sustainability (GPS)* a global scale, integrated assessment of the links between the economic, socio-

cultural, ecological and political systems that combine to shape the world in which we live; and

- *Culture, Identity and Space (CIS)* which emphasizes the dynamics between identity, culture and landscapes, with a particular focus on cooperation and conflict that produce local landscapes.

These areas reflect the expertise of the department and are not required for students in the program. A guide to these areas, and the courses that align with them, is published by the department.

The attraction of Geography as a discipline lies in its diverse interests and approaches to knowledge building while being centred on the fundamental concepts of human-environment relations, location/place and space/ distance. Geographers see the world and want to know how physical processes and systems shape the land, air, water, flora and fauna around them and how these are influenced by human activity. We want to know how human societies, cultures, and economies work and how these human systems are interdependent with each other and with natural systems. We work at a variety of geographic scales, from the micro-scale of local communities and regions, through the macro-scale of global human and physical systems. Human geography embraces the study of topics as wide-ranging as: human-environment relationships, globalization, social justice, attachment to place, recreation and tourism, climate change, and geopolitics. Therefore, by selecting courses from within the department, as well as complementary courses from other academic units of the University, students can develop fascinating, focused and challenging degree programs that will prepare them for careers in a variety of areas.

The General B.A. degree in Geography (90 credit hours, 30 in Geography) provides students with a basic level of understanding of the discipline and its inter-relationships. **This degree is also a useful consideration for students planning to complete the After-Degree Bachelor of Education program (see Faculty of Education (p. 447) ).** The General degree program may be completed entirely by Distance Education.

The Advanced B.A. degree program in Geography (120 credit hours, 51 in Geography) provides opportunities for students who desire a broad geographical education along with a significant degree of specialization in a particular field of Geography.

Students planning a professional career, graduate school or a high degree of specialization in Geography are strongly advised to enter the Honours B.A. degree program (120 credit hours, 69 in Geography). The Honours degree demands the highest scholastic performance of all programs available. Students are strongly advised to enter an Honours degree program with their admission to the Bachelor of Arts in Geography. Consultation with the department head and Faculty academic advisors is also recommended.

### STRUCTURE OF THE B.A. GEOGRAPHY DEGREE PROGRAM

The structure of the B.A. Geography degree is summarized as follows:

A **Geography (Major)** component that varies in credit hour requirement depending on the degree program; 30 credit hours in the General; 51 credit hours in the Advanced; and 69 credit hours in the Honours. Students are not permitted to declare a second major.

Advanced and General degree students must complete a **Minor** in a subject field that is different than that of the declared major. Honours degree students may, if they choose, complete a Minor in a subject field that is different than that of the declared major. The minor may be chosen from one of the other programs in the Clayton H. Riddell Faculty of Environment, Earth, and Resources or any program at the University

that offers a Minor. Students in the B.A. Geography are not permitted to complete a Minor in Physical Geography. Refer to the Minor requirements as described in the Faculty Regulations (p. 492) . Contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) i (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>)n the Faculty Dean's Office for further information about eligible Minors.

Students must complete 5 subject fields with 6 credit hours in each (30 credit hours). For example: 6 credit hours in Geography, plus 6 credit hours in Mathematics, plus 6 credit hours in Geological Sciences, plus 6 credit hours in Anthropology, plus 6 credit hours in Native Studies.

Students must also complete 6 credit hours from Humanities, and 6 credit hours offered by the Faculty of Arts, and 6 credit hours of science courses.

**Note:** Students can satisfy the requirement for Humanities, and/or Arts, or science and at the same time satisfy the Written English or Mathematics requirement and one of the 5 subject fields required with the same 6 credit hours of courses.

### Humanities

For course subjects taught by the Faculty of Arts that can be used towards the Humanities requirement, refer to the Faculty of Arts, Additional Faculty Regulations and Policies (p. 211). Music (i.e. all courses listed for Advanced Major and Minor programs except ensemble courses) and History of Art (i.e. all courses listed with course prefix FAAH) may also be eligible courses. Students should see a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) for further information.

### B.A. IN GEOGRAPHY - GENERAL: ACADEMIC REGULATIONS

To qualify for the degree Bachelor of Arts in Geography (General), students must complete 90 credit hours including: all course requirements; a chosen minor field; the requirements in the five subject fields; and areas of Humanities, Arts, and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00 on Geography courses as well as the 90 credit hours that constitute the degree. Students cannot exceed 48 credit hours of failed courses.

### B.A. IN GEOGRAPHY - ADVANCED: ACADEMIC REGULATIONS

To qualify for the Bachelor of Arts in Geography (Advanced) degree, students must complete 120 credit hours including: all course and performance requirements; a chosen minor field; the requirements in the five subject fields; and areas of Humanities, Arts, and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00 on Geography courses and the 120 credit hours that constitute the degree. Students cannot exceed 18 credit hours of failed courses.

### B.A. IN GEOGRAPHY - HONOURS: ACADEMIC REGULATIONS

To qualify for the Bachelor of Arts in Geography (Honours) degree, students must complete 120 credit hours including: all course and performance requirements; the requirements in the five subject fields, and the areas of Humanities, Arts and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 3.00 on Geography courses and

the 120 credit hours that constitute the degree. Students cannot exceed 18 credit hours of failed courses.

## Advanced Entry Requirements

Students are required to attain a minimum degree Grade Point Average of 2.00 based on the Degree Standards Table to be eligible for admission to the B.A. in Geography. Students who are admitted will be placed in the General degree program. Students may be eligible for transfer to either the Advanced or Honours degree program provided they satisfy the entrance requirements defined below. To enter the Advanced or Honours degree program, a student must consult with a Riddell Faculty student advisor in the Faculty Dean's Office.

### DEGREE PROGRAM IN B.A. GEOGRAPHY - HONOURS

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 3.00

**Maximum Credit Hours of Failed Courses:** 18

**Additional Entrance Requirements:** Grade of 'B' from GEOG 1280, GEOG 1290<sup>1</sup> and/or GEOG 1700/GPE 1700 or a GPA of 3.00 or better in all Geography courses

### DEGREE PROGRAM IN B.A. GEOGRAPHY - ADVANCED

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00

**Maximum Credit Hours of Failed Courses:** 18

**Additional Entrance Requirements:** grade of 'C' from GEOG 1280, GEOG 1290<sup>1</sup> and/or GEOG 1700/GPE 1700

### DEGREE PROGRAM IN B.A. GEOGRAPHY - GENERAL

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00<sup>1</sup>

**Maximum Credit Hours of Failed Courses:** 48

**Additional Entrance Requirements:** grade of 'C' from GEOG 1280, GEOG 1290<sup>2</sup> and/or GEOG 1700/GPE 1700

## Grade Point Average Calculation for Entrance and Continuation

General degree students in the B.A. Geography must attain a minimum 2.00 Grade Point Average at each point of assessment. The Degree Standards Table listed below is used to determine a student's eligibility for admission to the Riddell Faculty as well as evaluate a student's performance after each term.

### DEGREE STANDARDS TABLE

Credit Hours	Minimum Degree GPA
24-30	1.8
33-45	1.85
48-60	1.90
63-75	1.95
78-90	2.00
93+ hours	2.00

## Minimum Performance Requirements

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each *term* in which the student is registered in more than 4.0 credit hours. To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards outlined for his/her degree program at each point of assessment. For General degree students, this includes the Degree Standards Table, (p. 555) as well as the requirements outlined in Minimum Performance Requirements

for Continuation and Graduation. (p. 555) Students in the Advanced and Honours degrees are required to satisfy the requirements listed in 5.3.1. Minimum academic performance is based on the degree Grade Point Average and number of failed courses. Prior to each registration, Advanced and Honours degree students must have their course selections approved by a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>). Students may not make any subsequent changes without receiving prior written permission.

To graduate with a B.A. Geography with the intended degree designation, a student must achieve the minimum performance standards and graduation requirements following their last term of registration and satisfy all faculty and degree requirements in Geography as defined in minimum performance standards and graduation requirements and in the B.A. Geography Honours Program. (p. 555)

Students in the Honours and Advanced degree programs who do not meet these minimum performance requirements will be withdrawn from their existing program and placed in the Advanced and General degrees respectively. Students who do not meet the minimum performance requirements for the General degree program will receive an academic warning, be placed on probation or academic suspension as defined Academic Warning, Probation, Academic Suspension and Special Students (p. 495) (Academic Standing). Students withdrawn from the Honours degree program may be eligible to enter the Advanced program and are required to obtain permission from a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

Students withdrawn from the Honours degree program will have the notation, 'Required to Withdraw from the Honours Program', recorded on their transcript. Similarly, students withdrawn from the Advanced program will have the notation, 'Required to Withdraw from the Advanced Program', recorded on their transcript.

## MINIMUM PERFORMANCE REQUIREMENTS FOR CONTINUATION AND GRADUATION

Degree Program (Cr. Hrs.)	Minimum Degree Grade Point Average (DGPA)	Maximum Cr. Hrs. Failed Courses	Minimum Degree GPA in Geography Courses <sup>1</sup>	Geography Courses Cr. Hr. Requirements	Residence Requirement (Cr. Hrs.) <sup>3</sup>
Honours <sup>4,5</sup> (120)	3.00	18	3.00	69	60
Advanced <sup>1,4,5</sup> (120)	2.00	18	2.00	51	60
General <sup>1,4</sup>	2.00 <sup>6</sup>	48	2.00	30	48 cr. hrs. total or the final 30 cr. hrs.

<sup>1</sup> General and Advanced degree students are required to maintain a Degree Grade Point Average of 2.00 on the courses defining their Geography Major. **Note:** Students must complete all prerequisite courses with minimum "C" grades.

<sup>2</sup> See B.A. Geography-Honours (p. 550)

<sup>3</sup> See Faculty Requirements- Residence Requirements (p. 492)

<sup>4</sup> Within the first 60 credit hours of courses, students must have completed 6 credit hours in each of 5 subject fields (totalling 30 credit hours). See Program information in Bachelor of Arts Geography

<sup>5</sup> The courses required in this program may satisfy the university mathematics requirement (p. 118) and the science course requirement if selecting SOC 2290.

<sup>6</sup> See Grade Point Average Calculation for Entrance and Continuation

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a B.A. Geography (General) degree will have their degree granted 'With Distinction' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 60 credit hours of acceptable course work is completed at the University of Manitoba.

Students graduating with a B.A. Geography (Advanced) degree will have their degree granted 'With Distinction' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 90 credit hours of acceptable course work is completed at the University of Manitoba.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 90 credit hours of acceptable course work is completed at the University of Manitoba.

## Systematic (HS, PS, TS) and Area Studies (A) Courses

Courses numbered at the 2000- and 3000-level are arranged into Systematics (PS – Physical Geography, HS – Human Geography, TS Techniques) and Area Studies (A).

Courses offered for the current academic term are published in the Class Schedule in Aurora and can be searched by Attribute Type. To find Systematic (HS, PS, TS) courses search: 'Geography: Human', 'Geography: Physical' or 'Geography: Techniques'. To find Area Studies (A) courses search: 'Geography: Area Studies'.

## Degree Requirements

120 Credit Hours (51 credit hours in Geography)

Course	Title	Hours
<b>Year 1</b>		
Select two of the following:		6
GEOG 1280	Introduction to Human Geography	
GEOG 1290	Introduction to Physical Geography <sup>1</sup>	
GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	
Select 6 credits from Humanities <sup>2</sup>		6
Select 18 credit hours of Electives		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
Select two of the following:		6
GEOG 2520	Geography of Natural Resources (HS)	
GEOG 2640	Geography of Culture and Inequality (HS)	
GEOG 2870	Introduction to Economic Geography (HS)	
Select 12 credit hours in Geography courses numbered at the 2000- or 3000-level		12

Select 12 credit hours of Electives		12
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
GEOG 3730	Geographic Information Systems (TS) <sup>3</sup>	3
Select one of the following:		3
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>4</sup>	
WOMN 3000	Interdisciplinary Research in Women's and Gender Studies <sup>5</sup>	
ANTH 3930	Ethnographic Research Methods <sup>5</sup>	
SOC 2290	No Longer Offered	
Select 6 credit hours in Geography courses numbered at the 3000-level		6
Select 18 credit hours of Electives		18
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
Select 12 credit hours in Geography courses numbered at the 4000- level		12
Select 6 additional credit hours in Geography at the 2000-level or above		6
Select 12 credit hours of Electives		12
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> GEOG 1290 satisfies 3 of the required 6 credit hours of Science courses. Students in the Honours or Advanced degree programs will satisfy the Science requirement via other required course work. Students in the General degree selecting this course must complete an additional 3 credit hours of Science courses. General degree students electing GEOG 1280 or GEOG 1700 must complete 6 credit hours from science courses.
- <sup>2</sup> May also satisfy the Faculty of Arts requirement.
- <sup>3</sup> Students wishing to transfer from the General to the Advanced or Honours degree program are permitted to take GEOG 3730 in either third or fourth year.
- <sup>4</sup> The former GEOG 2530 may be used in lieu of ENVR 2810.
- <sup>5</sup> In order to register in these courses, students must have fulfilled the prerequisites.

### Notes:

- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.
- Entrance into the Honours and Advanced degree programs is summarized in Advanced Entry Requirements (p. 555).
- The W and M requirements must be completed within the first 60 credit hours.
- To fulfil prerequisite requirements, a grade of "C" must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).

- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography ([geography\\_environment@umanitoba.ca](mailto:geography_environment@umanitoba.ca)) general office.

## Geography, B.A. General Bachelor of Arts in Geography

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### Program Information

There are three areas where students can focus their course work in the B.A. in Geography program:

- *Resources, Environment and Society (RS)* focuses on the geographies of natural and human induced environmental processes in the recognition that current environmental change shapes relationships across all scales of society;
- *Global Politics, Justice, and Sustainability (GPS)* a global scale, integrated assessment of the links between the economic, socio-cultural, ecological and political systems that combine to shape the world in which we live; and
- *Culture, Identity and Space (CIS)* which emphasizes the dynamics between identity, culture and landscapes, with a particular focus on cooperation and conflict that produce local landscapes.

These areas reflect the expertise of the department and are not required for students in the program. A guide to these areas, and the courses that align with them, is published by the department.

The attraction of Geography as a discipline lies in its diverse interests and approaches to knowledge building while being centred on the fundamental concepts of human-environment relations, location/place and space/ distance. Geographers see the world and want to know how physical processes and systems shape the land, air, water, flora and fauna around them and how these are influenced by human activity. We want to know how human societies, cultures, and economies work and how these human systems are interdependent with each other and with natural systems. We work at a variety of geographic scales, from the micro-scale of local communities and regions, through the macro-scale of global human and physical systems. Human geography embraces the study of topics as wide-ranging as: human-environment relationships, globalization, social justice, attachment to place, recreation and tourism, climate change, and geopolitics. Therefore, by selecting courses from within the department, as well as complementary courses from other academic units of the University, students can develop fascinating, focused and challenging degree programs that will prepare them for careers in a variety of areas.

The General B.A. degree in Geography (90 credit hours, 30 in Geography) provides students with a basic level of understanding of the discipline and its inter-relationships. **This degree is also a useful consideration for students planning to complete the After-Degree Bachelor of Education**

**program (see Faculty of Education (p. 447) ).** The General degree program may be completed entirely by Distance Education.

The Advanced B.A. degree program in Geography (120 credit hours, 51 in Geography) provides opportunities for students who desire a broad geographical education along with a significant degree of specialization in a particular field of Geography.

Students planning a professional career, graduate school or a high degree of specialization in Geography are strongly advised to enter the Honours B.A. degree program (120 credit hours, 69 in Geography). The Honours degree demands the highest scholastic performance of all programs available. Students are strongly advised to enter an Honours degree program with their admission to the Bachelor of Arts in Geography. Consultation with the department head and Faculty academic advisors is also recommended.

### STRUCTURE OF THE B.A. GEOGRAPHY DEGREE PROGRAM

The structure of the B.A. Geography degree is summarized as follows:

A **Geography (Major)** component that varies in credit hour requirement depending on the degree program; 30 credit hours in the General; 51 credit hours in the Advanced; and 69 credit hours in the Honours. Students are not permitted to declare a second major.

Advanced and General degree students must complete a **Minor** in a subject field that is different than that of the declared major. Honours degree students may, if they choose, complete a Minor in a subject field that is different than that of the declared major. The minor may be chosen from one of the other programs in the Clayton H. Riddell Faculty of Environment, Earth, and Resources or any program at the University that offers a Minor. Students in the B.A. Geography are not permitted to complete a Minor in Physical Geography. Refer to the Minor requirements as described in the Faculty Regulations (p. 492) . Contact a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) i (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>)n the Faculty Dean's Office for further information about eligible Minors.

Students must complete 5 subject fields with 6 credit hours in each (30 credit hours). For example: 6 credit hours in Geography, plus 6 credit hours in Mathematics, plus 6 credit hours in Geological Sciences, plus 6 credit hours in Anthropology, plus 6 credit hours in Native Studies.

Students must also complete 6 credit hours from Humanities, and 6 credit hours offered by the Faculty of Arts, and 6 credit hours of science courses.

**Note:** Students can satisfy the requirement for Humanities, and/or Arts, or science and at the same time satisfy the Written English or Mathematics requirement and one of the 5 subject fields required with the same 6 credit hours of courses.

### Humanities

For course subjects taught by the Faculty of Arts that can be used towards the Humanities requirement, refer to the Faculty of Arts, Additional Faculty Regulations and Policies (p. 211). Music (i.e. all courses listed for Advanced Major and Minor programs except ensemble courses) and History of Art (i.e. all courses listed with course prefix FAAH) may also be eligible courses. Students should see a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) for further information.

**B.A. IN GEOGRAPHY - GENERAL: ACADEMIC REGULATIONS**

To qualify for the degree Bachelor of Arts in Geography (General), students must complete 90 credit hours including: all course requirements; a chosen minor field; the requirements in the five subject fields; and areas of Humanities, Arts, and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00 on Geography courses as well as the 90 credit hours that constitute the degree. Students cannot exceed 48 credit hours of failed courses.

**B.A. IN GEOGRAPHY - ADVANCED: ACADEMIC REGULATIONS**

To qualify for the Bachelor of Arts in Geography (Advanced) degree, students must complete 120 credit hours including: all course and performance requirements; a chosen minor field; the requirements in the five subject fields; and areas of Humanities, Arts, and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00 on Geography courses and the 120 credit hours that constitute the degree. Students cannot exceed 18 credit hours of failed courses.

**B.A. IN GEOGRAPHY - HONOURS: ACADEMIC REGULATIONS**

To qualify for the Bachelor of Arts in Geography (Honours) degree, students must complete 120 credit hours including: all course and performance requirements; the requirements in the five subject fields, and the areas of Humanities, Arts and sciences. As well, students must satisfy the Riddell Faculty regulations (p. 492). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 3.00 on Geography courses and the 120 credit hours that constitute the degree. Students cannot exceed 18 credit hours of failed courses.

**Advanced Entry Requirements**

Students are required to attain a minimum degree Grade Point Average of 2.00 based on the Degree Standards Table to be eligible for admission to the B.A. in Geography. Students who are admitted will be placed in the General degree program. Students may be eligible for transfer to either the Advanced or Honours degree program provided they satisfy the entrance requirements defined below. To enter the Advanced or Honours degree program, a student must consult with a Riddell Faculty student advisor in the Faculty Dean's Office.

**DEGREE PROGRAM IN B.A. GEOGRAPHY - HONOURS**

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 3.00

**Maximum Credit Hours of Failed Courses:** 18

**Additional Entrance Requirements:** Grade of 'B' from GEOG 1280, GEOG 1290<sup>1</sup> and/or GEOG 1700/GPE 1700 or a GPA of 3.00 or better in all Geography courses

**DEGREE PROGRAM IN B.A. GEOGRAPHY - ADVANCED**

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00

**Maximum Credit Hours of Failed Courses:** 18

**Additional Entrance Requirements:** grade of 'C' from GEOG 1280, GEOG 1290<sup>1</sup> and/or GEOG 1700/GPE 1700

**DEGREE PROGRAM IN B.A. GEOGRAPHY - GENERAL**

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00<sup>1</sup>

**Maximum Credit Hours of Failed Courses:** 48

**Additional Entrance Requirements:** grade of 'C' from GEOG 1280, GEOG 1290<sup>2</sup> and/or GEOG 1700/GPE 1700

**Grade Point Average Calculation for Entrance and Continuation**

General degree students in the B.A. Geography must attain a minimum 2.00 Grade Point Average at each point of assessment. The Degree Standards Table listed below is used to determine a student's eligibility for admission to the Riddell Faculty as well as evaluate a student's performance after each term.

**DEGREE STANDARDS TABLE**

Credit Hours	Minimum Degree GPA
24-30	1.8
33-45	1.85
48-60	1.90
63-75	1.95
78-90	2.00
93+ hours	2.00

**Minimum Performance Requirements**

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each *term* in which the student is registered in more than 4.0 credit hours. To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards outlined for his/her degree program at each point of assessment. For General degree students, this includes the Degree Standards Table, (p. 558) as well as the requirements outlined in Minimum Performance Requirements for Continuation and Graduation. (p. 559) Students in the Advanced and Honours degrees are required to satisfy the requirements listed in 5.3.1. Minimum academic performance is based on the degree Grade Point Average and number of failed courses. Prior to each registration, Advanced and Honours degree students must have their course selections approved by a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>). Students may not make any subsequent changes without receiving prior written permission.

To graduate with a B.A. Geography with the intended degree designation, a student must achieve the minimum performance standards and graduation requirements following their last term of registration and satisfy all faculty and degree requirements in Geography as defined in minimum performance standards and graduation requirements and in the B.A. Geography Honours Program. (p. 558)

Students in the Honours and Advanced degree programs who do not meet these minimum performance requirements will be withdrawn from their existing program and placed in the Advanced and General degrees respectively. Students who do not meet the minimum performance requirements for the General degree program will receive an academic warning, be placed on probation or academic suspension as defined Academic Warning, Probation, Academic Suspension and Special Students (p. 495) (Academic Standing). Students withdrawn from the Honours degree program may be eligible to enter the Advanced program and are required to obtain permission from a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

Students withdrawn from the Honours degree program will have the notation, 'Required to Withdraw from the Honours Program', recorded

on their transcript. Similarly, students withdrawn from the Advanced program will have the notation, 'Required to Withdraw from the Advanced Program', recorded on their transcript.

### MINIMUM PERFORMANCE REQUIREMENTS FOR CONTINUATION AND GRADUATION

Degree Program (Cr. Hrs.)	Minimum Degree Grade Point Average (DGPA)	Maximum Cr. Hrs. Failed Courses	Minimum Degree GPA in Geography Courses <sup>1</sup>	Geography Courses Cr. Hr. Requiremen	Residence Requirement (Cr. Hrs.) <sup>3</sup>
Honours <sup>4,5</sup> (120)	3.00	18	3.00	69	60
Advanced <sup>1,4,5</sup> (120)	2.00	18	2.00	51	60
General <sup>1,4</sup>	2.00 <sup>6</sup>	48	2.00	30	48 cr. hrs. total or the final 30 cr. hrs.

<sup>1</sup> General and Advanced degree students are required to maintain a Degree Grade Point Average of 2.00 on the courses defining their Geography Major. **Note:** Students must complete all prerequisite courses with minimum "C" grades.

<sup>2</sup> See B.A. Geography-Honours (p. 550)

<sup>3</sup> See Faculty Requirements- Residence Requirements (p. 492)

<sup>4</sup> Within the first 60 credit hours of courses, students must have completed 6 credit hours in each of 5 subject fields (totalling 30 credit hours). See Program information in Bachelor of Arts Geography

<sup>5</sup> The courses required in this program may satisfy the university mathematics requirement (p. 118) and the science course requirement if selecting SOC 2290.

<sup>6</sup> See Grade Point Average Calculation for Entrance and Continuation

### Graduating with Distinction or First Class Honours WITH DISTINCTION

Students graduating with a B.A. Geography (General) degree will have their degree granted 'With Distinction' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 60 credit hours of acceptable course work is completed at the University of Manitoba.

Students graduating with a B.A. Geography (Advanced) degree will have their degree granted 'With Distinction' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 90 credit hours of acceptable course work is completed at the University of Manitoba.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 90 credit hours of acceptable course work is completed at the University of Manitoba.

### Systematic (HS, PS, TS) and Area Studies (A) Courses

Courses numbered at the 2000- and 3000-level are arranged into Systematics (PS – Physical Geography, HS – Human Geography, TS Techniques) and Area Studies (A).

Courses offered for the current academic term are published in the Class Schedule in Aurora and can be searched by Attribute Type. To find

Systematic (HS, PS, TS) courses search: 'Geography: Human', 'Geography: Physical' or 'Geography: Techniques'. To find Area Studies (A) courses search: 'Geography: Area Studies'.

## Degree Requirements

90 Credit Hours (30 credit hours in Geography)

Course	Title	Hours
<b>Year 1</b>		
Select two of the following:		6
GEOG 1280	Introduction to Human Geography	
GEOG 1290	Introduction to Physical Geography <sup>1</sup>	
GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	
Select 6 credit hours of Humanities <sup>2</sup>		6
Select 18 credit hours of Electives		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
Select 12 credit hours in Geography courses numbered at the 2000-level		12
Select 18 credit hours of Electives		18
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
Select 12 credit hours in Geography courses numbered at the 3000- and/ or 4000- level		12
Select 18 credit hours of Electives		18
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> GEOG 1290 satisfies 3 of the required 6 credit hours of Science courses. Students in the Honours or Advanced degree programs will satisfy the Science requirement via other required course work. Students in the General degree selecting this course must complete an additional 3 credit hours of Science courses. General degree students electing GEOG 1280 or GEOG 1700 must complete 6 credit hours from science courses.

<sup>2</sup> May also satisfy the Faculty of Arts requirement.

#### Notes:

- The W and M requirements must be completed within the first 60 credit hours. Note: 30 credit hours, with 6 credit hours in each of 5 subject fields, must be completed in the first 60 credit hours.
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.
- Entry into the General degree program is summarized in the overview (p. 557).
- To fulfil prerequisite requirements, a grade of "C" must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the



Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).

- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography ([geography\\_environment@umanitoba.ca](mailto:geography_environment@umanitoba.ca)) general office.

## Geography Minor

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
Select two of the following:		
GEOG 1280	Introduction to Human Geography	6
GEOG 1290	Introduction to Physical Geography	
GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
Select 6 credit hours in Geography courses numbered at the 2000-level		
<b>Hours</b>		<b>6</b>
<b>Years 3-4</b>		
Select 6 credit hours in Geography courses numbered at the 3000-level		
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>18</b>

#### Notes:

- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.
- To fulfil prerequisite requirements, a grade of "C" must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule in Aurora ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)).
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography ([geography\\_environment@umanitoba.ca](mailto:geography_environment@umanitoba.ca)) general office.

## Physical Geography, B.Sc. Honours

### Bachelor of Science in Physical Geography

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### Program Information

Physical Geography includes the study of the environment through aspects of atmospheric science, geomorphology, biogeography, and hydrology, all of which draw upon the natural and applied sciences to understand the natural environment. Atmospheric sciences examine the physical and biophysical processes at and near the earth's surface shaping climate and determining the weather. These processes are examined over cascading scales, local to global. Hydrology studies the flow of water between the Earth's surface and the atmosphere, including the quantity and quality of water resources as well as the spatial variability in the hydrologic cycle. The examination of processes at the earth's surface and the associated landforms is called geomorphology. Various sub-disciplines in geomorphology include weathering and erosional processes, volcanoes, glacial and river systems. Biogeography studies the interrelationships between the biospheric environment and the physical environment. Formation of soils, ecosystem and biome cycles and components, as well as human interaction with the physical environment are all topical areas in biogeography.

Geomatics is an emerging field referring to the techniques of spatial data acquisition, handling, and analysis. Included within this field have been geographic applications of computer analysis and spatial modeling, spatial statistics, remote sensing technology, and geographic information systems. Many of these techniques have their origins in the applied sciences, but both physical and human geographers have contributed greatly to their development and application. The application of such methodologies in geographic fields, such as resource management, urban geography, climate change, and applied geography has also provided closer co-operation between human and physical geography, as well as promoting considerable interdisciplinary research with other University disciplines.

The Major and Honours B.Sc. degree programs in Physical Geography serve students who desire advanced study in the academic subject matter of various themes contained within Physical Geography. The Honours program in particular is intended for students interested in the opportunity for exposure to advanced geographic research. As such, the Honours program demands higher academic performance. Students who are ineligible to enter Honours in their second year may establish this in the following year on the basis of their improved scholastic performance. The degree programs may be pursued on a full or part-time basis.

### MINOR IN ANOTHER DEPARTMENT

Students in the B.Sc. Physical Geography have the opportunity to complete a Minor in a subject field that is different than that of the declared Major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students in the B.Sc. Physical Geography are not permitted to complete a Minor in Geography. Students can declare only one Minor. The Minor requirements are described in the Faculty Regulations (p. 492). Contact a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty Dean's Office for further information about eligible Minors.

### STREAMS

Students are required to complete a stream approved by a Riddell Faculty student advisor. Students in the Major or Major (Coop) programs are required to complete a minimum of 30 credit hours of 2000- (or higher) level courses, of which at least 18 credit hours must be at or

above the 3000-level. The B.Sc. Honours and Honours (Coop) programs require students to complete 39 credit hours in a Stream, of which at least 24 credit hours are defined at or above the 3000-level and must include GEOG 4660. Streams are currently available in *Atmospheric and Hydrological Sciences*, *Geomatics and Physical Geography*. See a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) for current information about these Streams.

## MAJOR

To qualify for the degree, Bachelor of Science in Physical Geography (Major), a student must complete 120 credit hours with passing grades ('D' or better) and a minimum degree grade point average of 2.00. Major (Coop) students must attain a minimum degree Grade Point Average of 2.50. Students must complete all faculty requirements. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

## HONOURS

To qualify for the degree Bachelor of Science in Physical Geography (Honours and Honours Coop), a student must complete 120 credit hours with passing grades ('D' or better) and a minimum degree grade point average of 3.00 in the courses that constitute the degree. Students must complete all faculty requirements. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

## Advanced Entry Requirements

Advanced Entry students are placed in the Major degree program until they have completed a minimum of 48 credit hours after which they may transfer to the Honours program or remain in the Major. To make a program transfer, students must consult a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

### ADVANCED ENTRY REQUIREMENTS

Advanced Entry students are placed in the Major degree program until they have completed a minimum of 48 credit hours after which they may transfer to the Honours program or remain in the Major. To make a program transfer, students must consult a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)). (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>)

### Degree Program in Physical Geography: Honours

**Minimum Number of Credit Hours:** 48

**Minimum Degree Grade Point Average:** 3.00

**Additional Entrance Requirements:** A grade of 'B' or better in GEOG 1290<sup>1</sup>; a grade of 'C+' or better in 12 credit hours from:

Course	Title	Hours
GEOL 1340	The Dynamic Earth	3
PHYS 1020	General Physics 1	3
or PHYS 1050	Physics 1: Mechanics	
MATH 1500	Introduction to Calculus	3
PHYS 1030	General Physics 2	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
MATH 1300	Vector Geometry and Linear Algebra	3
or MATH 1310	Matrices for Management and Social Sciences	

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500

### Degree Program in Physical Geography: Honours (Coop)<sup>1</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 3.0

**Additional Entrance Requirements:** ENVR 2900; students must satisfy the requirements for Entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2550	Geomorphology (PS)	3
GEOG 3730	Geographic Information Systems (TS)	3
PHYS 1020	General Physics 1 <sup>2</sup>	3
or PHYS 1050	Physics 1: Mechanics	
PHYS 1030	General Physics 2	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	3
or MATH 1310	Matrices for Management and Social Sciences	
MATH 1500	Introduction to Calculus <sup>2,3</sup>	3

<sup>1</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.

<sup>2</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>3</sup> MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500.

### Degree Program in Physical Geography: Major

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00

**Additional Entrance Requirements:** A grade of 'C' or better in GEOG 1290<sup>1</sup>; a grade of 'C+' or better in 6 credit hours from:

Course	Title	Hours
GEOL 1340	The Dynamic Earth	3
PHYS 1020	General Physics 1 <sup>1</sup>	3
or PHYS 1050	Physics 1: Mechanics	
MATH 1500	Introduction to Calculus <sup>1,2</sup>	3
PHYS 1030	General Physics 2	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
MATH 1300	Vector Geometry and Linear Algebra <sup>1</sup>	3
or MATH 1310	Matrices for Management and Social Sciences	

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500.

**Degree Program in Physical Geography: Major (Coop)<sup>1</sup>****Minimum Number of Credit Hours:** 60**Minimum Degree Grade Point Average:** 2.50**Additional Entrance Requirements:** ENVR 2900; students must satisfy the requirements for Entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2550	Geomorphology (PS)	3
GEOG 3730	Geographic Information Systems (TS)	3
PHYS 1020	General Physics 1 <sup>2</sup>	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
PHYS 1030	General Physics 2 <sup>2</sup>	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	3
or MATH 1310	Matrices for Management and Social Sciences	
MATH 1500	Introduction to Calculus <sup>2,3</sup>	3

<sup>1</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.

<sup>2</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>3</sup> MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500

**Minimum Performance Requirements for Continuation and Graduation**

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter term. Any revisions in this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average; the grades received in each of GEOG 1290 (or GEOG 1291), GEOG 2200, GEOG 2300, GEOG 2310, GEOG 2550, GEOG 3730, GEOG 3810; and the number of failed courses after admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

**DEGREE PROGRAM (CREDIT HOURS): HONOURS (120)****Minimum Performance Requirements:****Minimum Degree Grade Point Average (DGPA):** 3.00**Maximum Credit Hours of Failed Courses:** 18**Physical Geography Core: Minimum Grade Requirements**

in GEOG 1290<sup>1</sup>, GEOG 2200<sup>1</sup>, GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810: 'B' in GEOG 1290; 'C+' grades in others

**Graduation Requirements<sup>2</sup>****Stream (2000-Level or Higher):** 39 credit hours of which at least 24 credit hours must be at the 3000-level or higher;

completion of GEOG 4660; minimum 'C+' grade in each course.

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

**DEGREE PROGRAM (CREDIT HOURS): HONOURS COOP (120)****Minimum Performance Requirements:****Minimum Degree Grade Point Average (DGPA):** 3.00**Maximum Credit Hours of Failed Courses:** 18**Physical Geography Core: Minimum Grade Requirements**

in GEOG 1290<sup>1</sup>, GEOG 2200<sup>1</sup>, GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810: 'B' in GEOG 1290; 'C+' grades in others

**Graduation Requirements<sup>2</sup>****Stream (2000-Level or Higher):** 39 credit hours of which at least 24 credit hours must be at the 3000-level or higher;

completion of GEOG 4660; minimum 'C+' grade in each course.

**Coop Option Courses:**

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	1.5
ENVR 4980	Work Term 3 (optional)	0

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

**DEGREE PROGRAM (CREDIT HOURS): MAJOR (120)****Minimum Performance Requirements****Minimum Degree Grade Point Average (DGPA):** 2.00**Maximum Credit Hours of Failed Courses:** 18**Physical Geography Core: Minimum Grade Requirements**

in GEOG 1290<sup>1</sup>, GEOG 2200<sup>1</sup>, GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810: "C"

## Graduation Requirements <sup>2</sup>

**Stream (2000-Level or Higher):** 30 credit hours of which at least 18 credit hours must be at the 3000-level or higher; minimum Degree GPA of 2.00.

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

## DEGREE PROGRAM (CREDIT HOURS): MAJOR COOP (120)

### Minimum Performance Requirements

**Minimum Degree Grade Point Average (DGPA):** 2.50

**Maximum Credit Hours of Failed Courses:** 18

**Physical Geography Core: Minimum Grade Requirements**

in GEOG 1290<sup>1</sup>, GEOG 2200<sup>1</sup>, GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810: "C"

## Graduation Requirements <sup>2</sup>

**Stream (2000-Level or Higher):** 30 credit hours of which at least 18 credit hours must be at the 3000-level or higher; minimum Degree GPA of 2.00.

**Coop Option Courses:**

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	1.5
ENVR 4980	Work Term 3 (optional)	0

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

To **graduate** from the Bachelor of Science in Physical Geography with the intended degree designation, a student must achieve the minimum standards and graduation requirements outlined above (p. ) following the final term of registration and satisfy all degree course requirements in the foundation, physical geography core and Stream.

Students in the Honours program who do not meet these minimum performance requirements for continuation or graduation will be withdrawn from the degree program and placed in the Major provided they are eligible based on their performance. Students who do not meet the minimum performance requirements of the Major will be placed

on academic warning, probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) (p. 491).

Students withdrawn from the Honours program as a result of their inability to meet minimum performance requirements will have the notation, 'Required to Withdraw from the Honours Program', recorded on their transcript. Similarly, students withdrawn from the Major program will have the notation, 'Required to Withdraw from the Major Program', recorded on their transcript.

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a B.Sc. Physical Geography (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

## Degree Requirements

The courses required in this program will satisfy the University Mathematics requirement. (p. 118)

Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

Course	Title	Hours
<b>Year 1</b>		
GEOG 1290	Introduction to Physical Geography	3
PHYS 1020	General Physics 1 <sup>1</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
Select 6 credit hours from the Faculty of Arts		6
		<b>Hours</b>
		<b>15</b>
<b>Years 1-3</b>		
Select 21 credit hours from the following:		21
PHYS 1030	General Physics 2 <sup>1</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	
GEOL 1340	The Dynamic Earth	
COMP 1012	Computer Programming for Scientists and Engineers	
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>3</sup>	
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>3</sup>	
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>4</sup>	
STAT 2000	Basic Statistical Analysis 2	
BIOL 1020	Biology 1: Principles and Themes <sup>5</sup>	
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>5</sup>	

MATH 1700	Calculus 2 <sup>2</sup>	
	<b>Hours</b>	<b>21</b>
<b>Year 2</b>		
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2540	Weather and Climate (PS)	3
GEOG 2550	Geomorphology (PS)	3
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>6</sup>	3
	<b>Hours</b>	<b>18</b>
<b>Years 3-4</b>		
GEOG 2272	Natural Hazards (PS) <sup>7</sup>	3
GEOG 3730	Geographic Information Systems (TS)	3
GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>8</sup>	3
GEOG 4660	Honours Thesis	6
Select 33 credit hours in an approved Stream <sup>9</sup>		33
18 credit hours of electives		18
	<b>Hours</b>	<b>66</b>
	<b>Total Hours</b>	<b>120</b>

<sup>1</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030, respectively.

<sup>2</sup> MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700; or MATH 1310 may be used in lieu of MATH 1300; or MATH 1232 or MATH 1710 may be used in lieu of MATH 1700.

<sup>3</sup> The former CHEM 1300 and 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>4</sup> STAT 1150 may be used in lieu of STAT 1000.

<sup>5</sup> BIOL 1000 and BIOL 1010 may be used in lieu of BIOL 1020 and BIOL 1030.

<sup>6</sup> The former GEOG 2530 may be used in lieu of ENVR 2810.

<sup>7</sup> The former GEOG 2440 may be used in lieu of GEOG 2272.

<sup>8</sup> The former GEOG 3860 may be used in lieu of GEOG 3810.

<sup>9</sup> A **Stream** must be approved by a Riddell Faculty student advisor. Honours Stream requirements are as follows: 33 credit hours of 2000- (or higher) level courses, of which 24 credit hours must be at the 3000- or 4000-level.

Entrance into the degree programs is summarized in the Overview (p. 561).

The W course (p. 118) must be completed within the first 60 credit hours of courses.

**Note:**

To fulfil prerequisite requirements a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.

- Students should review the course topics available for GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses

are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.

- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/#about-us>) general office.

**Important:** The Honours and Major programs need not be completed in the course order described in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

## Honours Cooperative Option <sup>1</sup>

The courses required in this program will satisfy the University Mathematics requirement (p. 118).

Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

Course	Title	Hours
<b>Year 1</b>		
GEOG 1290	Introduction to Physical Geography	3
PHYS 1020	General Physics 1 <sup>2</sup>	3
MATH 1500	Introduction to Calculus <sup>3</sup>	3
Select 6 credit hours from the Faculty of Arts		6
	<b>Hours</b>	<b>15</b>

### Years 1-3

Select 21 credit hours from the following:		21
PHYS 1030	General Physics 2 <sup>2</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>3</sup>	
GEOG 1340	The Dynamic Earth	
COMP 1012	Computer Programming for Scientists and Engineers	
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>4</sup>	
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>4</sup>	
CHEM 1120	Introduction to Chemistry Techniques <sup>4</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>5</sup>	
STAT 2000	Basic Statistical Analysis 2	
BIOL 1020	Biology 1: Principles and Themes <sup>6</sup>	
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>6</sup>	
MATH 1700	Calculus 2 <sup>3</sup>	
	<b>Hours</b>	<b>21</b>

### Year 2

GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2540	Weather and Climate (PS)	3
GEOG 2550	Geomorphology (PS)	3
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>7</sup>	3

ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3910	Coop Work Term Report 1	1.5
<b>Hours</b>		<b>21</b>
<b>Years 3-4</b>		
GEOG 2272	Natural Hazards (PS) <sup>8</sup>	3
GEOG 3730	Geographic Information Systems (TS)	3
GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>9</sup>	3
GEOG 4660	Honours Thesis	6
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 4980	Work Term 3 (optional) <sup>10</sup>	
ENVR 4910	Coop Work Term Report 3 (optional) <sup>10</sup>	
Select 33 credit hours in an approved Stream <sup>11</sup>		33
12 credit hours of electives		12
<b>Hours</b>		<b>63</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> Entrance into the degree programs is summarized in the Overview (p. 561).
- <sup>2</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030, respectively.
- <sup>3</sup> MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700; or MATH 1310 may be used in lieu of MATH 1300; or MATH 1232 or MATH 1710 may be used in lieu of MATH 1700.
- <sup>4</sup> The former CHEM 1300 and 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.
- <sup>5</sup> STAT 1150 may be used in lieu of STAT 1000.
- <sup>6</sup> BIOL 1000 and BIOL 1010 may be used in lieu of BIOL 1020 and BIOL 1030.
- <sup>7</sup> The former GEOG 2530 may be used in lieu of ENVR 2810.
- <sup>8</sup> The former GEOG 2440 may be used in lieu of GEOG 2272.
- <sup>9</sup> The former GEOG 3860 may be used in lieu of GEOG 3810.
- <sup>10</sup> Students in the cooperative education option who complete ENVR 4980 and ENVR 4910 will graduate with an additional 1.5 degree credits for a total of 121.5 credits hours.
- <sup>11</sup> A **Stream** must be approved by a Riddell Faculty student advisor. Honours Stream requirements are as follows: 33 credit hours of 2000- (or higher) level courses, of which 24 credit hours must be at the 3000- or 4000-level.

The W course (p. 118) must be completed within the first 60 credit hours of courses.

**Note:**

To fulfil prerequisite requirements a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.

- Students should review the course topics available for GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/#about-us>) general office.

**Important:** The Honours and Major programs need not be completed in the course order described in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

## Cooperative Education Option

A Cooperative Education Option (<https://umanitoba.ca/environment-earth-resources/student-experience/#learning-outside-the-classroom>) is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work term placements. Further information about Cooperative Education and student eligibility is available from the Coop Placement Coordinator (<https://umanitoba.ca/faculties/environment/undergraduate/coop/contact.html>) available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree program. Students complete ENVR 2900, ENVR 3900, work term placements ENVR 3980, ENVR 3990, and the work term report courses ENVR 3910 and ENVR 3920. Additional work terms are available to interested students. Each academic term and each employment term commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program (<http://umanitoba.ca/faculties/environment/undergraduate/coop/>) webpage

# Physical Geography, B.Sc. Major

## Bachelor of Science in Physical Geography

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### Program Information

Physical Geography includes the study of the environment through aspects of atmospheric science, geomorphology, biogeography, and hydrology, all of which draw upon the natural and applied sciences to understand the natural environment. Atmospheric sciences examine the physical and biophysical processes at and near the earth's surface shaping climate and determining the weather. These processes are examined over cascading scales, local to global. Hydrology studies the flow of water between the Earth's surface and the atmosphere, including the quantity and quality of water resources as well as the spatial variability in the hydrologic cycle. The examination of processes at the earth's surface and the associated landforms is called geomorphology. Various sub-disciplines in geomorphology include weathering and erosional processes, volcanoes, glacial and river systems. Biogeography studies the interrelationships between the biospheric environment and the physical environment. Formation of soils, ecosystem and biome cycles and components, as well as human interaction with the physical environment are all topical areas in biogeography.

Geomatics is an emerging field referring to the techniques of spatial data acquisition, handling, and analysis. Included within this field have been geographic applications of computer analysis and spatial modeling, spatial statistics, remote sensing technology, and geographic information systems. Many of these techniques have their origins in the applied sciences, but both physical and human geographers have contributed greatly to their development and application. The application of such methodologies in geographic fields, such as resource management, urban geography, climate change, and applied geography has also provided closer co-operation between human and physical geography, as well as promoting considerable interdisciplinary research with other University disciplines.

The Major and Honours B.Sc. degree programs in Physical Geography serve students who desire advanced study in the academic subject matter of various themes contained within Physical Geography. The Honours program in particular is intended for students interested in the opportunity for exposure to advanced geographic research. As such, the Honours program demands higher academic performance. Students who are ineligible to enter Honours in their second year may establish this in the following year on the basis of their improved scholastic performance. The degree programs may be pursued on a full or part-time basis.

### MINOR IN ANOTHER DEPARTMENT

Students in the B.Sc. Physical Geography have the opportunity to complete a Minor in a subject field that is different than that of the declared Major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students in the B.Sc. Physical Geography are not permitted to complete a Minor in

Geography. Students can declare only one Minor. The Minor requirements are described in the Faculty Regulations (p. 492). Contact a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)) in the Faculty Dean's Office for further information about eligible Minors.

### STREAMS

Students are required to complete a stream approved by a Riddell Faculty student advisor. Students in the Major or Major (Coop) programs are required to complete a minimum of 30 credit hours of 2000- (or higher) level courses, of which at least 18 credit hours must be at or above the 3000-level. The B.Sc. Honours and Honours (Coop) programs require students to complete 39 credit hours in a Stream, of which at least 24 credit hours are defined at or above the 3000-level and must include GEOG 4660. Streams are currently available in *Atmospheric and Hydrological Sciences, Geomatics and Physical Geography*. See a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>) for current information about these Streams.

### MAJOR

To qualify for the degree, Bachelor of Science in Physical Geography (Major), a student must complete 120 credit hours with passing grades ('D' or better) and a minimum degree grade point average of 2.00. Major (Coop) students must attain a minimum degree Grade Point Average of 2.50. Students must complete all faculty requirements. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

### HONOURS

To qualify for the degree Bachelor of Science in Physical Geography (Honours and Honours Coop), a student must complete 120 credit hours with passing grades ('D' or better) and a minimum degree grade point average of 3.00 in the courses that constitute the degree. Students must complete all faculty requirements. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

### Advanced Entry Requirements

Advanced Entry students are placed in the Major degree program until they have completed a minimum of 48 credit hours after which they may transfer to the Honours program or remain in the Major. To make a program transfer, students must consult a Riddell Faculty student advisor (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>).

### ADVANCED ENTRY REQUIREMENTS

Advanced Entry students are placed in the Major degree program until they have completed a minimum of 48 credit hours after which they may transfer to the Honours program or remain in the Major. To make a program transfer, students must consult a Riddell Faculty student advisor ([riddell.faculty@umanitoba.ca](mailto:riddell.faculty@umanitoba.ca)). (<https://umanitoba.ca/faculties/environment/undergraduate/advice/>)

### Degree Program in Physical Geography: Honours

**Minimum Number of Credit Hours:** 48

**Minimum Degree Grade Point Average:** 3.00

**Additional Entrance Requirements:** A grade of 'B' or better in GEOG 1290<sup>1</sup>; a grade of 'C+' or better in 12 credit hours from:

Course	Title	Hours
GEOL 1340	The Dynamic Earth	3
PHYS 1020	General Physics 1	3
or PHYS 1050	Physics 1: Mechanics	
MATH 1500	Introduction to Calculus	3

PHYS 1030	General Physics 2	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
MATH 1300	Vector Geometry and Linear Algebra	3
or MATH 1310	Matrices for Management and Social Sciences	

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500.

### Degree Program in Physical Geography: Honours (Coop) <sup>1</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 3.0

**Additional Entrance Requirements:** ENVR 2900; students must satisfy the requirements for Entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2550	Geomorphology (PS)	3
GEOG 3730	Geographic Information Systems (TS)	3
PHYS 1020	General Physics 1 <sup>2</sup>	3
or PHYS 1050	Physics 1: Mechanics	
PHYS 1030	General Physics 2	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	3
or MATH 1310	Matrices for Management and Social Sciences	
MATH 1500	Introduction to Calculus <sup>2,3</sup>	3

<sup>1</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.

<sup>2</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>3</sup> MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500.

### Degree Program in Physical Geography: Major

**Minimum Number of Credit Hours:** 24

**Minimum Degree Grade Point Average:** 2.00

**Additional Entrance Requirements:** A grade of 'C' or better in GEOG 1290<sup>1</sup>; a grade of 'C+' or better in 6 credit hours from:

Course	Title	Hours
GEOL 1340	The Dynamic Earth	3
PHYS 1020	General Physics 1 <sup>1</sup>	3
or PHYS 1050	Physics 1: Mechanics	
MATH 1500	Introduction to Calculus <sup>1,2</sup>	3
PHYS 1030	General Physics 2	3
or PHYS 1070	Physics 2: Waves and Modern Physics	

MATH 1300	Vector Geometry and Linear Algebra <sup>1</sup>	3
or MATH 1310	Matrices for Management and Social Sciences	

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500.

### Degree Program in Physical Geography: Major (Coop) <sup>1</sup>

**Minimum Number of Credit Hours:** 60

**Minimum Degree Grade Point Average:** 2.50

**Additional Entrance Requirements:** ENVR 2900; students must satisfy the requirements for Entrance/continuation in the regular program and (normally) have completed:

Course	Title	Hours
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2550	Geomorphology (PS)	3
GEOG 3730	Geographic Information Systems (TS)	3
PHYS 1020	General Physics 1 <sup>2</sup>	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
PHYS 1030	General Physics 2 <sup>2</sup>	3
or PHYS 1070	Physics 2: Waves and Modern Physics	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	3
or MATH 1310	Matrices for Management and Social Sciences	
MATH 1500	Introduction to Calculus <sup>2,3</sup>	3

<sup>1</sup> Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.

<sup>2</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>3</sup> MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500.

### Minimum Performance Requirements for Continuation and Graduation

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter *term*. Any revisions in this schedule should also be approved prior to the end of the registration revision period.

To be in **good standing** and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average; the grades received in each of GEOG 1290 (or GEOG 1291), GEOG 2200, GEOG 2300, GEOG 2310, GEOG 2550, GEOG 3730, GEOG 3810; and the number of failed courses after admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources.



**DEGREE PROGRAM (CREDIT HOURS): HONOURS (120)****Minimum Performance Requirements:****Minimum Degree Grade Point Average (DGPA):** 3.00**Maximum Credit Hours of Failed Courses:** 18**Physical Geography Core: Minimum Grade Requirements**in GEOG 1290<sup>1</sup>, GEOG 2200<sup>1</sup>, GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810: 'B' in GEOG 1290; 'C+' grades in others**Graduation Requirements<sup>2</sup>****Stream (2000-Level or Higher):** 39 credit hours of which at least 24 credit hours must be at the 3000-level or higher;

completion of GEOG 4660; minimum 'C+' grade in each course.

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

**DEGREE PROGRAM (CREDIT HOURS): HONOURS COOP (120)****Minimum Performance Requirements:****Minimum Degree Grade Point Average (DGPA):** 3.00**Maximum Credit Hours of Failed Courses:** 18**Physical Geography Core: Minimum Grade Requirements**in GEOG 1290<sup>1</sup>, GEOG 2200<sup>1</sup>, GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810: 'B' in GEOG 1290; 'C+' grades in others**Graduation Requirements<sup>2</sup>****Stream (2000-Level or Higher):** 39 credit hours of which at least 24 credit hours must be at the 3000-level or higher;

completion of GEOG 4660; minimum 'C+' grade in each course.

**Coop Option Courses:**

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	1.5
ENVR 4980	Work Term 3 (optional)	0

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

**DEGREE PROGRAM (CREDIT HOURS): MAJOR (120)****Minimum Performance Requirements****Minimum Degree Grade Point Average (DGPA):** 2.00**Maximum Credit Hours of Failed Courses:** 18**Physical Geography Core: Minimum Grade Requirements**in GEOG 1290<sup>1</sup>, GEOG 2200<sup>1</sup>, GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810: "C"**Graduation Requirements<sup>2</sup>****Stream (2000-Level or Higher):** 30 credit hours of which at least 18 credit hours must be at the 3000-level or higher; minimum Degree GPA of 2.00.

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

**DEGREE PROGRAM (CREDIT HOURS): MAJOR COOP (120)****Minimum Performance Requirements****Minimum Degree Grade Point Average (DGPA):** 2.50**Maximum Credit Hours of Failed Courses:** 18**Physical Geography Core: Minimum Grade Requirements**in GEOG 1290<sup>1</sup>, GEOG 2200<sup>1</sup>, GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810: "C"**Graduation Requirements<sup>2</sup>****Stream (2000-Level or Higher):** 30 credit hours of which at least 18 credit hours must be at the 3000-level or higher; minimum Degree GPA of 2.00.**Coop Option Courses:**

Course	Title	Hours
ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3910	Coop Work Term Report 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 4910	Coop Work Term Report 3 (optional)	1.5
ENVR 4980	Work Term 3 (optional)	0

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

<sup>2</sup> B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

To **graduate** from the Bachelor of Science in Physical Geography with the intended degree designation, a student must achieve the minimum standards and graduation requirements outlined above (p. ) following the final term of registration and satisfy all degree

course requirements in the foundation, physical geography core and Stream.

Students in the Honours program who do not meet these minimum performance requirements for continuation or graduation will be withdrawn from the degree program and placed in the Major provided they are eligible based on their performance. Students who do not meet the minimum performance requirements of the Major will be placed on academic warning, probation or academic suspension as defined in Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) (p. 491).

Students withdrawn from the Honours program as a result of their inability to meet minimum performance requirements will have the notation, 'Required to Withdraw from the Honours Program,' recorded on their transcript. Similarly, students withdrawn from the Major program will have the notation, 'Required to Withdraw from the Major Program,' recorded on their transcript.

## Graduating with Distinction or First Class Honours

### WITH DISTINCTION

Students graduating with a B.Sc. Physical Geography (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

### FIRST CLASS HONOURS

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
GEOG 1290	Introduction to Physical Geography	3
PHYS 1020	General Physics 1 <sup>1</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
Select 6 credit hours from the Faculty of Arts		6
<b>Hours</b>		<b>15</b>
<b>Years 1-3</b>		
Select 21 credit hours from the following:		21
PHYS 1030	General Physics 2 <sup>1</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	
GEOL 1340	The Dynamic Earth	
COMP 1012	Computer Programming for Scientists and Engineers	
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>3</sup>	
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>3</sup>	
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>4</sup>	
STAT 2000	Basic Statistical Analysis 2	
BIOL 1020	Biology 1: Principles and Themes <sup>5</sup>	
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>5</sup>	

MATH 1700	Calculus 2 <sup>2</sup>	
<b>Hours</b>		<b>21</b>
<b>Year 2</b>		
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2540	Weather and Climate (PS)	3
GEOG 2550	Geomorphology (PS)	3
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>6</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 3-4</b>		
GEOG 2272	Natural Hazards (PS) <sup>7</sup>	3
GEOG 3730	Geographic Information Systems (TS)	3
GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>8</sup>	3
Select 30 credit hours in an approved Stream <sup>9</sup>		30
27 credit hours of electives		27
<b>Hours</b>		<b>66</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030, respectively.
- <sup>2</sup> MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700; or MATH 1310 may be used in lieu of MATH 1300; or MATH 1232 or MATH 1710 may be used in lieu of MATH 1700.
- <sup>3</sup> The former CHEM 1300 and 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.
- <sup>4</sup> STAT 1150 may be used in lieu of STAT 1000.
- <sup>5</sup> BIOL 1000 and BIOL 1010 may be used in lieu of BIOL 1020 and BIOL 1030.
- <sup>6</sup> The former GEOG 2530 may be used in lieu of ENVR 2810.
- <sup>7</sup> The former GEOG 2440 may be used in lieu of GEOG 2272.
- <sup>8</sup> The former GEOG 3860 may be used in lieu of GEOG 3810.
- <sup>9</sup> A **Stream** must be approved by a Riddell Faculty student advisor. Major Stream requirements are as follows: 30 credit hours of 2000- (or higher) level courses, of which 18 credit hours must be at the 3000- or 4000-level.

Entrance into the degree programs is summarized in the Overview (p. 561).

The W course (p. 118) must be completed within the first 60 credit hours of courses.

The courses required in this program will satisfy the University Mathematics requirement. (p. 118)

Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

### Note:

To fulfil prerequisite requirements a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.

- Students should review the course topics available for GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/#about-us>) general office.

**Important:** The Honours and Major programs need not be completed in the course order described in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

## Major Cooperative Option <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
GEOG 1290	Introduction to Physical Geography	3
PHYS 1020	General Physics 1 <sup>2</sup>	3
MATH 1500	Introduction to Calculus <sup>3</sup>	3
Select 6 credit hours from the Faculty of Arts		6
<b>Hours</b>		<b>15</b>
<b>Years 1-3</b>		
Select 21 credit hours from the following:		21
PHYS 1030	General Physics 2 <sup>2</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>3</sup>	
GEOL 1340	The Dynamic Earth	
COMP 1012	Computer Programming for Scientists and Engineers	
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>4</sup>	
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>4</sup>	
CHEM 1120	Introduction to Chemistry Techniques <sup>4</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>5</sup>	
STAT 2000	Basic Statistical Analysis 2	
BIOL 1020	Biology 1: Principles and Themes <sup>6</sup>	
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions <sup>6</sup>	
MATH 1700	Calculus 2 <sup>3</sup>	
<b>Hours</b>		<b>21</b>
<b>Year 2</b>		
GEOG 2200	Introduction to Thematic Cartography (TS)	3
GEOG 2300	Atmospheric Thermodynamics, Clouds and Precipitation (PS)	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2540	Weather and Climate (PS)	3
GEOG 2550	Geomorphology (PS)	3
ENVR 2810	Environmental Critical Thinking and Scientific Research <sup>7</sup>	3

ENVR 2900	Professional Development in the Environmental Sectors 1	1.5
ENVR 3980	Coop Work Term 1	0
ENVR 3910	Coop Work Term Report 1	1.5
<b>Hours</b>		<b>21</b>
<b>Years 3-4</b>		
GEOG 2272	Natural Hazards (PS) <sup>8</sup>	3
GEOG 3730	Geographic Information Systems (TS)	3
GEOG 3810	Quantitative Research Methods in Geography (TS) <sup>9</sup>	3
ENVR 3900	Professional Development in the Environmental Sectors 2	1.5
ENVR 3990	Coop Work Term 2	0
ENVR 3920	Coop Work Term Report 2	1.5
ENVR 4980	Work Term 3 (optional) <sup>10</sup>	
ENVR 4910	Coop Work Term Report 3 (optional) <sup>10</sup>	
Select 30 credit hours in an approved Stream <sup>11</sup>		30
21 credit hours of electives		21
<b>Hours</b>		<b>63</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Entrance into the degree programs is summarized in the Overview (p. 561).

<sup>2</sup> PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030, respectively.

<sup>3</sup> MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700; or MATH 1310 may be used in lieu of MATH 1300; or MATH 1232 or MATH 1710 may be used in lieu of MATH 1700.

<sup>4</sup> The former CHEM 1300 and 1310 may be used in lieu of CHEM 1100, CHEM 1110 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>5</sup> STAT 1150 may be used in lieu of STAT 1000.

<sup>6</sup> BIOL 1000 and BIOL 1010 may be used in lieu of BIOL 1020 and BIOL 1030.

<sup>7</sup> The former GEOG 2530 may be used in lieu of ENVR 2810.

<sup>8</sup> The former GEOG 2440 may be used in lieu of GEOG 2272.

<sup>9</sup> The former GEOG 3680 may be used in lieu of GEOG 3810.

<sup>10</sup> Students in the cooperative education option who complete ENVR 4980 and ENVR 4910 will graduate with an additional 1.5 degree credits for a total of 121.5 credits hours.

<sup>11</sup> A **Stream** must be approved by a Riddell Faculty student advisor. Major Stream requirements are as follows: 30 credit hours of 2000- (or higher) level courses, of which 18 credit hours must be at the 3000- or 4000-level.

The W course (p. 118) must be completed within the first 60 credit hours of courses.

The courses required in this program will satisfy the University Mathematics requirement (p. 118).

Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

**Note:**

To fulfil prerequisite requirements a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.

- Students should review the course topics available for GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/#about-us>) general office.

**Important:** The Honours and Major programs need not be completed in the course order described in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

## Cooperative Education Option

A Cooperative Education Option (<https://umanitoba.ca/environment-earth-resources/student-experience/#learning-outside-the-classroom>) is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work term placements. Further information about Cooperative Education and student eligibility is available from the Coop Placement Coordinator (<https://umanitoba.ca/faculties/environment/undergraduate/coop/contact.html>) available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree program. Students complete ENVR 2900, ENVR 3900, work term placements ENVR 3980, ENVR 3990, and the work term report courses ENVR 3910 and ENVR 3920. Additional work terms are available to interested students. Each academic term and each employment term commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program (<http://umanitoba.ca/faculties/environment/undergraduate/coop/>) webpage

## Physical Geography Minor Minor Requirements

The courses required in this program will satisfy the University Mathematics requirement. (p. 118)

Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

Course	Title	Hours
<b>Years 1-4</b>		
GEOG 1290	Introduction to Physical Geography	3
Select 15 credit hours selected from 2000-, 3000-, or 4000-level courses designated as Physical Geography (PS) or Techniques (TS) courses in the Geography course descriptions defined in the courses tab		15
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>18</b>

**Note:**

To fulfil prerequisite requirements a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.

- Students should review the course topics available for GEOG 3740, GEOG 3750, GEOG 3760, GEOG 3770 and GEOG 4670. Also, all courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography (<http://umanitoba.ca/faculties/environment/departments/geography/519.html>) general office.

**Important:** The Honours and Major programs need not be completed in the course order described in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

## Extended Education

### General Office

**Dean:** Dr. Rod Lastra (Acting)

**Associate Dean(s):** Dr. Kari Kumar

**Campus Address/General Office:** 185 Extended Education Complex

**Telephone:** 204 474 8800; Toll Free: 1 888 216 7011

**Fax:** 204 474 7660

**Website:** [umanitoba.ca/extended-education](https://www.umanitoba.ca/extended-education/) (<https://www.umanitoba.ca/extended-education/>)

### Extended Education

Extended Education is an academic unit of the University that offers continuing and professional programming to lifelong learners. We offer a diversity of University continuing education courses and programs which include micro credentials i.e., Micro-Certificates, Letters of Accomplishment and Letters of Participation, as well as more comprehensive programs, such as Certificate programs. These offers are designed to meet the needs of a wide spectrum of lifelong learners. We also offer programming that provides support for Indigenous and newcomer University students as well as for students admitted to the University in *General Studies*. We work in partnership with industry, government, U of M faculties and departments, as well as community organizations, to develop high quality programming that is responsive, accessible, and socially progressive.

Access and Aboriginal Focus Programs (p. 572)

Flexible Delivery and Intensive Programs (p. 574)

General Studies and Military Support Office (p. 577)

## Access and Aboriginal Focus Programs

**Area Director:** Dr. Diedre A. Desmarais

**General Office:** 221 Migizii Agamik, 114 Sidney Smith St.

**Telephone:** 204 474 8000

**Website:** [umextended.ca/access/](https://umextended.ca/access/) (<https://umextended.ca/access/>)

Established in 1975, Access' mandate is to support those students who have not had the opportunity to pursue post-secondary education due to social, economic, and/or cultural barriers. The Aboriginal Focus Programs were established in 1998 with the mandate to create and provide community-based programs responding to the post-secondary, and professional development needs of Indigenous peoples. These two distinct areas were integrated on July 1, 2011, combining the unique program development skills of the Aboriginal Focus Programs with the expertise of delivering strong academic, personal and financial supports to students who have experienced barriers to post-secondary education. The amalgamation of these two areas strengthens our capacity to provide students with unique programs in tandem with the supports needed to enhance capacity for success. In 2014, a new initiative was developed to provide academic supports and programming in math and science with the goal to further enhance student success. This includes enhanced teaching capacity, supplemental academic supports for specific science courses and non-degree offers in math and science skills. In 2017, Access introduced a Common First Year (CFY) for new students, which utilizes a "cohort" type model. Students progress through their first year together thereby fostering "community" and easing the transition to university. The CFY

is designed to nurture the connection between students and staff as well as within the student body. Additionally, Access provides intensive supports related to academic reading and writing. In 2018, a full time "Unkan" (Grandfather-in-Residence) joined the team, further enriching student and staff academic experience. We take pride in our holistic approach to program development and student support and have progressively sought gifted educators to help us carry forward continued excellence in all our educational endeavours.

### Access Programs

Established in 1975, Access' mandate is to support those students who have not had the opportunity to pursue post secondary education due to academic, social, economic and/or cultural barriers. The following are programs currently being offered:

#### University of Manitoba Access Program (UMAP)

In cooperation with the Province of Manitoba, the University of Manitoba Access Program (UMAP) facilitates university studies at the undergraduate degree level for persons who traditionally have not had the opportunity for such experience because of social, economic and cultural reasons, lack of formal education or residence in remote areas. Students in this program are provided with academic and personal supports. For information, call 474-8800 or, within Manitoba, 1-888-216-7011.

#### Health Careers Access Program (HCAP)

This program is designed to prepare Manitoban Indigenous persons (Status, Non-Status, Métis, Inuit) for entry to the health professional programs such as Medicine, Dentistry, Dental Hygiene, Pharmacy, Medical Rehabilitation (Occupational, Physical and Respiratory Therapy), Nursing, and Midwifery. Through the cooperation of the Province of Manitoba and the University of Manitoba, students in this program are provided with academic and personal supports. For information call 474-8800 or, within Manitoba, 1-888-216-7011.

#### Professional Health Program (PHP)

This program is designed to support Indigenous persons (Status, Non-Status, Métis, Inuit) in any of the professional health programs. This program provides academic, personal supports. For information call 474-8800 or, within Manitoba, 1-888-216-7011.

#### Aboriginal Focus Programs (AFP)

Aboriginal Focus Programs (AFP) offers certificate and diploma programs as well as degree programs through cooperative arrangements with Indigenous stakeholders and faculties of the University of Manitoba. Programs are offered as in-house training to staff of an organization, or as community-based programs. Programs are offered as 'open enrolment' or as block-funded cohort programs through an arrangement with an employer or sponsor. Delivery methodology can be part-time or full-time study, and can incorporate technology-based delivery where technology access permits. Indigenous organizations that identify a need for specific post-secondary or adult education not currently available may be interested in knowing that AFP has the capacity to develop new programs to meet their needs. The following are programs currently being offered:

#### Aboriginal Counselling Skills Certificate

(This program is currently under review and as such is not being offered in 2022/2023)

The Aboriginal Counseling Skills (ACSC) Certificate program provides individuals who are employed by First Nation, Metis and Inuit social service agencies with the knowledge and skills required to provide culturally appropriate counseling services to individuals and families. An Aboriginal philosophy of recognizing the strengths and resilience of families within the counseling relationship is emphasized. The certificate is offered as a general intake program in Winnipeg or as a community-based program through agreements with Aboriginal agencies. The Faculty of Social work offers graduates 3 allocated and 6 unallocated hours of credit.

## Aboriginal Environmental Stewardship Diploma

(This program is currently under review and as such is not being offered in 2022/2023)

The Aboriginal Environmental Stewardship (AESD) Diploma Program is a partnership program between Aboriginal Focus Programs and the University of Manitoba's Clayton H. Riddell Faculty of Environment, Earth and Resources and the Faculty of Arts: Department of Native Studies. The 60-credit hour diploma offers a post-secondary education program that provides the core principles of environmental science, stewardship and indigenous environmental justice. The program is designed to offer students an Indigenous community-focused perspective of environmental issues within Manitoba. The objective will be to integrate global and regional environmental issues related to the ecological, and cultural impacts as well as legal implications of resource use and exploration in the 21st century. The curriculum will focus on the incorporation of Indigenous Knowledge within a scientific framework.

The AESD program is offered on-campus or as a community-based program through collaboration with external stakeholders.

### Program and Graduation Requirements:

- Students must pass 60 credit hours of the program (30 credit hours of required courses, 28.5 credit hours of elective courses, and 1.5 credit hours of work experience)
- Students must achieve an average GPA of 2.5 (C+) in the program and must not have a grade lower than a "C" in every program course.

Students must complete all course work within six (6) years from the date of the first registration in the program. Application for extension of this time limit must be received prior to the end of the six year time frame and approved by the Dean of Extended Education.

Course	Title	Hours
<b>Required Courses</b>		<b>30</b>
ARTS 1110	Introduction to University	3
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 2000	Environmental Science 2 - Issues	3
ENVR 3160	Environmental Responsibilities and the Law	3
ENVR 3250	Environmental Assessment	3
GEOG 4260	Sacred Lands	3
NATV 1220	Course no longer offered	
NATV 1240	Course no longer offered	
NATV 2100	Course no longer offered	
NATV 3310	Course no longer offered	
<b>Elective Courses</b>		<b>28.5</b>
ENVR 2010	Field Topics in Environment (1.5 credit hours for each topic)	1.5

GPS Field Survey and Sampling		
Field Readiness and Outdoor Survival		
Wildlife Sampling, Stewardship and GIS		
ENVR 2010	Field Topics in Environment (3 credit hours for each topic)	1.5
Extended Field Topics in Environmental Science 1		
Basic Communication and Statistical Skills		
Biological and Ecological Concepts		
Landscape Sampling and Boreal Forest Stewardship		
Environmental Health		
ENVR 3000	Multidisciplinary Topics in Environmental Science 1 (3 credit hours for each topic)	3
Ecosystem Management Techniques		
Biogeography		
Concepts in Wildlife Management		
Ecology of the Boreal Region		
Parks and Protected Areas		
Indigenous Stewardship		
ENVR 3010	Field Topics in Environmental Science 1 (1.5 credit hours for each topic)	1.5
Water Quality Assessment		
Issues in Sustainable Forestry		
Soil Characterization		
Wildlife and/or Fisheries Techniques		
EER 1000	Earth: A User's Guide	3
GEOL 1340	The Dynamic Earth	3
GEOG 1290	Introduction to Physical Geography	3
BIOL 1000	Biology: Foundations of Life	3
BIOL 1010	Biology: Biological Diversity and Interaction	3
BIOL 2390	Introductory Ecology	3
<b>Required Work Experience Program</b>		<b>1.5</b>

## First Nations Community Wellness Diploma

(This program is currently under review and as such is not being offered in 2022/2023)

The First Nations Community Wellness (FNCW) Diploma offers an excellent program of studies for people who wish to expand their knowledge and skills in Indigenous mental health and community wellness services. The Diploma is offered in partnership with First Nations and Inuit Health and the University of Manitoba's Extended Education, as well as the Faculties of Social Work, Kinesiology, Health Sciences, College of Nursing and Arts: Native Studies and Psychology. The FNCW Diploma provides students with higher education that respects Indigenous knowledge and Western theory through education based on Indigenous values concerning wellness. The 60-credit hours of the FNCW Diploma are typically delivered as 7-day modules in an off-campus location or via blended/technology-based delivery. Students are eligible for transfer credit into degree programs in the participating faculties at the University of Manitoba.

### Program and Graduation Requirements:

- Students must pass 60 credit hours of the program including 33 credit hours of required courses, and 27 credit hours of elective courses or the equivalent of degree and non-degree credit.
- Students must achieve an average GPA of 2.0 (C) in the program.
- Students must complete all course work within six years from the date of the first course registration in the program. Application for extension of this time limit must be approved by the Dean of Extended Education.

Course	Title	Hours
<b>Required Courses</b>		<b>33</b>
ARTS 1110	Introduction to University	3
HNSC 1100	Nutrition for Healthy Living	3
KPER 1200	Physical Activity, Health and Wellness	3
NATV 1200	Course no longer offered	
NATV 2100	Course no longer offered	
NATV 3240	Course no longer offered	
NURS 3350	Counselling Skills for Nurses	3
PSYC 1200	Introduction to Psychology	6
SWRK 2080	Interpersonal Communication Skills	3
SWRK 4070	Social Problem and Social Work Practice Seminar	3
<b>Elective Courses</b>		<b>27</b>
FMLY 1010	Human Development in the Family	3
FMLY 1012	Introduction to Social Development	3
FMLY 1020	Course no longer offered	
FMLY 2012	Development, Conflict, and Displacement	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 2130	Nutrition Through the Life Cycle	3
KPER 1400	Concepts of Recreation and Leisure	3
KPER 2200	Planning Principles	3
NATV 1240	Course no longer offered	
NATV 3100	Course no longer offered	
NATV 4250	Course no longer offered	
NURS 3340	Course no longer offered	
PHED 3770	Indigenous Games and Activities	3
PSYC 2490	Abnormal Psychology	3
SWRK 2050	Community and Organizational Theory	3
SWRK 3100	Systematic Inquiry in Social Work	3
SWRK 4050	Selected Topics in Social Work	3

## Aboriginal Child and Family Services Diploma

(This program is currently under review and as such is not being offered in 2022/2023)

The Aboriginal Child and Family Services (ACFS) Diploma Program provides an opportunity for students to build their knowledge and skills base in the area of child protection and family enhancement.

The program is of interest to those individuals who are currently employed, or who anticipate future employment in the field of Indigenous Child Welfare. The diploma consists of 60 credit hours with students completing 9 required courses and 12 credit hours of electives. There is also a comprehensive program orientation to provide students with the foundational skills to assist in their studies. Students are eligible for

transfer credit into degree programs in the participating faculties at the University of Manitoba.

## Flexible Delivery and Intensive Programs

**General Office:** 185 Extended Education Complex

**Telephone:** 204 474 8800

**Website:** [umextended.ca \(https://umextended.ca/\)](https://umextended.ca/)

### Flexible Delivery

A diverse selection of courses, short-programs, and certificates, are offered for professional and personal development, in business, finance and management; process and technology management; public sector and municipal administration; adult education design and instruction; higher education administration; and applied social sciences. Programs can be completed on a part-time or full-time basis. Currently Extended Education offers 12-month Intensive packages for international students and a growing range of collaborative partner programs. For more information call 204-474-8800 or visit [umextended.ca \(https://umextended.ca/\)](https://umextended.ca/).

### Education

#### Certificate in Program Development for Adult Learners (PDAL)

This certificate program responds to the expressed needs of business and industry for a program tailored specifically for people who develop and/or deliver teaching and training to adults, are instructional designers, program planners, curriculum developers or evaluators in a variety of work environments. One of its kind in Canada, this innovative program ushers in a new era of professional development for you, your employer, and the people you educate.

#### Micro-Certificate in Facilitating Older Adult Learning

The micro-certificate in Facilitating Older Adult Learning is designed for teachers/ educators, support/health care workers, therapists and others working with older adults. Facilitating Older Adult Learning was created in consultation with Manitoba's experts on aging, including the Centre on Aging at the University of Manitoba, the Manitoba Association of Seniors Communities (MASC), Creative Retirement Manitoba, and select Canadian universities with programs for older adults. MASC supports this program and believes it will provide a better understanding of the aging process and the learning styles and needs of older adult learners.

#### Letter of Accomplishment in Teaching English as a Second Language (TESL)

Teach English to newcomers or teach abroad with confidence and the power of your Teaching English as a Second Language credential behind you. The University of Manitoba's TESL program is an intensive online training program followed by an in-class practicum. Learn online from wherever you are and put your knowledge into practice at a practicum near you, in a real ESL classroom setting. No new applications for admission into this program will be accepted at this time.

This program is under review. No new program applications are being accepted at this time.

## Letter of Accomplishment in E-Learning (LOA: E)

This two-streamed program, teaching and design, is for both new and more experienced educators and professional trainers who want to gain foundational knowledge and techniques in instructional design, e-learning technologies, teaching in an online environment, and the coordination of e-learning projects.

This program is under review. No new program applications are being accepted at this time.

## Management and Leadership

### Certificate in Management and Administration (CIMA)

The Certificate in Management and Administration is designed for supervisors, managers and professionals who are seeking to enhance their management and leadership skills and obtain a University of Manitoba credential along with a professional designation. Offered in proud partnership with the Canadian Institute of Management, the program includes courses in business administration, managerial communication, financial management, and strategic analysis. Graduates will earn their CIMA credential through Extended Education and may apply for Certified in Management designation, with membership to the Canadian Institute of Management/Chartered Managers Canada.

### Certificate in Human Resource Management (HRM)

The Human Resource Management Certificate provides students with the leadership, teamwork, communication and strategic planning skills necessary for a successful career in human resources. This comprehensive program covers key topics such as employee relations, human resource legislation, and staff training and development, while also introducing students to the professional competencies required for the CPHR designation. This program of studies is ideally suited for professionals looking to start or advance their career in human resources. This program is offered in partnership with CPHR Manitoba.

### Certificate in Business Analysis (BA)

The Certificate in Business Analysis provides students with a high-level, multifaceted introduction to the growing field of business analysis (BA). This program prepares students for BA employment and future certifications from organizations, such as the International Institute for Business Analysis (IIBA) and/or the Project Management Institute (PMI).

### Certificate in Quality Management (QM)

The Quality Management Certificate is designed for professionals wishing to implement or manage quality assurance and control programs within their organizations. It provides learners with the necessary knowledge and skills to implement effective quality assurance principles and plan and manage quality control processes. This program is beneficial for professionals working in a wide range of sectors – government, education, healthcare, manufacturing, and the service industry.

### Letter of Accomplishment in Introductory Business Accounting (LOA: IBA)

The Letter of Accomplishment (LOA) in Introductory Business Accounting provides students with introductory skills in financial management and accounting. It is intended for students who have little or no background in the field, but are required or interested in obtaining foundational skills in the areas of finance and accounting. It is also appropriate for individuals working/seeking employment where this knowledge is required to document the achievement. The LOA consists of two courses:

Introductory Accounting for Business, which provides an understanding of basic accounting principles; as well as Financial Management, which seeks to introduce students to the broader field of managerial finance.

### Letter of Accomplishment in Change Management (CM)

The Letter of Accomplishment (LOA) in Change Management provides new or emerging change management specialists and other professionals the opportunity to participate in professional development. The program focuses on key foundation change management practices and skills and consists of two courses (54 contact hours in total).

### Post-Baccalaureate Certificate in Aerospace Program Management (PAPM)

The Post-Baccalaureate in Aerospace Program Management offers the tools and knowledge needed to be a leader in the sophisticated and dynamic aerospace industry. The Post-Baccalaureate Certificate is an advanced credential in aerospace program management designed for current and future project, production, and operational managers, design engineers, and procurement and logistics specialists wishing to enter the field or advance their career in the aerospace industry. Learners will develop an in-depth understanding of the complete life cycle of an aerospace system; from initial identification of system requirements, to the design, manufacturing and marketing of the system, to its ongoing employment and maintenance.

This program is under review. No new program applications are being accepted at this time.

## Partnership Management and Leadership Programs

### Certificate Program in Public Sector Management (CPSM)

The Certificate in Public Sector Management (CPSM) is co-sponsored by the Government of Manitoba. A strong emphasis is placed on integrating the important and current issues affecting all levels of government in Manitoba. The instructors have a wealth of hands-on senior management experience in the public sector.

### Certificate in Manitoba Municipal Administration (CMMA)

The Certificate in Manitoba Municipal Administration provides students with the knowledge and skills required to assume administrative responsibilities within small to mid-sized municipalities. This comprehensive program, which can be completed in one year, covers key topics for current and future municipal administrators, including municipal accounting, municipal law and municipal administration.

### United Way of Winnipeg Leadership Development Certificate Program - (UW)

This program is offered in partnership with United Way and provides extensive training to Sponsored Executives. Sponsored Executives are leaders or potential leaders in their workplace who have a commitment to their community and are willing to serve as ambassadors for the United Way of Winnipeg and their organizations.

### Certificate in Applied Management (CAM)

The Certificate in Applied Management (CAM) program is designed to combine management studies with applications relevant to specific professional fields. This industry-facing professional development



program is offered in partnership with a diverse range of organizations, including Manitoba Liquor and Lotteries, Bioscience Association of Manitoba, Manitoba Customer Service Contact Association, QNET Manitoba, and Manitoba Hydro.

## Higher Education

### Certificate in University & College Administration (CUCA)

The program is designed to provide a background to the complex cultures and administrative challenges found in modern universities and colleges, and to help practitioners become integral members of the academic administrative team.

### Micro-Certificate in Governance in Canadian Universities

Increase your governance expertise so you are prepared to ensure effective governance in Canadian universities and help to move them forward into the future. Explore Canadian university governance, its foundational principles and relationships, and consider the role of the governance professional. Enhance your knowledge and skills, and gain a university credential with Canada's first micro-certificate program for higher education professionals working in university governance.

### Women in Academic Leadership

Prepare to take the next step in your career and enhance your higher education leadership potential with this unique and innovative course offered since 2018. Each year, we revise and update curriculum to ensure the most relevant experience for participants.

### Letter of Accomplishment in Higher Education Administration (HEA)

The Letter of Accomplishment (LOA) in Higher Education Administration will prepare entry-level or mid-level professionals in Canadian universities, polytechnics, and colleges to become integral members of the administrative team by developing a greater understanding of how the context in which they work impacts their role, and by acquiring skills and abilities to enhance their performance.

This program is under review. No new program applications are being accepted at this time.

### Letter of Accomplishment in Academic Advising (LOA: AA)

The Letter of Accomplishment (LOA) in Academic Advising provides an understanding of the academic advising landscape in Canada. This program aims to enable advisors at all levels to deepen their understanding of the theories and practices associated with academic advising and to provide enhanced service to students and their institutions. The LOA is composed of three core courses and two electives.

## Health and Social Services

### Certificate in Applied Counselling (ACC)

The Applied Counselling Certificate provides an introduction to the counselling process and helps learners develop effective counselling strategies. It is ideally suited for anyone working in a counselling context through paid or volunteer work. Participants' varied workplaces include: health care, education, social services, and government.

Through this program, the student can choose a General Stream or Specialization in Addictions Studies. The later combines courses in the ACC program with courses from the Addictions Foundation of Manitoba (<https://afm.mb.ca>).

## Information and Technology Management

### Certificate in Building Information Modelling Management

Build on your career in Architecture, Engineering, Construction, or as an Owner or Operator as you gain important knowledge about digital construction and BIM project management processes that are being adopted around the world. Unlike most BIM-focused programs in Canada, this one focuses on the process not the software. It provides you with a comprehensive, higher-level understanding of BIM processes, preparing you to manage projects and work effectively within a cross-functional AECOO team. For professionals and future professionals working in Architecture, Engineering, Construction and Management including Owners and Operators (AECOO), understanding Building Information Modeling and its international standards for exchanging project information and managing a project through its entire lifecycle are essential to preparing for the future and opening doors in your career.

### Micro-Certificate in Artificial Intelligence: Machine Learning Solutions

Learn how Artificial Intelligence and Machine Learning can solve the most important challenges in your business or organization and fuel your career. Explore real-world data and problems in order to gain practical experience. Join the critical discussions surrounding the ethics and privacy implications of AI. This micro-certificate program is designed to empower professionals and compliment the studies of graduate students and the careers of IT professionals alike by providing them with additional practical experience, no coding required.

## Science and Environment

### Field Readiness and Safety Course - EEAS 0100

A field course designed to provide students with hands-on review of field safety techniques (e.g., navigation, wildlife encounters, land and water safety). Students will spend five days in the field combined with class room instruction. Upon successful completion of the course students will receive a Letter of Accomplishment.

No new program applications are being accepted at this time.

## Intensive Programming

### 12-month Intensive Program Packages

The structure and components of the Intensive Program Packages include:

- **Certificate and Letter of Accomplishment**, completed in the first 10 months of study (over three consecutive academic terms)
- **Industry Experience** (includes, Industry Experience course OR Industry Placement), completed in the last two months of study
- **Academic program supports** embedded throughout

For more information, go to <https://umextended.ca/international-professionals-students/>

## University Skills Courses

### Basic Skills in Mathematics - MSKL 0500

This course provides an overview of basic computational, algebraic and geometric concepts, the mastery of which will be essential for success in a pre-calculus course. Students will learn the basic concepts of calculations involving integers and fractions, algebraic computations such as factoring and solving equations, as well as some geometry such as coordinator geometry and right-angle trigonometry. Upon successful completion of this course the student will receive a letter grade which will demonstrate preparation for entry into MSKL 0100 Mathematical Skills course, a course which can serve as a pre-requisite to many first-year mathematics courses. Register through Extended Education: <https://umextended.ca/math-skills/>

### Mathematical Skills - MSKL 0100

This course is designed, but not exclusively, for students preparing to enter first-year mathematics courses. Students will learn how to apply mathematical skills consistently and with confidence. The courses include a review of fundamental concepts, demonstrations, problem solving, applications and regular testing. Upon successful completion of this course, the student will receive a letter grade which will demonstrate preparation for entry into selected University of Manitoba mathematics courses. Register through Extended Education: <https://umextended.ca/math-skills> (<https://umextended.ca/math-skills/>)

## General Studies

**General Office:** 185 Extended Education Complex

**Telephone:** 204 474 8800

### General Studies

General Studies provides opportunities for students to take credit courses at the University of Manitoba without being enrolled in a degree program. General Studies students include professionals developing their careers, students satisfying entrance requirements to professional and other faculties, seniors enriching their lives, students visiting from other institutions, and individuals exploring a career change. Courses are available in the Fall, Winter and Summer terms and are offered on campus, online and /or some form of remote learning.

General Studies Student Advisors are available to assist with course and program planning and to provide admission and registration information throughout the year.

#### Admission

Prospective students are required to submit an online application to Extended Education in one of the following categories: General Studies (Special-Regular-Transfer) Student, Auditing Student, Senior (Canadian Citizen or permanent Resident), Mature Student (Canadian Military only), or Visiting Student. Detailed information on eligibility requirements may be found on the Admissions web site (<https://umanitoba.ca/admissions/>) or by contacting the General Studies office.

#### Registration

All General Studies students register for courses using Aurora; for more information on how to register, go to: Registrar's Office web site (<https://umanitoba.ca/registrar/registration/>). Registration for Fall & Winter term courses will begin in August. To determine your initial access date for

registration, log onto Aurora beginning Friday July 8th (select Enrolment & Academic Records, Registration & Exams, Registration Time & Status).

Please refer to the Registrar's Office web site (<https://umanitoba.ca/registrar/registration/>) for helpful links regarding registration procedures, fee information, and examinations. Note that applicable prerequisites as outlined in Aurora Student (Course Catalog) must be fulfilled prior to registering in a course.

You may register for up to a maximum of 30 credit hours in the combined Fall and Winter terms, and up to a maximum of 15 credit hours in any one term, including Summer.

### Special Students (Regular (Transfer Student))

**To be eligible for admission, students must have completed a minimum of 24 credit hours of post-secondary college or university level studies and be in good standing.**

Special students are those taking course(s) for professional development or personal learning, students with a degree taking a few courses to satisfy entry requirements to a faculty, students who have completed previous university/college course work, and those wanting to increase their GPA for admission to a faculty, college, or school.

Special Students pay the application fee and provide all official transcripts from external institutions attended. If born outside Canada and now a permanent resident or Canadian citizen, you are required to provide proof of status in Canada. If English is not your first language, you are required to provide English Language Proficiency results (<http://www.umanitoba.ca/student/admissions/international/english/>).

*Transfer credit* - A General Studies Student Advisor will enter overrides for external courses that have been evaluated by the University of Manitoba and satisfy prerequisite requirements, provided - the prerequisite grade requirement has been satisfied. To access the Transfer Credit Resource Equivalencies database, visit [aurora.umanitoba.ca](http://aurora.umanitoba.ca) ([https://aurora.umanitoba.ca/banprod/twbkwbis.P\\_GenMenu/?name=homepage](https://aurora.umanitoba.ca/banprod/twbkwbis.P_GenMenu/?name=homepage)), click on Transfer Credit Resource. Note that external credits are not officially evaluated for transfer credit until an application to a degree granting faculty/school is received by the Admissions Office. For more information regarding evaluation of external courses, contact a General Studies Student Advisor.

### Returning Special Students

If you need help with course selection or have any concerns about your status, contact a General Studies Student Advisor.

### Visiting Students

Visiting students who have been admitted and registered previously in at least one course are eligible to register in a subsequent session without reapplying for admission provided your home university has not changed since you last registered in General Studies, you have a Letter of Permission from your home institution approving the selected course(s), and the Letter of Permission has been submitted to a General Studies advisor prior to registering.

The Letter of Permission from your home institution overrides all prerequisites as stated in the course descriptions in the Undergraduate Calendar, except where a course requires Department Head or Instructor approval. Instructor/departmental approvals should be submitted to a General Studies Student Advisor prior to registration. We recommend that you start the process with your home institution early and have a

selection of alternate courses approved in case the initial course(s) is/are full.

## Auditing Students

This option is available to Canadian Citizens / Permanent Residents only. Auditing students are required to apply to the Division of Extended Education as an Auditor: go to the University of Manitoba Admissions (<https://umanitoba.ca/admissions/>) website.

Auditing students should obtain written permission from the course instructor to audit a course. The written permission and your written consent must be submitted to a General Studies Student Advisor who will manually register you for the course(s). Please contact General Studies for more information.

## Senior Students

Adults who are 65 years by Sept. 1 (Fall term), Jan. 1 (Winter term), or May 1 (Summer term) and who are Canadian citizens or Permanent Residents will not pay application or tuition fees. Proof of age and citizenship/residence status, and English language proficiency may be required. Seniors can apply to General Studies as a Special Student to take course(s) for credit or as an Auditing Student to take courses for personal interest.

## Courses Available to General Studies Students

All courses in the following faculties and schools are available to General Studies students. Prerequisites may be required for some courses as specified in the course descriptions.

- Clayton H. Riddell Faculty of Environment, Earth, and Resources
- Faculty of Agricultural and Food Sciences
- Faculty of Arts
- Faculty of Science
- I.H. Asper School of Business
- School of Art (visiting students may not register in any course offered by the School of Art)

All courses offered in the following faculties require teaching faculty written approval before registering, with the exception of courses open to all students as listed under University 1:

- Faculty of Architecture
- Faculty of Education (5000 level courses only)
- Price Faculty of Engineering
- Faculty of Health Sciences
- Faculty of Kinesiology and Recreation Management
- College of Nursing
- Faculty of Social Work
- Marcel A. Desautels Faculty of Music

## Academic Regulations and Policies Applicable to all General Studies Students

### Academic Assessment and Progression Rules

Academic Assessment gauges student success at the University. Formal academic assessment shall be done following each academic term for all General Studies students who have completed 30 credit hours or more of attempts. In order to be in "good standing" in General Studies, a student must achieve a degree Grade Point Average (GPA) of 2.00 or greater at

each assessment period. Students in "good standing" may continue in General Studies or, preferably, transfer to a target faculty.

Students who do not achieve a degree GPA of 2.00 will be placed "on probation", which will appear on the student's transcript. Once "on probation", a student will be allowed to register for another term (or terms). At each point of assessment, a student "on probation" must achieve a term GPA of 2.00 in order to proceed. In order to clear probation, a student must achieve a degree GPA of 2.00. While "on probation", students are encouraged to consult a General Studies Student Advisor prior to registration and on a regular basis thereafter.

If a student does not succeed in achieving a term GPA of 2.00 by the end of the probation period, they will be placed on "academic suspension" for one calendar year. A student on "academic suspension" is normally not allowed to register in another faculty or school at the University of Manitoba or to attend any other post-secondary institution during the time of suspension. Following the suspension period, a student may reapply for admission to General Studies.

## Credit Hour Policy

In an effort to assist students with academic decisions, all students who have completed 30 credit hours of study with General Studies will be required to meet with a General Studies Student Advisor before being allowed further registration. Until such time as the student meets with an advisor, a block will be placed on their record that prevents further registration.

## Diploma in Labour Relations and Workplace Studies

The Diploma in Labour Relations and Workplace Studies was originally approved by Senate in 2002. Extended Education, along with the Labour Studies program, Faculty of Arts, developed this comprehensive university-based program that is intended to provide necessary knowledge and skills to conduct improved labour and industrial relations. The intended audience of the program is labour representatives and industrial relations practitioners. The program has been designed in a manner that is accessible for working people qualified to enter General Studies, and able to access on-campus, day or evening, courses, and courses offered during Summer term.

The Diploma in Labour Relations and Workplace Studies provides a broad educational experience in labour relations and workplace studies, including courses in economics and politics of work, unions and labour relations, employment legislation, labour law, and pensions and benefits.

The diploma is composed of 30 credit hours of Labour Studies coursework.

Course	Title	Hours
LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3
<b>Electives</b>		
LABR 2XXX	Designated 2000 Level Courses	6
LABR 3XXX	Designated 3000 Level Courses	18
<b>Total Hours</b>		<b>30</b>

LABR 1260 and LABR 1290 are prerequisites to all other courses in the program and must be completed as the first two courses with a minimum grade of "C". Upon successful completion of these two prerequisites,

students may complete the electives in the order they choose, subject to availability.

Students are required to complete all 30 credit hours and achieve a 2.5 GPA with a minimum grade of "C" in each course.

## Application Process

Complete the Application for the Diploma in Labour Relations and Workplace Studies, available on the web site (<https://umextended.ca/labour-studies/>).

## Dual Credit

Students currently admitted into another Faculty at the University of Manitoba may also apply for the Diploma in Labour Relations and Workplace Studies.

## Graduation

Upon completion of the designated 30 credit hours of study, students must indicate their intent to graduate in Aurora Student or contact the General Studies student advisor.

## Degree Credit

All courses from the Diploma in Labour Relations and Workplace Studies are transferable to a degree program in the Faculty of Arts and possibly other faculties. Students who have received external transfer credit towards the Diploma program should note that some faculties and schools may have limitations on external transfer credit taken beyond a specific period. This information may be found in each faculty chapter of the University of Manitoba Undergraduate Calendar.

### **For more information, contact:**

General Studies, Division of Extended Education  
185 Extended Education Complex  
Telephone: 204.474.8800  
Canada: Toll-Free 1.888.216.7011  
Fax: 204.272.1626  
Website: <https://umextended.ca/>

# Rady Faculty of Health Sciences

## General Office

**Dean:** Dr. Brian Postl

**Campus Address/General Office:** A101 Chown-753 McDermot Avenue

**Telephone:** (204) 789-3485

**Email Address:** brian.postl@umanitoba.ca

## Introduction

The Faculty of Health Sciences was created with the amalgamation of the University's former health sciences faculties (Dentistry, Medicine, Nursing, Pharmacy, Human Ecology (<https://catalog.umanitoba.ca/undergraduate-studies/health-sciences/health-studies-bhsc/>)) and former schools (Dental Hygiene and Medical Rehabilitation). Professional Colleges within the Faculty are the: College of Dentistry (p. 629)

(including the School of Dental Hygiene (p. 637)), College of Medicine (p. 592), College of Nursing (p. 646), College of Pharmacy (p. 665), and College of Rehabilitation Sciences (p. 674). All existing programs of these units will initially be offered by the proposed new faculty.

In addition to the above programs, the administration of the Interdisciplinary Health Program (B.H.Sc. and B.H.St. (p. 581) and General Human Ecology (B.H.Ecol.) program from the Faculty of Human Ecology (HE) will be transferred to the Faculty of Health Sciences (FHS (p. 580)). As such, effective Fall 2015 term, the programs will be transferred to, and administered by, the Faculty of Health Sciences.

## Programs

Minors (optional or required) are part of degree programs - for program length, refer to the Years to Completion.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Baccalaureate Program for Registered Nurses (BPRN)+ (p. 660)	2	45	
Dental Hygiene, B.Sc.D.Hyg. (p. 644)	1-2	19-120	
Dental Hygiene, Dip.D.Hyg. (p. 645)	3	101	
Dental Medicine, D.M.D. (p. 634)	4	154	
Dental Medicine, D.M.D. International Dentists Degree Program (IDDP) (p. 635)	2 (plus 8 week summer orientation)	74	
Dentistry, B.Sc. Dent (p. 636)	2 summers (normally commencing after first year)		
Family Social Sciences Minor (p. 604)		18	
Health Sciences, B.H.Sc. (p. 583)	4	120	
Health Sciences Minor (p. 586)		18	
Health Studies, B.H.St. (p. 586)	4	120	
Health Studies Minor (p. 591)		18	
Human Ecology (Family Social Sciences), B.H.Ecol. (p. 596)	4	120	
Human Ecology (The After Degree Program in Family Social Sciences), B.H.Ecol. (p. 601)	2	60	
Midwifery, B.Mid. (p. 662)	4	130	
Nursing, B.N. (p. 662)	4	127	
Pharmacy, B.Sc. (p. 672)	5*	166	
Pharmacy, Pharm.D. (p. 672)	6**	204	
Post-Baccalaureate Diploma in Medical Physiology and Pathophysiology (p. 626)	1	27	
Postgraduate Medical Education (p. 607)	varies		
Respiratory Therapy, B.R.T. (p. 675)	4	136	
Undergraduate Medical Education Program (MD) (p. 610)	4		

## Units

- Interdisciplinary Health Program (p. 581)
- Max Rady College of Medicine (p. 592)
- Dr. Gerald Niznick College of Dentistry (p. 629)
- School of Dental Hygiene (p. 637)
- College of Nursing (p. 646)
- College of Pharmacy (p. 665)
- College of Rehabilitation Sciences (p. 674)

## Interdisciplinary Health Program

### General Office

**Dean:** Brian Postl

**Program Director:** Mark Nachtigal

**Campus Address/General Office:** 202 Human Ecology Bldg

**Telephone:** 204 474 8137

**Website:** <https://umanitoba.ca/explore/programs-of-study/health-sciences-bhsc> (<https://umanitoba.ca/explore/programs-of-study/health-sciences-bhsc/>)

**Academic Staff:** Please refer to our website (<https://umanitoba.ca/explore/programs-of-study/health-sciences-bhsc/#contact-us>)

### Introduction

Students entering the Interdisciplinary Health Program will select one of the following two programs:

- Health Sciences
- Health Studies

This curriculum consists of two degree programs: the Bachelor of Health Sciences and the Bachelor of Health Studies. These degree programs offer new approaches to planning, administration and delivery of health services by fully integrating biological science and social science in understanding the health of people. Students will gain experience of dealing with health issues at the individual, community and population levels, as well as across the lifespan. The two degrees can serve as the foundation for careers in biomedical sciences, health care teams and community health management. They offer a general course of study, not a professional status. Students can use both degree programs to build the knowledge and prerequisites for entry into professional programs in the health and social science fields.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Health Sciences, B.H.Sc. (p. 583)	4	120	
Health Sciences Minor (p. 586)		18	
Health Studies, B.H.St. (p. 586)	4	120	
Health Studies Minor (p. 591)		18	

## Faculty Academic Regulations

### Admission Requirements for the Interdisciplinary Health Program

Admission requirements are described on the Undergraduate Admissions website (<https://umanitoba.ca/admissions/>).

In order to qualify for a degree, students must complete the 120 credit hours specified for the selected program. Elective choices provided in each program can permit students to transfer between them; however, this opportunity decreases as students progress. Students who transfer to another program must meet the full requirements of that program.

### Advisement

The Interdisciplinary Health Program will provide entering students with orientation information and will refer a student to an academic advisor if the student requests. All returning students in the program must submit a program plan for the succeeding year before the start of registration.

## Minors

### The Minor in Management

A Management Minor is offered by the Asper School of Business. Interdisciplinary Health students may complete this Minor as part of the electives portion of their programs. The Minor will consist of any 18 credit hours of Management courses. Students must meet prerequisites for all courses.

### The Voluntary Minor

Students in the Interdisciplinary Health Program may declare and complete a Minor from departments and interdisciplinary programs in which a Minor is offered. A Family Social Sciences Minor is available. Information about Minors in programs other than Interdisciplinary Health is found in the appropriate description of departmental/school/faculty program offerings in the Academic Calendar.

Completion of the Minor is entirely optional. Students may not, however, declare both their Major and Minor from the same department/interdisciplinary program. No course may be used as part of a prescribed program in the Interdisciplinary Health Program and also be part of a prescribed Minor. For example, if a course in Chemistry is part of a student's degree requirements, it cannot be used as part of a Minor in another program. Completion of a Minor may require that a student take more than the minimum number of credit hours for graduation.

## Programs

Minors (optional or required) are part of degree programs - for program length, refer to the Years to Completion.

### General Entrance Requirements to the Interdisciplinary Health Program Health Sciences

A minimum adjusted grade point average (AGPA) of 2.5 in at least 24 credit hours of University 1, including 6 credit hours from Arts and 6 credit hours from Science to total 12 credit hours, plus 12-18 credit hours of other University 1 courses, for a total of 24-30 credit hours.

**Health Studies**

A minimum adjusted grade point average (AGPA) of 2.5 in at least 24 credit hours of university level course work.

**Other Requirements for University Study**

High school prerequisites required for University level courses in certain programs: Mathematics 40S (pre-calculus or applied) and Chemistry 40S are required for the science requirements in the Interdisciplinary Health Program.

Minimum Adjusted GPA for Consideration: 2.5.

For students wishing to choose the focused approach for entry to the Interdisciplinary Health Program, the course requirements for each of the programs or areas of concentration offered by the program are described in the Start Book (<https://umanitoba.ca/current-students/first-year/>).

**Direct Admission into the Health Sciences/Health Studies Degree Programs from High School****Health Sciences**

Manitoba High School graduation (5 full credits at the grade 12 level in courses designated S, G, or U). A minimum 85% average over the four required courses with no less than 60% in each required course.

1. English 40S
2. Applied Mathematics 40S or Pre-Calculus Mathematics 40S
3. Biology 40S
4. Chemistry 40S

**Health Studies**

Manitoba High School graduation (5 full credits at the grade 12 level in courses designated S, G, or U). A minimum 85% average over the four required courses with no less than 60% in each required course.

1. English 40S
2. Applied Mathematics 40S or Pre-Calculus Mathematics 40S
3. Biology 40S or Chemistry 40S
4. An academic 40S course

**Academic Regulations****Interdisciplinary Health Program Academic Regulations Intro**

The provisions of the General Academic Regulations (p. 118), and the University Policies and Procedures (p. 37), apply to all students. In addition, the Interdisciplinary Health Program has regulations and requirements, published below, that apply specifically to its students.

**Prerequisite, Corequisite, and Course Availability: Definitions****Prerequisite**

If a course is prerequisite to a second course, the prerequisite must be met in order to continue in the second course. The department giving the second course may require a minimum grade of 'C' in the first course to register in the second course. Some inactive (legacy) courses may be used as prerequisites.

**Corequisite**

If a first course is a corequisite to a second course, the first course (unless previously completed) must be taken in the same term as the second course.

**Course Availability**

Not all courses listed are offered every year. Students are referred to the on-line calendar ([https://aurora.umanitoba.ca/banprod/bwckctlg.p\\_disp\\_dyn\\_ctlg/](https://aurora.umanitoba.ca/banprod/bwckctlg.p_disp_dyn_ctlg/)) for courses offered in the year.

**Scholastic Standards****Graduation and Grade Point Average**

To graduate, a student must have passed 120 credit hours acceptable for credit in the current degree program and have obtained a minimum of 300 quality points. This is equivalent to a Degree Grade Point Average of 2.50. A pass indicates a grade of 'D' or better. A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses which apply at a particular stage. The effective courses consist of all courses passed, in addition to all failures which have not been cleared, or substituted for, in the student's record. A maximum of 150 credit hours (25 courses or the equivalent) may be attempted in order to obtain the 120 credit hours.

**Assessment**

The status of each student will be assessed in May of each year in which a student is registered. Assessments can include the following comments:

- Faculty minimum met (grade point average meets the standards (p. 582));
- Dean's Honour (p. 583)
- Academic Warning
- Probationary status (p. 582)
- Suspension (p. 582)
- Suspension - all attempts used (p. 582)

Academic warning indicates a grade point average between the minimum required at the effective credit hours (year) and the DGPA requirement of 2.0.

There is a maximum of 30 credit hours of attempts allowed for each academic program; once those attempts are used (repeated courses, grades of F or D), it is impossible to graduate.

**Probationary Standing**

Students must achieve or exceed the following standards at the specified stages in their academic careers. Failure to obtain the standard results in probation. Once placed on probation, students who fail to meet the appropriate performance level at the next assessment following the next registration will be academically suspended. A student is not permitted to be on probation for two consecutive years.

**Assessment Standards**

Interdisciplinary Health Program: Health Sciences and Health Studies

Credit Hours	Grade Point Average	Comment
9 – 21 credit hours	< 2.0	Academic Warning
24 – 30 credit hours	2.0	
33 – 60 credit hours	2.2	
63 – 90 credit hours	2.4	
93 – 117 credit hours	2.5	
120+ credit hours	2.5	

**Suspension**

Suspended students must remain out of the Degree Program for one academic year from the date of suspension and must apply for reinstatement at the Admissions Office no later than May 1.

**Suspension (All Attempts Used)**

Where it is mathematically impossible for a student to complete the degree by repeating failed courses, a suspended student, after remaining out of the program for one calendar year, may attempt reinstatement. By completing at least 12 credit hours in one term with a minimum 'D' grade

in all courses and a term grade point average of at least 2.0, the student will be reinstated. The student will start the program afresh, with previous grades of 'C' or better applicable to the program.

### Part-time Students

The maximum time allowed for completion of the degree is 10 years. After completion of 24 credit hours, part-time students will be evaluated each May and must conform to the minimum performance levels.

### Repeating Courses

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

A student may repeat any course for the purpose of attaining a better grade. A course (or its equivalent) that is repeated in Fall 2016 or later will have the highest grade count. There are no supplemental examinations for students who have failed final or deferred examinations.

### Challenge for Credit

A student wishing to challenge a course for credit should contact an Academic Advisor. Letter grades are granted upon completion of the course that is challenged for credit. An application is required.

### Transfer of Credit

Please refer to Admissions (p. 129) and Transfer of Credit (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>).

### Appeals of Academic Regulations

The Committee on Student Standing considers petitions from students who request special consideration with respect to rules and regulations governing their programs of study and qualification for graduation.

### Dean's Honour List

Eligible students who achieve a term Grade Point Average of 3.5 or higher in at least 12 credit hours per term will be included in the Deans Honour List.

### Degree With Distinction

Students who graduate with a degree GPA of 3.75 and higher will receive a degree with distinction.

### Work Permit for Study Purposes

International students who are registering for courses or programs that require work placement must obtain a valid **Work Permit**, in addition to maintaining a valid Study Permit. Work placement includes, but is not limited to, any **paid or unpaid** practicum, internships, work experience, field placement, and co-op programs that are a required component for the completion of their degree, diploma or certificate. Please contact your program advisor or the International Centre for Students (<https://umanitoba.ca/international/>) for further information.

### Release and Indemnification Forms

In elective courses, students may be required to sign a release form for off-campus activities.

### Written English and Mathematics Requirements

The written English and Mathematics requirements are satisfied by required courses HNSC 2000 (or the former HMEC 2000) and STAT 1000 within the Interdisciplinary Health Program. HNSC 2000 (or the former HMEC 2000) will be available to students upon admission to the Interdisciplinary Health Program.

An Option in Aging is offered by and in the following faculties, schools, and colleges: Arts, Rady Faculty of Health Sciences: Bachelor of Human

Ecology Family Social Sciences Degree Program, Interdisciplinary Health Program, Nursing, Kinesiology and Recreation Management, Social Work, and Agricultural and Food Sciences: Bachelor of Science in Human Nutritional Sciences Program.

To complete the option, students in the Interdisciplinary Health Program must complete each of the following requirements:

Course	Title	Hours
FMLY 2650	The Social Aspects of Aging	3
or REC 2650	The Social Aspects of Aging	
or		
SWRK 2650	The Social Aspects of Aging	
KIN 2610	Health and Physical Aspects of Aging	3
or NURS 2610	Health and Physical Aspects of Aging	
At least six (6) credit hours of discipline-specific (professional) applied work in the student's department of registration		6
FMLY 4300	Field Experience <sup>1</sup>	
HNSC 4362	Nutrition Option Practicum <sup>1</sup>	
Six (6) credit hours of aging -related courses from:		6
FMLY 3220	Death and the Family	
FMLY 3240	Families in Later Years	
FMLY 4220	Aging and Risk in a Global Context	
HNSC 2130	Nutrition Through the Life Cycle	
HNSC 4310	Nutrition and the Elderly	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Application is required for all field placement or practicum courses.

Upon completion of these requirements, a comment will be added to the student's transcript.

## Health Sciences, B.H.Sc.

### Degree Requirements

The Bachelor of Health Sciences (B.H.Sc.) degree is a four year interdisciplinary program that incorporates science, humanities and social science to provide students with an integrative perspective on health. The BHSc provides students with an interdisciplinary background and skill set that will contribute to their preparation for a future in health-related careers. This interdisciplinary skill set is seen as advantageous for students applying for education in professional health programs and graduate studies.

The Bachelor of Health Sciences (B.H.Sc.) Degree consists of 120 credit hours.

Students should consult the Academic Calendar to ensure that they have the appropriate pre- or co-requisites before they attempt to register in a course. A number of courses are cross-listed between departments/faculties. Students are strongly encouraged to seek the advice of the Academic Advisor in the Interdisciplinary Health Program in order to plan their programs.

Course	Title	Hours
<b>Year 1</b>		
BIOL 1410	Anatomy of the Human Body	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>2</sup>	3



CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>2</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
HEAL 1500	Foundations of Human Biology 1 <sup>3</sup>	3
HEAL 1502	Foundations of Human Biology 2 <sup>3</sup>	3
INDG 1220 or INDG 1240	Indigenous Peoples in Canada, Part 1 or Indigenous Peoples in Canada, Part 2	3
PSYC 1200 or SOC 1000	Introduction to Psychology or Introduction to Sociology	6
STAT 1000	Basic Statistical Analysis 1	3
3 credit hours of Free electives if SOC 1000 is taken		

<b>Hours</b>	<b>30</b>
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**Year 2**

BGEN 2000	Medical Cell Biology	3
CHEM 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2000 or PSYC 2250	Research Methods and Presentation <sup>4</sup> or Introduction to Psychological Research	3
IMMU 2000	Fundamentals in Immunology	3
PHGY 1030	Fundamentals of Medical Physiology	6
Select 3 credit hours of Free Electives		3

<b>Hours</b>	<b>30</b>
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**Year 3**

BGEN 3010	Genetics in Biomedicine <sup>5</sup>	3
FMLY 3750	Fundamentals of Health Promotion	3
FMLY 3780 or FMLY 3790	Introduction to the Development of Programs for Children and Families or Introduction to the Evaluation of Programs for Children and Families	3
HEAL 3000	Introduction to Social Epidemiology	3
HEAL 3600	Integration of Health Determinants for Communities	3
HEAL 3610	Mechanisms of Disease 1	3
PHAC 3000	Foundations of Pharmacology	3
PHIL 2740	Ethics and Biomedicine <sup>6</sup>	3
3 credit hours of Free Electives		3
3 credit hours of Program Electives <sup>7</sup>		3

<b>Hours</b>	<b>30</b>
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**Year 4**

ANAT 4010	Human Embryology	3
HEAL 4600	Integration of Health Determinants for Canada and the World	3
HEAL 4620	Health Sciences Capstone	3
HEAL 4630	Mechanisms of Disease 2	3
PHAC 4030	Drugs in Human Disease I	3
PHAC 4040	Drugs in Human Disease II	3
6 credit hours of Program Electives <sup>7</sup>		6

6 credit hours of Free Electives	6
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<b>Hours</b>	<b>30</b>
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<b>Total Hours</b>	<b>120</b>
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<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

<sup>2</sup> The former CHEM 1300 and the former CHEM 1310 may be used as course equivalents if completed prior to September 2021.

<sup>3</sup> BIOL 1020 and BIOL 1030 may be used as course equivalents if completed prior to September 2021.

<sup>4</sup> Students are advised that they must complete 3 credit hours from the Written English list within their first 60 credit hours, if they do not plan to take HNSC 2000.

<sup>5</sup> Students interested in applying to the MSc in Genetic Counselling must take BGEN 3022 and BGEN 3024 instead of BGEN 3010.

<sup>6</sup> PHIL 2290 (6) may be used in place of PHIL 2740 and will also satisfy the requirement of 3 credit hours of Free Electives.

<sup>7</sup> Of the 9 credit hours of program electives, 6 credit hours must be selected from the science elective list.

## Bachelor of Health Sciences Program Electives List

Please note, a course completed as a core requirement may not also be used as an elective.

### SCIENCE ELECTIVES

#### Faculty of Agricultural and Food Sciences

Course	Title	Hours
AGRI 2180	Introductory Toxicology	3
FOOD 4150	Food Microbiology 1	3
HNSC 2130	Nutrition Through the Life Cycle	3

#### CLAYTON H. RIDDELL FACULTY OF ENVIRONMENT EARTH AND RESOURCES

Course	Title	Hours
ENVR 2180	Introductory Toxicology	3

#### MAX RADY COLLEGE OF MEDICINE

Course	Title	Hours
BGEN 3022	Introduction to Human Genetics A	3
BGEN 3024	Introduction to Human Genetics B	3

#### FACULTY OF SCIENCE

Course	Title	Hours
BIOL 2380	Introductory Toxicology	3
BIOL 3290	Medicinal and Hallucinogenic Plants	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2750	Elements of Biochemistry 2	3
MATH 1230	Differential Calculus	3
MATH 1500	Introduction to Calculus	3
MBIO 1220	Essentials of Microbiology	3

MBIO 2420	Introductory Virology	3
MBIO 2750	Elements of Biochemistry 2	3
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PHYS 1050	Physics 1: Mechanics	3
PHYS 1070	Physics 2: Waves and Modern Physics	3
STAT 2000	Basic Statistical Analysis 2	3
STAT 3000	Applied Linear Statistical Models	3

## SOCIAL SCIENCE ELECTIVES

### Faculty of Arts

Course	Title	Hours
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 3690	Economic Issues of Health Policy	3
ECON 3692	Economic Determinants of Health	3
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
INDG 2020	The Métis in Canada	3
INDG 2110	Introduction to Indigenous Community Development	3
INDG 3100	Indigenous Healing Ways	3
INDG 3240	Indigenous Medicine and Health	3
INDG 3330	Indigenous People, Science and the Environment	3
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology	3
PSYC 2290	Child Development	3
PSYC 2360	Brain and Behaviour	3
PSYC 2440	Behaviour Modification Principles	3
PSYC 2490	Abnormal Psychology	3
PSYC 3070	Adult Development	3
PSYC 3130	Introduction to Health Psychology	3
PSYC 3150	Behaviour Modification Applications	3
PSYC 3310	Adolescent Development	3
SOC 1000	Introduction to Sociology	3
SOC 2330	Social Psychology in Sociological Perspective	3
SOC 2390	Social Organization	3
SOC 2460	The Family	3
SOC 2490	Sociology of Health and Illness	3
SOC 2620	The Sociology of Aging	3
SOC 3540	The Sociology of Health Care Systems	3
SOC 3660	Sociology of Mental Disorder	3
SOC 3770	Women, Health and Medicine	3

### Faculty of Kinesiology and Recreation Management

Course	Title	Hours
KIN 2610	Health and Physical Aspects of Aging	3
KPER 1200	Physical Activity, Health and Wellness	3
REC 2650	The Social Aspects of Aging	3

## Rady Faculty of Health Sciences

Course	Title	Hours
HEAL 1600	Health and Health Professions	3
HEAL 4640	Mechanisms of Disease 3	6
HEAL 4650	Selected Topics in Interdisciplinary Health	3

## College of Nursing

Course	Title	Hours
NURS 2610	Health and Physical Aspects of Aging	3
NURS 3330	Women and Health	3
NURS 3400	Men's Health: Concerns, Issues and Myths	3
NURS 4520	Professional Foundations 5: Interprofessional and Collaborative Practice	3

## Max Rady College of Medicine

Course	Title	Hours
FMLY 1000	Families in Contemporary Canadian Society	3
FMLY 1010	Human Development in the Family	3
FMLY 1012	Introduction to Social Development	3
FMLY 1420	Family Management Principles	3
FMLY 2012	Development, Conflict, and Displacement	3
FMLY 2400	Family Financial Health	3
FMLY 2500	Diversity and Families	3
FMLY 2600	Foundations of Childhood Developmental Health	3
FMLY 2650	The Social Aspects of Aging	3
FMLY 2800	Family Violence	3
FMLY 3012	Theories of Social Development	3
FMLY 3220	Death and the Family	3
FMLY 3240	Families in Later Years	3
FMLY 3330	Parenting and Developmental Health	3
FMLY 3400	Families as Consumers	3
FMLY 3470	Selected Studies in the Family I	3
FMLY 3600	Adolescents in Families and Society	3
FMLY 3780	Introduction to the Development of Programs for Children and Families	3
FMLY 3790	Introduction to the Evaluation of Programs for Children and Families	3
FMLY 3800	Conflict Resolution in the Family	3
FMLY 3802	Intimate Partner Violence	3
FMLY 3806	Children, Violence and Rights	3
FMLY 4012	Social Development Policies	3
FMLY 4220	Aging and Risk in a Global Context	3
FMLY 4300	Field Experience	6
FMLY 4330	Management of Family Stress	3
FMLY 4400	Family Economics: Poverty and Wealth	3
FMLY 4470	Selected Studies in the Family II	3
FMLY 4480	Work and Family Issues	3
FMLY 4602	Family Relationships, Health and Well-being	3
FMLY 4604	Children in Adversity	3
FMLY 4606	A Social Justice Perspective on Indigenous Maternal and Child Health	3
FMLY 4802	Family Violence Prevention	3

**Faculty of Social Work**

Course	Title	Hours
SWRK 1310	Introduction to Social Welfare Policy Analysis	3
SWRK 2650	The Social Aspects of Aging	3

**Health Sciences Minor****Minor Requirements**

Course	Title	Hours
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3600	Integration of Health Determinants for Communities	3
HEAL 4600	Integration of Health Determinants for Canada and the World	3
Select 6 credit hours of Science Orientation courses at the 3000 or 4000 level		6
Select 3 credit hours of Social Science Orientation courses at the 3000 or 4000 level		3
<b>Total Hours</b>		<b>18</b>

For Science Orientation courses - Bachelor of Health Sciences Program Electives List (p. 583)

For Social Science Orientation courses - Bachelor of Health Studies Program Electives List (p. 586)

**Health Studies, B.H.St.****Degree Requirements**

The Bachelor of Health Studies (B.H.St.) Degree now consists of 3 Concentrations from which students must declare at least one. A Concentration is 18 credit hours. Students must choose from one of the following 3 Concentrations: Health Policy, Planning and Evaluation, Health Promotion and Education, or Family Health. Requirements for these are found in the Concentrations Tab (p. 589).

Course	Title	Hours
<b>Year 1</b>		
ANTH 1210 or ANTH 1220	Human Origins and Antiquity or Cultural Anthropology	3
FMLY 1012	Introduction to Social Development	3
HEAL 1500	Foundations of Human Biology 1 <sup>2</sup>	3
HEAL 1502	Foundations of Human Biology 2 <sup>2</sup>	3
PSYC 1200	Introduction to Psychology	6
SOC 1000	Introduction to Sociology	3
STAT 1000	Basic Statistical Analysis 1	3
3 credit hours of Concentration Electives		3
3 credit hours of Free Electives		3
<b>Hours</b>		<b>30</b>

**Year 2**

ECON 1210 or ECON 1220	Introduction to Canadian Economic Issues and Policies or Introduction to Global and Environmental Economic Issues and Policies	3
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GMGT 1010 or GMGT 2070	Business and Society or Introduction to Organizational Behaviour	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2000 or PSYC 2250	Research Methods and Presentation <sup>3</sup> or Introduction to Psychological Research	3
Select one of the following:		3
INDG 1220	Indigenous Peoples in Canada, Part 1	
INDG 1240	Indigenous Peoples in Canada, Part 2	
INDG 3240	Indigenous Medicine and Health	
Select 6 credit hours of Concentration Electives		6
Select 3 credit hours of Program Electives <sup>4</sup>		3
Select 3 credit hours of Free Electives		3
<b>Hours</b>		<b>30</b>

**Year 3**

FMLY 3750	Fundamentals of Health Promotion	3
FMLY 3780	Introduction to the Development of Programs for Children and Families	3
FMLY 3790	Introduction to the Evaluation of Programs for Children and Families	3
HEAL 3000	Introduction to Social Epidemiology	3
HEAL 3600	Integration of Health Determinants for Communities	3
PHIL 2740	Ethics and Biomedicine <sup>5</sup>	3
SOC 2490	Sociology of Health and Illness	3
Select 3 credit hours of Concentration Electives		3
Select 6 credit hours of Program Electives <sup>4</sup>		6
<b>Hours</b>		<b>30</b>

**Year 4**

HEAL 4600	Integration of Health Determinants for Canada and the World	3
HEAL 4610	Health Studies Capstone	3
Select 6 credit hours of Concentration Electives		6
Select 12 credit hours of Program Electives <sup>4</sup>		12
Select 6 credit hours of Free Electives		6
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

<sup>2</sup> BIOL 1020 and BIOL 1030 may be used as course equivalents if courses were completed prior to September 2021.

<sup>3</sup> Students are advised that they must complete 3 credit hours from the Written English list within their first 60 credit hours, if they do not plan to take HNSC 2000.

<sup>4</sup> Of the 21 credit hours of program electives, 9 credit hours must be at the 3000-4000 level.

<sup>5</sup> PHIL 2290 (6) may be used in place of PHIL 2740 and will also satisfy the requirement of 3 credit hours of Free Electives.

## Bachelor of Health Studies Program Electives List

Please note, a course completed as a core requirement may not also be used as an elective.

### Faculty of Agricultural and Food Sciences

Course	Title	Hours
ABIZ 1010	Economics of World Food Issues and Policies	3
ABIZ 3550	Environmental Policy	3
FOOD 4150	Food Microbiology 1	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 3350	Culture and Food Patterns	3
HNSC/GEOG 3870	Food Geographies	3

### Faculty of Arts

Course	Title	Hours
ANTH 2020	Relatedness in a Globalizing World	3
ANTH 2040	Native North America: A Sociocultural Survey	3
ANTH 2240	Plagues and People	3
ANTH 2300	Anthropology of Childhood	3
ANTH 2510	Anthropology of Economic Systems	3
ANTH 2550	Culture and the Individual	3
ANTH 2560	Anthropology of Illness	3
ANTH 2860	Evolution and Human Diversity	3
ANTH 2880	Human Evolution	3
ANTH 2890	Human Population Biology	3
ANTH 3200	Anthropology of Food	3
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3330	Sex and Sexualities	3
ANTH 3500	Peoples of the Arctic	3
ANTH 3550	Canadian Subcultures	3
ANTH 3740	Human Growth and Variation	3
ANTH 3750	Anthropological Perspectives on Globalization and the World-System	3
ECON 2350	Community Economic Development	3
ECON 2362	Economics of Gender	3
ECON 3690	Economic Issues of Health Policy	3
ECON 3692	Economic Determinants of Health	3
GPE 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3
HIST 2010	Indigenous History in Canada (C)	6
HIST 2400	History of Human Rights and Social Justice in the Modern World (M)	3
HIST 3730	A History of Western Canada (C)	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
INDG 1250	Introductory Cree 1	3
INDG 1270	Introductory Anishinaabemowin (Ojibwe) 1	3
INDG 1300	Selected Topics in Introductory Indigenous Language	3
INDG 2020	The Métis in Canada	3
INDG 2040	The Dakota, Lakota, and Nakota Nations	3

INDG 2060	Eastern Woodlands Encounters Columbus to Confederation	3
INDG 2070	Cree, Innu, and Dene Nations	3
INDG 2080	Inuit Society and Culture	3
INDG 2100	Indigenous Spirituality	3
INDG 2110	Introduction to Indigenous Community Development	3
INDG 3100	Indigenous Healing Ways	3
INDG 3150	Residential School Literature	3
INDG 3240	Indigenous Medicine and Health	3
INDG 3300	Indigenous Language Planning and Development	3
LABR 1260	Working for a Living	3
LABR 3060	Workplace Health and Safety	3
LABR 3070	Labour Relations and Occupational Health and Safety Law	3
PHIL 2290	Ethics and Society	6
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology	3
PSYC 2290	Child Development	3
PSYC 2360	Brain and Behaviour	3
PSYC 2440	Behaviour Modification Principles	3
PSYC 2470	Learning Foundations of Psychology	3
PSYC 2480	Cognitive Processes	3
PSYC 2490	Abnormal Psychology	3
PSYC 2530	Psychology of Personality	3
PSYC 2540	Social Psychology	3
PSYC 3070	Adult Development	3
PSYC 3130	Introduction to Health Psychology	3
PSYC 3150	Behaviour Modification Applications	3
PSYC 3160	Perception and Attention	3
PSYC 3310	Adolescent Development	3
PSYC 3390	Thinking	3
PSYC 3430	Sensory Processes	3
PSYC 3470	Dyadic Relations	3
PSYC 3490	Individual Differences	3
PSYC 3580	Language and Thought	3
PSYC 3630	Psychological Measurement and Assessment	3
RLGN 1322	Introduction to Eastern Religions	3
RLGN 1324	Introduction to Western Religions	3
RLGN 1410	Death and Concepts of the Future	3
RLGN 2590	Religion and Social Issues	3
SOC 2320	Canadian Society and Culture	3
SOC 2330	Social Psychology in Sociological Perspective	3
SOC 2360	Small Group Interaction	3
SOC 2370	Ethnic Relations	3
SOC 2390	Social Organization	3
SOC 2460	The Family	3
SOC 2510	Criminology	3
SOC 2610	Sociology of Criminal Justice and Corrections	3
SOC 2620	The Sociology of Aging	3
SOC 2630	Social Change	3
SOC 3310	Theorizing Crime, Law, and Social Justice	3
SOC 3370	Sociology of Work	3

SOC 3380	Power, Politics and the Welfare State	3
SOC 3400	Policing and Crime Prevention	3
SOC 3540	The Sociology of Health Care Systems	3
SOC 3660	Sociology of Mental Disorder	3
SOC 3730	Society and Education	3
SOC 3750	Institutional Responses to Violence in Family and Intimate Relationships	3
SOC 3770	Women, Health and Medicine	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3820	Qualitative and Historical Methods in Sociology	3
SOC 3830	Youth, Crime, and Society	3
SOC 3840	Community and Social Reconstruction	3
SOC 3860	Genocide, Crime and Society	3
SOC 3890	Power and Inequality in Comparative Perspective	3
WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
WOMN 2000	Feminist Thought	3
WOMN 2500	Race, Class and Sexuality	3
WOMN 2560	Women, Science and Technology	3
WOMN 2600	Sex, Gender, Space and Place	3
WOMN 2610	Gender, Transport and Social Justice	3
WOMN 3000	Interdisciplinary Research in Women's and Gender Studies	3
WOMN 3560	Feminist Perspectives on Violence Against Women	3

### I. H. Asper School of Business

Course	Title	Hours
HRIR 2440	Human Resource Management	3
HRIR 3450	Labour and Employment Relations	3
LEAD 2010	Learning to Lead	3
LEAD 3010	Negotiation and Conflict Management	3
LEAD 4020	Leadership, Power and Politics in Organizations	3

### Clayton H. Riddell Faculty of Environment, Earth and Resources

Course	Title	Hours
EER 1000	Earth: A User's Guide	3
ENVR 1000	Environmental Science 1 - Concepts	3
ENVR 3400	Introduction to Environment and Health	3
ENVR 4400	Advanced Issues in Environment and Health	3
GEOG 1280	Introduction to Human Geography	3
GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3
GEOG 3870	Food Geographies	3
GEOG 3890	Geography and Wellness (HS)	3

### Faculty of Education

Course	Title	Hours
EDUA 1560	Adult Learning and Development	3
EDUA 1570	Foundations of Adult Education	3
EDUA 1580	Program Planning in Adult Education	3
EDUA 1590	Facilitating Adult Education	3

### Rady Faculty of Health Sciences

Course	Title	Hours
HEAL 1600	Health and Health Professions	3
HEAL 4650	Selected Topics in Interdisciplinary Health	3

### Max Rady College of Medicine

Course	Title	Hours
BGEN 2000	Medical Cell Biology	3
BGEN 3010	Genetics in Biomedicine	3
BGEN 3022	Introduction to Human Genetics A	3
BGEN 3024	Introduction to Human Genetics B	3
PHGY 1030	Fundamentals of Medical Physiology	6
FMLY 1000	Families in Contemporary Canadian Society	3
FMLY 1010	Human Development in the Family	3
FMLY 1420	Family Management Principles	3
FMLY 2012	Development, Conflict, and Displacement	3
FMLY 2400	Family Financial Health	3
FMLY 2500	Diversity and Families	3
FMLY 2600	Foundations of Childhood Developmental Health	3
FMLY 2650	The Social Aspects of Aging	3
FMLY 2800	Family Violence	3
FMLY 3012	Theories of Social Development	3
FMLY 3220	Death and the Family	3
FMLY 3240	Families in Later Years	3
FMLY 3330	Parenting and Developmental Health	3
FMLY 3400	Families as Consumers	3
FMLY 3470	Selected Studies in the Family I	3
FMLY 3600	Adolescents in Families and Society	3
FMLY 3800	Conflict Resolution in the Family	3
FMLY 3802	Intimate Partner Violence	3
FMLY 3806	Children, Violence and Rights	3
FMLY 4012	Social Development Policies	3
FMLY 4220	Aging and Risk in a Global Context	3
FMLY 4300	Field Experience	6
FMLY 4330	Management of Family Stress	3
FMLY 4400	Family Economics: Poverty and Wealth	3
FMLY 4470	Selected Studies in the Family II	3
FMLY 4480	Work and Family Issues	3
FMLY 4604	Children in Adversity	3
FMLY 4606	A Social Justice Perspective on Indigenous Maternal and Child Health	3
FMLY 4802	Family Violence Prevention	3

### College of Nursing

Course	Title	Hours
NURS 2610	Health and Physical Aspects of Aging	3
NURS 3330	Women and Health	3
NURS 3400	Men's Health: Concerns, Issues and Myths	3
NURS 4520	Professional Foundations 5: Interprofessional and Collaborative Practice	3

### Faculty of Kinesiology and Recreation Management

Course	Title	Hours
KIN 2610	Health and Physical Aspects of Aging	3
KIN 3510	Physical Activity and Aging	3
KPER 1200	Physical Activity, Health and Wellness	3
KPER 2200	Planning Principles	3
KPER 2700	Motor Control and Learning	3
KPER 3100	Inclusive Physical Activity and Leisure	3
REC 2650	The Social Aspects of Aging	3
REC 3220	Program Planning and Evaluation	3
REC 4250	Leisure and Aging	3

### Faculty of Science

Course	Title	Hours
BIOL 1300	Economic Plants	3
BIOL 1340	The State of the Earth's Environment: Contemporary Issues	3
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
BIOL 3290	Medicinal and Hallucinogenic Plants	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1120	Introduction to Chemistry Techniques	3
CHEM 1130	Introduction to Organic Chemistry	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
CHEM 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
CHEM 2750	Elements of Biochemistry 2	3
MATH 1010	Applied Finite Mathematics	3
MATH 1020	Mathematics in Art	3
MATH 1080	Fundamentals of Mathematical Reasoning	3
MATH 1090	Mathematical Reasoning in Euclidean Geometry	3
MATH 1220	Linear Algebra 1	3
MATH 1230	Differential Calculus	3
MATH 1300	Vector Geometry and Linear Algebra	3
MATH 1500	Introduction to Calculus	3
MBIO 1010	Microbiology I	3
MBIO 1220	Essentials of Microbiology	3
MBIO 1410	Introduction of Molecular Biology	3
MBIO 2020	Microbiology II	3
MBIO 2420	Introductory Virology	3

MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PHYS 1050	Physics 1: Mechanics	3
PHYS 1070	Physics 2: Waves and Modern Physics	3
STAT 2000	Basic Statistical Analysis 2	3

### Faculty of Social Work

Course	Title	Hours
SWRK 1310	Introduction to Social Welfare Policy Analysis	3
SWRK 2050	Community and Organizational Theory	3
SWRK 2080	Interpersonal Communication Skills	3
SWRK 2110	Emergence of the Canadian Social Welfare State	3
SWRK 2130	Comparative Social Welfare Systems	3
SWRK 2650	The Social Aspects of Aging	3
SWRK 3130	Contemporary Canadian Social Welfare	3

## Concentrations

The Bachelor of Health Studies (B.H.St.) Degree now consists of 3 Concentrations from which students must declare at least one. A Concentration is 18 credit hours. Students must choose from one of the following 3 Concentrations:

1. Health Policy, Planning and Evaluation or
2. Health Promotion and Education or
3. Family Health

Students should consult the Academic Calendar to ensure that they have the appropriate pre- or co-requisites before they attempt to register in a course. A number of courses are cross-listed between departments/faculties. Students are strongly encouraged to seek the advice of Academic Advisor in the Interdisciplinary Health Program in order to plan their programs. The curriculum of this program integrates social science concepts, such as sociology and economics with science concepts, such as biology and metabolism. The integration supports the promotion of health by creating a new understanding among graduates of the determinants of health and how these determinants influence the health of individuals, families, and communities, as well as health services. This degree combines knowledge from science and social science disciplines in their content and learning experiences.

### Health Policy, Planning and Evaluation Concentration

The **Health Policy, Planning, and Evaluation** concentration can provide foundational knowledge related to health policy development and related evaluation, as well as programming services. This concentration can be a potential route for those wishing to pursue related graduate studies in Community Health Sciences (although students in all three concentrations are eligible to pursue graduate studies), or for individuals seeking careers in areas such as Health Policy Analysis or Program Planning and Evaluation Coordinators.

### Health Policy, Planning and Evaluation Concentration Electives List

Course	Title	Hours
ABIZ 1010	Economics of World Food Issues and Policies	3
ACC 1100	Introductory Financial Accounting	3

ANTH 2560	Anthropology of Illness	3	ENVR 4400	Advanced Issues in Environment and Health	3
ECON 3690	Economic Issues of Health Policy	3	FMLY 1010	Human Development in the Family	3
ECON 3692	Economic Determinants of Health	3	FMLY 1420	Family Management Principles	3
ENVR 3400	Introduction to Environment and Health	3	FMLY 2650	The Social Aspects of Aging	3
ENVR 4400	Advanced Issues in Environment and Health	3	FMLY 3012	Theories of Social Development	3
FMLY 4012	Social Development Policies	3	FMLY 4012	Social Development Policies	3
GEOG 1280	Introduction to Human Geography	3	GEOG 1280	Introduction to Human Geography	3
GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3	GEOG 1700	Social Justice in the 21st Century: Global Political Economy and Environmental Change	3
GEOG 2640	Geography of Culture and Inequality (HS)	3	GEOG 2640	Geography of Culture and Inequality (HS)	3
HNSC 1200	Food: Facts and Fallacies	3	HNSC 1200	Food: Facts and Fallacies <sup>1</sup>	3
HNSC 3350	Culture and Food Patterns	3	HNSC 2130	Nutrition Through the Life Cycle <sup>1</sup>	3
HNSC 3870	Food Geographies	3	HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
INDG 2100	Indigenous Spirituality	3	HNSC 2160	Principles of Food Preparation and Preservation	3
INDG 3100	Indigenous Healing Ways	3	HNSC 3260	Food Quality Evaluation	3
KIN/NURS 2610	Health and Physical Aspects of Aging	3	HNSC 3350	Culture and Food Patterns	3
KPER 1200	Physical Activity, Health and Wellness	3	HNSC 4270	Sensory Evaluation of Food	3
KPER 2200	Planning Principles	3	HNSC 4290	Food, Nutrition and Health Policies	3
LABR 1260	Working for a Living	3	HNSC 4310	Nutrition and the Elderly	3
LABR 3060	Workplace Health and Safety	3	INDG 2100	Indigenous Spirituality	3
LEAD 2010	Learning to Lead	3	INDG 3100	Indigenous Healing Ways	3
LEAD 3010	Negotiation and Conflict Management	3	KIN/NURS 2610	Health and Physical Aspects of Aging	3
LEAD 4020	Leadership, Power and Politics in Organizations	3	KPER 1200	Physical Activity, Health and Wellness	3
PSYC 2260	Introduction to Research Methods in Psychology	3	LABR 1260	Working for a Living	3
PSYC 2540	Social Psychology	3	PHIL 2150	Mind and Body	3
PSYC 3130	Introduction to Health Psychology	3	PSYC 2260	Introduction to Research Methods in Psychology	3
REC 3220	Program Planning and Evaluation	3	PSYC 2360	Brain and Behaviour	3
SOC 2390	Social Organization	3	PSYC 2440	Behaviour Modification Principles	3
SOC 2630	Social Change	3	PSYC 2470	Learning Foundations of Psychology	3
SOC 3540	The Sociology of Health Care Systems	3	PSYC 2480	Cognitive Processes	3
STAT 2000	Basic Statistical Analysis 2	3	PSYC 3130	Introduction to Health Psychology	3
SWRK 1310	Introduction to Social Welfare Policy Analysis	3	RLGN 1430	Food: Religious Concepts and Practices	3
SWRK 2050	Community and Organizational Theory	3	SOC 2620	The Sociology of Aging	3
SWRK 2080	Interpersonal Communication Skills	3	SOC 2630	Social Change	3
			SOC 3540	The Sociology of Health Care Systems	3
			SOC 3730	Society and Education	3
			STAT 2000	Basic Statistical Analysis 2 <sup>1</sup>	3
			SWRK 2050	Community and Organizational Theory	3
			SWRK 2080	Interpersonal Communication Skills	3

## Health Promotion and Education Concentration

The **Health Promotion and Education** concentration would be a route through which students wishing to pursue a career as a home economics teacher could obtain their 'teachable subjects' in family studies and nutrition. Students are advised that additional training will be required and that consultation with academic advisors in the Faculty of Education is recommended. Aside from home economics education, this concentration would lay the foundation for a future career options as Community Health Educators or Health-related Organization/Foundation Fundraising, or Health and Safety Coordinators or a Professional Home Economist (P.H.Ec.)

### Health Promotion and Education Concentration Electives List

Course	Title	Hours
ANTH 2560	Anthropology of Illness	3
EDUA 1560	Adult Learning and Development	3
EDUA 1570	Foundations of Adult Education	3
EDUA 1580	Program Planning in Adult Education	3
EDUA 1590	Facilitating Adult Education	3
ENVR 3400	Introduction to Environment and Health	3

<sup>1</sup> Students considering a career as a Home Economics teacher through the Faculty of Education after degree program should consult with an academic advisor in the Faculty of Education. Some courses (marked with an asterisk) may be required for completion of higher level courses in the "teachable subject areas" in foods and nutrition and family social sciences and will require careful program planning.

## Family Health Concentration Electives List

The **Family Health** concentration was created to ensure that those students interested in family social science would clearly see a place for themselves in the new academic structure. One of the features of the Family Health concentration will be the ability to take courses relevant to the existing Family Social Science options (Aging and Developmental Health; Child and Youth Developmental Health; Family Economic Health;

Family Violence; Social Development) allowing the program to be flexible and meet individual student needs. This degree provides the educational background suitable for a future career as a Community Wellness Worker, Victim Services Worker, Youth Care Worker, Residential Care Manager.

For Social Science Orientation courses - Bachelor of Health Studies Program Electives List (p. 586)

For Science Orientation courses - Bachelor of Health Sciences Program Electives List (p. 583)

### Family Health Concentration Electives List

Course	Title	Hours
FMLY 1000	Families in Contemporary Canadian Society	3
FMLY 1010	Human Development in the Family	3
FMLY 1420	Family Management Principles	3
FMLY 2012	Development, Conflict, and Displacement	3
FMLY 2400	Family Financial Health	3
FMLY 2500	Diversity and Families	3
FMLY 2600	Foundations of Childhood Developmental Health	3
FMLY 2650	The Social Aspects of Aging	3
FMLY 2800	Family Violence	3
FMLY 3012	Theories of Social Development	3
FMLY 3220	Death and the Family	3
FMLY 3240	Families in Later Years	3
FMLY 3330	Parenting and Developmental Health	3
FMLY 3400	Families as Consumers	3
FMLY 3470	Selected Studies in the Family I	3
FMLY 3600	Adolescents in Families and Society	3
FMLY 3800	Conflict Resolution in the Family	3
FMLY 3802	Intimate Partner Violence	3
FMLY 3806	Children, Violence and Rights	3
FMLY 4012	Social Development Policies	3
FMLY 4220	Aging and Risk in a Global Context	3
FMLY 4300	Field Experience	6
FMLY 4330	Management of Family Stress	3
FMLY 4400	Family Economics: Poverty and Wealth	3
FMLY 4470	Selected Studies in the Family II	3
FMLY 4480	Work and Family Issues	3
FMLY 4604	Children in Adversity	3
FMLY 4606	A Social Justice Perspective on Indigenous Maternal and Child Health	3
FMLY 4802	Family Violence Prevention	3
NURS 2100	Introduction to Family Caregiving Across the Lifespan	3

## Health Studies Minor

### Minor Requirements

Course	Title	Hours
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3600	Integration of Health Determinants for Communities	3
HEAL 4600	Integration of Health Determinants for Canada and the World	3
Select 6 credit hours of Social Science Orientation courses at the 3000 or 4000 level		6
Select 3 credit hours of Science Orientation courses at the 3000 or 4000 level		3
<b>Total Hours</b>		<b>18</b>



# Max Rady College of Medicine

## General Office

**Dean, Max Rady College of Medicine & Vice-Provost (Health Sciences):**  
Dr. Brian Postl

**Vice Dean(s):** (Academic): Dr. Sara Israels; (Continuing Competency & Assessment): Dr. Christine Polimeni; (Education): Dr. Marie Edwards; (Graduate Studies): Dr. Hope Anderson; (Indigenous): Dr. Marcia Anderson; (Research): Dr. Peter Nickerson

**Associate Dean(s):** (Admissions): Dr. Sara Goulet; (Undergraduate Medical Education): Dr. Ira Ripstein; (Professionalism): Dr. Eric Jacobsohn; (Student Affairs, UGME): Dr. Aviva Goldberg; (Research): Dr. Jude Uzonna; (Brandon Satellite Program): Dr. Charles Penner; (Quality Improvement & Accreditation): Dr. Aaron Chiu; (Postgraduate Student Affairs & Wellness): Dr. Amanda Condon; (Postgraduate Medical Education): Dr. Cliff Yaffe

**Assistant Dean(s):** (Professionalism): Dr. Nancy Porhownik; (Brandon Satellite Program): Dr. Joanne Maier

**Campus Address/General Office:** 260 Brodie Centre-727 McDermot Avenue Winnipeg, MB R3E 3P5

**Telephone:** (204) 789-3557

**Fax:** (204) 789-3929

**Website:** <https://umanitoba.ca/health-sciences/>

## History of the College

Medical education in Manitoba had its beginnings in 1883 when 13 physicians applied to the local legislature for a charter to form the Manitoba Medical College. The college was chartered as an affiliate of the University of Manitoba. The number of students registered for the first session was 15, and the number in attendance at each session from that date to the present has ranged from 15 to 440. The university came to the aid of the Medical School from time to time by furnishing full-time professors in chemistry, physiology, pathology, bacteriology, and zoology. With the session of 1918-1919 the Manitoba Medical College ceased to exist as a separate institution. It made a gift of all its property and equipment to the University of Manitoba "on condition that the university establish a Faculty of Medicine, and carry on the work of medical education in an efficient manner."

In 1921, a building for the accommodation of the departments of Physiology, Biochemistry, and Bacteriology was erected on the old Medical School property, and a further unit was completed in February, 1922. In January, 1956, the new wing of the medical building was officially opened, which included new quarters for the Medical Library. In February, 1965, the Chown Building was opened providing five-stories of administration offices and space for Pharmacology and Therapeutics and the Computer Department for Health Sciences. The Basic Medical Sciences Building, containing undergraduate teaching facilities, opened in 1973. It provides accommodation for anatomy, biochemistry, physiology, and medical microbiology. The Brodie Centre officially opened in the spring of 1996; it provides a library, research and recreational facilities. In 2004, the Office of the Dean and the Education Offices relocated to new administrative facilities in the Brodie Centre. General teaching facilities are located in the medical buildings, and facilities for clinical instruction are provided in the teaching hospitals affiliated with the University of Manitoba and in related institutions. The varied settings in which medicine is practised in Winnipeg and in rural and northern Manitoba also provide students with

the opportunity to study community medicine outside the major teaching institutions.

## Neil John Maclean Health Sciences Library

The Neil John Maclean Health Sciences Library provides access to a wide range of evidence-based medical resources. Online resources include core medical textbooks such as Harrison's Principles of Internal Medicine, drug reference resources such as Lexi-Comp and RxTX and clinical point of care tools such as UpToDate and Access Medicine. The Library subscribes to over 4,500 online journals and a number of essential medical databases such as PubMed, EMBASE, Scopus, and the Science Citation Index Expanded through Web of Science. Students can access all of the online resources on-campus using the Bannatyne campus wireless network and from home with a UMNNetID. The Library's facilities include an assistive technology workstation, 2 computer labs with 15 computers each, 12 seminar rooms, which can be booked by students for group study, 92 study carrels, 4 sit-stand desks and 24 computers for walk-in use. Librarians offer training on the use of key medical resources and information management both as part of the curriculum and in regularly scheduled sessions throughout the year.

## Graduate Studies

Approximately 350 graduate students are doing research and pursuing Master's and Doctoral degrees in the Max Rady College of Medicine. Their training programs offer opportunities to conduct research at a number of sites such as the Bannatyne Campus, National Microbiology Laboratory and St. Boniface Hospital Albrechtsen Research Centre. Graduate programs are available in the Departments of Biochemistry and Medical Genetics, Community Health Sciences, Human Anatomy and Cell Science, Immunology, Medical Microbiology and Infectious Diseases, Pathology, Pharmacology and Therapeutics, Physiology and Pathophysiology as well as Surgery.

## Postgraduate Medical Education

Postgraduate Medical Education (PGME) at the University of Manitoba is comprised of a variety of training programs for graduated medical students interested in obtaining a higher level of education in Family Medicine or medical specialty. Programs are usually organized to be in one of three categories:

- Programs accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).
- Programs accredited by the College of Family Physicians of Canada (CFPC).
- Other training and fellowship programs approved by the Max Rady College of Medicine.

For further information, please refer to the Postgraduate Medical Education website or see Section 10.

## Master of Physician Assistant Studies

The Master of Physician Assistant Studies degree program is a comprehensive two-year program administered by the Max Rady College of Medicine's Department of Family Medicine. Physician Assistants are academically and clinically educated medical generalists who practice medicine within a formalized structure with physicians. PA education prepares graduates for roles in primary health care, specialty practice, or hospital-based roles. For further information, please refer to the Physician Assistant Studies Program website and the Graduate Academic Calendar Physician Assistant Program Info (p. 1593).

## Office of Educational and Faculty Development

The mandate of the Office of Educational and Faculty Development is to work in a collaborative manner across all programs and schools within the Max Rady College of Medicine to provide expertise and services related to medical education including curriculum development, faculty development, and design of evaluation tools and assessment. The second purpose of the Office of Educational and Faculty Development is to engage in research and scholarly activity related to medical education.

## Continuing Professional Development

The **Continuing Professional Development Program (Medicine)** is an accredited academic unit responsible for creating a variety of certified educational programs for physicians and other primary care practitioners throughout the Province of Manitoba and North-western Ontario. These educational sessions incorporate plenary, small group, interactive and e-learning activities to a consistently growing audience. Each year, CPD-Med develops and co-develops over one hundred educational sessions. In addition, the program provides support in the form of event planning,

organization of clinical traineeships and coordination to externally developed CPD events on a fee-for-service basis, as well as, providing accreditation of CPD events on behalf of the Royal College of Physicians and Surgeons of Canada (RCPSC). CPD-Med also provides assistance in maintaining educational standards for accredited regular scheduled series programs in a number of departments in the Max Rady College of Medicine.

For information contact:

Office of Continuing Competency and Assessment  
260 Brodie Centre - 727 McDermot Avenue  
Winnipeg, Manitoba R3E 3P5  
(204) 789-3660 Fax (204) 789-3911  
contactcca@umanitoba.ca  
cpd-umanitoba.ca (<https://umanitoba.ca/health-sciences/continuing-education-assessment-and-faculty-development/>)

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Family Social Sciences Minor (p. 604)		18	
Human Ecology (Family Social Sciences), B.H.Ecol. (p. 596)	4	120	
Human Ecology (The After Degree Program in Family Social Sciences), B.H.Ecol. (p. 601)	2	60	
Post-Baccalaureate Diploma in Medical Physiology and Pathophysiology (p. 626)	1	27	
Postgraduate Medical Education (p. 607)	varies		
Undergraduate Medical Education Program (MD) (p. 610)	4		

## Units

- Community Health Sciences-Family Social Sciences (p. 594)
- Postgraduate Medical Education (p. 607)
- Undergraduate Medical Education Program (MD) (p. 610)
- Post-baccalaureate Diploma in Medical Physiology and Pathophysiology (p. 626)

### This Interfaculty Option in Aging is available to students in the Bachelor of Human Ecology-Family Social Sciences Degree

An Interfaculty Option in Aging is offered by the following faculties and colleges: Agricultural and Food Sciences, Arts, Kinesiology and Recreation Management, Medicine, Nursing, and Social Work.

To complete the option, students must complete each of the following requirements:

Course	Title	Hours
<b>Required Courses</b>		
FMLY 2650 or REC 2650	The Social Aspects of Aging	3
or		
SWRK 2650	The Social Aspects of Aging	

NURS 2610	Health and Physical Aspects of Aging	3
or KIN 2610	Health and Physical Aspects of Aging	

<b>Discipline-Specific (Professional) Courses <sup>1</sup></b>		
FMLY 4300	Field Experience (must be focused on Aging)	6
HNSC 4362	Nutrition Option Practicum	6

<b>Aging-Related Courses</b>		
6 credit hours from the following:		6

FMLY 3220	Death and the Family	
FMLY 3240	Families in Later Years	
FMLY 4220	Aging and Risk in a Global Context	
HNSC 2130	Nutrition Through the Life Cycle	
HNSC 4310	Nutrition and the Elderly	

<b>Total Hours</b>		<b>24</b>
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<sup>1</sup> Application is required for all field placement or practicum courses.

Upon completion of these requirements, a comment will be added to the student's transcript.

## Community Health Sciences-Family Social Sciences

**Dean:** Brian Postl

**Email Address:** family\_social\_sciences@umanitoba.ca

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/community\\_health\\_sciences/departmental\\_units/fss/undergraduate/9266.html](http://umanitoba.ca/faculties/health_sciences/medicine/units/community_health_sciences/departmental_units/fss/undergraduate/9266.html) ([http://umanitoba.ca/faculties/health\\_sciences/medicine/units/community\\_health\\_sciences/departmental\\_units/fss/undergraduate/9266.html](http://umanitoba.ca/faculties/health_sciences/medicine/units/community_health_sciences/departmental_units/fss/undergraduate/9266.html))

**Academic Staff:** Please refer to the website at: [umanitoba.ca/faculties/health\\_sciences/medicine/units/community\\_health\\_sciences/departmental\\_units/fss/undergraduate/9266.html](http://umanitoba.ca/faculties/health_sciences/medicine/units/community_health_sciences/departmental_units/fss/undergraduate/9266.html) ([http://umanitoba.ca/faculties/health\\_sciences/medicine/units/community\\_health\\_sciences/departmental\\_units/fss/undergraduate/9266.html](http://umanitoba.ca/faculties/health_sciences/medicine/units/community_health_sciences/departmental_units/fss/undergraduate/9266.html))

### Degree Programs Offered

#### Professional Designations

Home economists in Manitoba, and other provinces, are regulated by legislation. Graduates may apply to the Manitoba Association of Home Economists (MAHE) for interim professional home economist (IPHE) status, and subsequently qualify as a professional home economist (PHEc).

### Admission Requirements for Family Social Sciences

**Admissions into the Family Social Sciences program has been suspended.**

Students interested in Family Social Sciences are advised to review the Bachelor of Health Studies ([https://umanitoba.ca/faculties/health\\_sciences/ihp/bhst.html](https://umanitoba.ca/faculties/health_sciences/ihp/bhst.html)) (Family Health concentration), which is part of the Interdisciplinary Health Program. All FMYL courses

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Family Social Sciences Minor (p. 604)		18	
Human Ecology (Family Social Sciences), B.H.Ecol. (p. 596)	4	120	
Human Ecology (The After Degree Program in Family Social Sciences), B.H.Ecol. (p. 601)	2	60	

### Department Academic Regulations

The provisions of the General Academic Regulations (p. 118) and the University Policies and Procedures (p. 37), apply to all students. In addition, the Bachelor of Human Ecology - Family Social Sciences Degree Program has regulations and requirements, published below, that apply specifically to its students.

#### Prerequisite, Corequisite, and Course Availability: Definitions

**Prerequisite:** If a course is prerequisite to a second course, the prerequisite must be met in order to continue in the second course. The department giving the second course may require a minimum grade of 'C' in the first course to register in the second course. Some inactive (legacy) courses may be used as prerequisites.

listed under Family Social Sciences continue to be offered through the Bachelor of Health Studies, in the Family Health concentration, and will continue to do so regardless of the suspension of FSS. All courses listed in this *Calendar* are not offered every year. Students are referred to the Class Schedule ([http://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](http://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)) for current information.

### The Minor in Management

A Management Minor is offered by the Asper School of Business. Bachelor of Human Ecology Family Social Sciences Degree Program students may complete this Minor as part of the electives portion of their programs. The Minor will consist of any 18 credit hours of Management courses. Students must meet prerequisites for all courses.

### The Voluntary Minor

Students in the Bachelor of Human Ecology Family Social Sciences Degree Program may declare and complete a Minor from departments and interdisciplinary programs in which a Minor is offered. Information about Minors in programs is found in the appropriate description of departmental/school/faculty program offerings in the Undergraduate Calendar.

Completion of the Minor is entirely optional. Students may not, however, declare both their Major and Minor from the same department/interdisciplinary program. No course may be used as part of a prescribed program in the Bachelor of Human Ecology Family Social Science Degree Program and also be part of a prescribed Minor. For example, if a course in Chemistry is part of a student's degree requirements in the Bachelor of Human Ecology Family Social Sciences Degree Program, it cannot be used as part of a Minor in another program. Completion of a Minor may require that a student take more than the minimum number of credit hours for graduation.

### Program List

**Corequisite:** If a first course is a corequisite to a second course, the first course (unless previously completed) must be taken in the same term as the second course.

**Course Availability:** Not all courses listed in this Calendar are offered every year. Students are referred to the on-line calendar for courses offered in the year. Family Social Sciences courses at the 3000 and 4000 level are available only to students registered in the Bachelor of Human Ecology - Family Social Sciences Degree Program or one of the minors or options associated with the Degree Program. Courses at the 3000 and 4000 level may be taken with written permission from an Academic Advisor as long as there is space.

## Scholastic Standards

### GRADUATION AND GRADE POINT AVERAGE

To graduate, a student must have passed 120 credit hours acceptable for credit in the current degree program and have obtained a minimum of 240 quality points. This is equivalent to a Degree Grade Point Average of 2.0. A pass indicates a grade of 'D' or better. A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses which apply at a particular stage. The effective courses consist of all courses passed, in addition to all failures which have not been cleared, or substituted for, in the student's record. A maximum of 150 credit hours (25 courses or the equivalent) may be attempted in order to obtain the 120 credit hours.

### ASSESSMENT

The status of each student will be assessed in May of each year in which a student is registered. All Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology - Family Social Sciences Degree Program assessment standards. Assessments can include the following comments:

- Faculty minimum met (grade point average meets the standards (p.     ));
- Dean's Honour (p.     )
- Academic Warning
- Probationary status (p.     )
- Suspension (p. 595)
- Suspension - all attempts used (p.     )

Academic warning indicates a grade point average between the minimum required at the effective credit hours (year) and the DGPA requirement of 2.0.

There is a maximum of 30 credit hours of attempts allowed for each academic program; once those attempts are used (repeated courses, grades of F or D), it is impossible to graduate.

### PROBATIONARY STANDING

Students must achieve or exceed the following standards at the specified stages in their academic careers. Failure to obtain the standard results in probation. Once placed on probation, students who fail to meet the appropriate performance level at the next assessment following the next registration will be academically suspended. A student is not permitted to be on probation for two consecutive years.

### ASSESSMENT STANDARDS

#### Bachelor of Human Ecology Family Social Sciences Degree Program

Credit Hours	Grade Point Average	Comment
9 – 21 credit hours	< 2.0	Academic Warning
24 – 30 credit hours	Minimum 1.80	
33 – 60 credit hours	Minimum 1.85	
63 – 90 credit hours	Minimum 1.90	
93 – 117 credit hours	Minimum 1.95	
120+ credit hours	Minimum 2.0	

### SUSPENSION

Suspended students must remain out of the Bachelor of Human Ecology - Family Social Sciences Degree Program for one academic year from the date of suspension and must apply for reinstatement at the Admissions Office no later than May 1.

Where mathematically possible for a suspended student to complete the degree by repeating failed courses, a suspended student shall be automatically reinstated after remaining out of the Degree Program for one calendar year, or by achieving a degree GPA above the probationary standard.

### SUSPENSION (ALL ATTEMPTS USED)

Where it is mathematically impossible for a student to complete the degree by repeating failed courses, a suspended student, after remaining out of the faculty for one calendar year, may attempt reinstatement. By completing at least 12 credit hours in one term with a minimum 'D' grade in all courses and a term grade point average of at least 2.0, the student will be reinstated. The student will start the program afresh, with previous grades of 'C' or better applicable to the program.

## Part-time Students

The maximum time allowed for completion of the degree is 10 years. After completion of 24 credit hours, part-time students will be evaluated each May and must conform to the minimum performance levels.

## Direct Entry

**Admissions into the Family Social Sciences program has been suspended. Students interested in Family Social Sciences are advised to review the Bachelor of Health Studies ([https://umanitoba.ca/faculties/health\\_sciences/ihp/bhst.html](https://umanitoba.ca/faculties/health_sciences/ihp/bhst.html)) (Family Health concentration), which is part of the Interdisciplinary Health Program.**

Current Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology Family Social Science Degree Program's assessment standards. Probationary standing is assessed using the criteria listed.

Direct Entry students who complete fewer than 24 credit hours by May of their first year will not be formally assessed until the following May. Students who complete 9 - 21 credit hours with a grade point average of less than 2.0 will be placed on academic warning.

## Repeating Courses

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

A student may repeat any course for the purpose of attaining a better grade. A course or its equivalent that is repeated in Fall 2016 or later will have the highest grade count. There are no supplemental examinations for students who have failed final or deferred examinations.

## Challenge for Credit

A student wishing to challenge a course for credit should contact an Academic Advisor. Letter grades are granted upon completion of the course that is challenged for credit. A list of courses for challenge is available in the Advising Office. An application is required.

## Transfer of Credit

Please refer to Admissions (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>) and Transfer of Credit web site (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>).

## Appeals of Academic Regulations

The Committee on Student Standing considers petitions from students who request special consideration with respect to rules and regulations governing their programs of study and qualification for graduation.

## Dean's Honour List

Eligible students who achieve a term Grade Point Average of 3.5 or higher in at least 12 credit hours per term will be included in the Deans Honour List.

## Degree With Distinction

Students who graduate with a degree GPA of 3.75 and higher will receive a degree with distinction.

## Work Permit for Study Purposes

International students who are registering for courses or programs that require work placement must obtain a valid **Work Permit**, in addition to maintaining a valid Study Permit. Work placement includes, but is not limited to, any **paid or unpaid** practicum, internships, work experience, field placement, and co-op programs that are a required component for the completion of their degree, diploma or certificate. Please contact your program advisor or the International Centre for Students (<https://umanitoba.ca/international/>) for further information.

## Release and Indemnification Forms

In elective courses, students may be required to sign a release form for off-campus activities.

## Written English and Mathematics Requirements

The written English and Mathematics requirements are satisfied by required courses HNSC 2000 (formerly HMEC 2000) and STAT 1000 within the Bachelor of Human Ecology Family Social Science Degree Program. HNSC 2000 (formerly HMEC 2000) will be available to students upon admission to the Degree.

## Program and Graduation Requirements

**Intake to the Family Social Sciences program has been suspended.**

For students entering the Bachelor of Human Ecology - Family Social Sciences Degree Program:

In order to qualify for a degree, students must complete the 120 credit hours specified for the selected program. Elective choices provided in each program can permit students to transfer between them; however, this opportunity decreases as students progress. Students who transfer to another program must meet the full requirements of that program. There is a quota in effect for intake to each program per academic year. The quota may affect movement into a program after the September intake.

## Advisement

**Intake to the Family Social Sciences program has been suspended.**

The Bachelor of Human Ecology Family Social Sciences Degree Program will provide entering students with orientation information and will refer a student to a program advisor if the student requests. All returning students in the Degree Program must submit a program plan for the succeeding year before the start of registration.

# Human Ecology (Family Social Sciences), B.H.Ecol.

## Overview/Entrance Requirements

**Head:** Sharon Bruce - Community Health Sciences

## Admission Requirements for Family Social Sciences

**Admissions into the Family Social Sciences program has been suspended.**

Students interested in Family Social Sciences are advised to review the Bachelor of Health Studies ([https://umanitoba.ca/faculties/health\\_sciences/ihp/bhst.html](https://umanitoba.ca/faculties/health_sciences/ihp/bhst.html)) (Family Health concentration), which is part of the Interdisciplinary Health Program. All FMYL courses listed under Family Social Sciences continue to be offered through the Bachelor of Health Studies, in the Family Health concentration, and will continue to do so regardless of the suspension of FSS. All courses listed in this *Calendar* are not offered every year. Students are referred to the Class Schedule ([http://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](http://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)) for current information.

Applying knowledge from the social and physical sciences, students in Family Social Sciences examine factors affecting human psychosocial health and wellbeing. They study human development from infancy to old age within the context of families, communities, and culture.

Students are required to choose at least one area, or option, in which to focus their studies. The name of their option will appear as a "comment" on their transcripts. They may select from the following options:

1. Aging and Developmental Health Option;
2. Child and Youth Developmental Health Option;
3. Family Economic Health;
4. Family Violence;
5. Social Development as well as the Interfaculty Option in Aging.

Family Social Sciences graduates are permitted to complete any option after their degree as a Special Student. Not every Family Social Sciences course will be offered every year. A chart providing course rotation information is available on the Family Social Sciences web page.

The Family Social Sciences program can provide students with academic preparation or complementary courses for programs such as Law, Social Work, Education or Graduate Studies.

Students interested in Family Social Sciences are also advised to review the Bachelor of Health Studies, which is part of the Interdisciplinary Health Program (<https://catalog.umanitoba.ca/undergraduate-studies/health-sciences/health-studies-bhsc/>).

## Degree Requirements

### Faculty Program Requirements

The following are the guidelines for the program requirements in the Degree Program. The courses outlined in the sections which follow, meet these basic requirements.

All students complete a Degree Program core of 9 credit hours consisting of:

Course	Title	Hours
HEAL 2600	Integration of Health Determinants of Individuals	3
HNSC 2000	Research Methods and Presentation <sup>1</sup>	3
HEAL 3000	Introduction to Social Epidemiology <sup>2</sup>	3

<sup>1</sup> Formerly HMEC 2000.

<sup>2</sup> Formerly HMEC 3000.

- Plus a minimum of 51 additional credit hours within the Degree Program;
- Plus a minimum of 27 additional credit hours outside the Degree Program of which at least 6 credit hours must be from the Faculty of Science and six from the social sciences;
- Plus a minimum of 12 additional credit hours of free electives leading to a degree requirement of 120 (123) credit hours.

#### Notes:

Students admitted before September, 2005 and graduating after May, 2005, will make the following program adjustments:

- Family Social Sciences students must complete an additional 3 credit hours of FMLY electives at the 3000-4000 level.

Students admitted between September 2005 and September 2015 are urged to seek academic advising assistance for advice regarding completion of core course requirements.

## Program Electives

Courses within each program fall into one of three categories:

- Program electives must be chosen from within the program department.
- Outside electives must be chosen from a Faculty other than the Bachelor of Human Ecology Family Social Sciences Degree Program.
- Free electives may be chosen from within or outside the Degree Program.

Courses to be taken by all Family Social Sciences students:

Course	Title	Hours
STAT 1000	Basic Statistical Analysis 1	3
Select one of the following:		3
STAT 2000	Basic Statistical Analysis 2	
Any other Science course		
Select one of the following: <sup>1</sup>		3-6
ECON 1010	Introduction to Microeconomic Principles	
ECON 1020	Introduction to Macroeconomic Principles	
ECON 1210	Introduction to Canadian Economic Issues and Policies	
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies	
HNSC 2000	Research Methods and Presentation <sup>2</sup>	3
HEAL 3000	Introduction to Social Epidemiology <sup>3</sup>	3
HEAL 2600	Integration of Health Determinants of Individuals	3
FMLY 1000	Families in Contemporary Canadian Society	3
FMLY 1010	Human Development in the Family	3
FMLY 1012	Introduction to Social Development	3
FMLY 1420	Family Management Principles	3

FMLY 2400	Family Financial Health	3
FMLY 2500	Diversity and Families	3
FMLY 3750	Fundamentals of Health Promotion	3
FMLY 3780	Introduction to the Development of Programs for Children and Families	3
FMLY 3790	Introduction to the Evaluation of Programs for Children and Families	3
PSYC 1200	Introduction to Psychology (or SOC 1200 Course no longer offered)	6
Select 24 credit hours in Program Electives		24
Select 3 credit hours in FMLY Electives <sup>4</sup>		3
Select 12-15 credit hours in Outside Electives		12-15
Select 27 credit hours in Free Electives		27

**Total Hours 117-123**

<sup>1</sup> If students choose ECON 1010 and ECON 1020 (formerly ECON 1200) or ECON 1210 and ECON 1220, 12 credit hours of outside electives are required.

<sup>2</sup> Formerly HMEC 2000.

<sup>3</sup> Formerly HMEC 3000.

<sup>4</sup> Any non-required FMLY course is a Bachelor of Human Ecology (Family Social Sciences) program elective. At least one of the non-specified program electives must be at the 3000-4000 level. For more information, students are asked to contact the Academic Advisor for the Bachelor of Human Ecology Family Social Sciences Degree Program.

Note:

- All courses listed in the general Family Social Sciences section (above) are required. In addition, students must choose at least one area (Option) in which to focus their studies. In the following section, the courses required to fulfill each Option are listed. They will partially meet department, outside and free elective requirements. More courses will be required to complete the 120 credit hour degree. Students are encouraged to take more than one Option. Each Option must consist of 18 non-overlapping credit hours; that is, no course can satisfy the requirement of more than one Option.

## Concentrations

### Aging and Developmental Health Option

This option is also part of the Interfaculty Option in Aging, which can fulfill the requirement for an option within the Family Social Sciences major.

Course	Title	Hours
FMLY/REC/SWRK 2650	The Social Aspects of Aging	3
NURS/KIN 2610	Health and Physical Aspects of Aging	3
FMLY 4300	Field Experience (must be focused on Aging)	6
Select at least 3 credit hours from the following:		3
FMLY 3220	Death and the Family	
FMLY 3240	Families in Later Years	
FMLY 4220	Aging and Risk in a Global Context	
Select at least 3 credit hours from the following:		3
KIN 4500	Course No Longer Offered	
PSYC 2490	Abnormal Psychology	

PSYC 3070	Adult Development	
PSYC 3490	Individual Differences	
PSYC 3610	Memory	
REC 4250	Leisure and Aging	
RLGN 1410	Death and Concepts of the Future	
SOC 2490	Sociology of Health and Illness	
SOC 2620	The Sociology of Aging	
SOC 3540	The Sociology of Health Care Systems	
<b>Total Hours</b>		<b>18</b>

### Child and Youth Developmental Health Option

Course	Title	Hours
FMLY 2600	Foundations of Childhood Developmental Health	3
FMLY 3600	Adolescents in Families and Society	3
Select one of the following:		3
FMLY 3330	Parenting and Developmental Health	
FMLY 4604	Children in Adversity	
FMLY 4606	A Social Justice Perspective on Indigenous Maternal and Child Health	
Select at least 9 credit hours from the following:		9
ANTH 2300	Anthropology of Childhood	
FMLY 2800	Family Violence	
FMLY 3800	Conflict Resolution in the Family	
FMLY 3802	Intimate Partner Violence	
FMLY 3806	Children, Violence and Rights	
FMLY 4330	Management of Family Stress	
FMLY 4480	Work and Family Issues	
FMLY 4602	Family Relationships, Health and Well-being	
HNSC 1210	Nutrition for Health and Changing Lifestyles	
HNSC 2130	Nutrition Through the Life Cycle	
NURS 4440	Course No Longer Offered	
PSYC 2440	Behaviour Modification Principles	
PSYC 3070	Adult Development	
PSYC 3150	Behaviour Modification Applications	
PSYC 3310	Adolescent Development	
PSYC 3360	Experimental Child Psychology	
PSYC 3860	Child Language Development	
SOC 3830	Youth, Crime, and Society	
<b>Total Hours</b>		<b>18</b>

### Family Economic Health Option

Course	Title	Hours
Select at least 9 credit hours from the following:		9
FMLY 3400	Families as Consumers	
FMLY 4330	Management of Family Stress	
FMLY 4400	Family Economics: Poverty and Wealth	
FMLY 4480	Work and Family Issues	
Select at least 9 credit hours from Electives (see below) <sup>1</sup>		9
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Select at least 3 credit hours from courses numbered 3000 or 4000.

### Electives

Course	Title	Hours
ACC 1100	Introductory Financial Accounting	3
ACC 1110	Introductory Managerial Accounting	3
ANTH 2430	Ecology, Technology and Society	3
ANTH 2550	Culture and the Individual	3
ECON 2310	Canadian Economic Problems	6
ECON 2350	Community Economic Development	3
ECON 2362	Economics of Gender	3
ECON 2390	Introduction to Environmental Economics	3
ECON 3720	Urban and Regional Economics and Policies	3
FIN 2200	Corporate Finance	3
FIN 3420	Security Analysis	3
FMLY 3012	Theories of Social Development	3
FMLY 3240	Families in Later Years	3
FMLY 4012	Social Development Policies	3
FMLY 4220	Aging and Risk in a Global Context	3
FMLY 4602	Family Relationships, Health and Well-being	3
GEOG 1280	Introduction to Human Geography	3
GEOG 2210	Course No Longer Offered	3
GMGT 2070	Introduction to Organizational Behaviour	3
HRIR 2440	Human Resource Management	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2130	Nutrition Through the Life Cycle	3
MKT 2210	Fundamentals of Marketing	3
MKT 3230	Consumer Behaviour	3
NATV 1200	Course no longer offered	6
NATV 1240	Course no longer offered	3
NURS 4440	Course no longer offered	3
SOC 3370	Sociology of Work	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3390	Contemporary Sociological Theory	3
TXSC 1600	Course no longer offered	3
TXSC 1610	Course no longer offered	3
TXSC 2600	Course no longer offered	3
TXSC 2610	Course no longer offered	3
TXSC 2620	Course no longer offered	3
TXSC 3600	Course no longer offered	3

### Family Violence Option

Course	Title	Hours
FMLY 2800	Family Violence	3
FMLY 3802	Intimate Partner Violence	3
or FMLY 3806	Children, Violence and Rights	
FMLY 4802	Family Violence Prevention	3
Select at least 9 credit hours from Electives (see below) <sup>1</sup>		9
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Select at least 3 credit hours from courses numbered 3000 or 4000.

## Electives

Course	Title	Hours
ANTH 3380	Anthropology and Contemporary Social Issues	3
FMLY 3800	Conflict Resolution in the Family	3
FMLY 4220	Aging and Risk in a Global Context	3
FMLY 4330	Management of Family Stress	3
FMLY 4602	Family Relationships, Health and Well-being	3
FMLY 4604	Children in Adversity	3
NATV 1220	Course no longer offered	3
NATV 1240	Course no longer offered	3
NURS 3330	Women and Health	3
NURS 3400	Men's Health: Concerns, Issues and Myths	3
PSYC 3470	Dyadic Relations	3
SOC 2370	Ethnic Relations	3
SOC 2510	Criminology	3
SOC 3700	Sociology of Law	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3830	Youth, Crime, and Society	3
SWRK 3130	Contemporary Canadian Social Welfare	3
WOMN 3560	Feminist Perspectives on Violence Against Women	3

## Social Development Option

Course	Title	Hours
Select at least 9 credit hours from the following:		9
FMLY 2012	Development, Conflict, and Displacement	
FMLY 3012	Theories of Social Development	
FMLY 4012	Social Development Policies	
FMLY 4400	Family Economics: Poverty and Wealth	
Select 3 credit hours from the following:		3
FMLY/SWRK/ REC 2650	The Social Aspects of Aging	
FMLY 2800	Family Violence	
FMLY 3240	Families in Later Years	
FMLY 3400	Families as Consumers	
FMLY 3800	Conflict Resolution in the Family	
FMLY 4220	Aging and Risk in a Global Context	
FMLY 4330	Management of Family Stress	
FMLY 4480	Work and Family Issues	
FMLY 4602	Family Relationships, Health and Well-being	
FMLY 4604	Children in Adversity	
Select 6 credit hours from the following:		6
ANTH 1220	Cultural Anthropology	
LABR 3220	Global Sweatshops, Global Struggles	
NATV 1220	Course no longer offered	
NATV 1240	Course no longer offered	
POLS 1502	Introduction to Political Studies	
POLS 2702	Introduction to Canadian Politics	
SOC 2320	Canadian Society and Culture	
SOC 3890	Power and Inequality in Comparative Perspective	
SWRK 2050	Community and Organizational Theory	

WOMN 1600 Introduction to Women's and Gender Studies in the Social Sciences

**Total Hours** **18**

## Department Academic Regulations

The provisions of the General Academic Regulations (p. 118) and the University Policies and Procedures (p. 37), apply to all students. In addition, the Bachelor of Human Ecology - Family Social Sciences Degree Program has regulations and requirements, published below, that apply specifically to its students.

### Prerequisite, Corequisite, and Course Availability: Definitions

**Prerequisite:** If a course is prerequisite to a second course, the prerequisite must be met in order to continue in the second course. The department giving the second course may require a minimum grade of 'C' in the first course to register in the second course. Some inactive (legacy) courses may be used as prerequisites.

**Corequisite:** If a first course is a corequisite to a second course, the first course (unless previously completed) must be taken in the same term as the second course.

**Course Availability:** Not all courses listed in this Calendar are offered every year. Students are referred to the on-line calendar for courses offered in the year. Family Social Sciences courses at the 3000 and 4000 level are available only to students registered in the Bachelor of Human Ecology - Family Social Sciences Degree Program or one of the minors or options associated with the Degree Program. Courses at the 3000 and 4000 level may be taken with written permission from an Academic Advisor as long as there is space.

### Scholastic Standards

#### GRADUATION AND GRADE POINT AVERAGE

To graduate, a student must have passed 120 credit hours acceptable for credit in the current degree program and have obtained a minimum of 240 quality points. This is equivalent to a Degree Grade Point Average of 2.0. A pass indicates a grade of 'D' or better. A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses which apply at a particular stage. The effective courses consist of all courses passed, in addition to all failures which have not been cleared, or substituted for, in the student's record. A maximum of 150 credit hours (25 courses or the equivalent) may be attempted in order to obtain the 120 credit hours.

#### ASSESSMENT

The status of each student will be assessed in May of each year in which a student is registered. All Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology - Family Social Sciences Degree Program assessment standards. Assessments can include the following comments:

- Faculty minimum met (grade point average meets the standards (p. ));
- Dean's Honour (p. )
- Academic Warning
- Probationary status (p. )
- Suspension (p. 600)
- Suspension - all attempts used (p. )



Academic warning indicates a grade point average between the minimum required at the effective credit hours (year) and the DGPA requirement of 2.0.

There is a maximum of 30 credit hours of attempts allowed for each academic program; once those attempts are used (repeated courses, grades of F or D), it is impossible to graduate.

### PROBATIONARY STANDING

Students must achieve or exceed the following standards at the specified stages in their academic careers. Failure to obtain the standard results in probation. Once placed on probation, students who fail to meet the appropriate performance level at the next assessment following the next registration will be academically suspended. A student is not permitted to be on probation for two consecutive years.

### ASSESSMENT STANDARDS

#### Bachelor of Human Ecology Family Social Sciences Degree Program

Credit Hours	Grade Point Average	Comment
9 – 21 credit hours	< 2.0	Academic Warning
24 – 30 credit hours	Minimum 1.80	
33 – 60 credit hours	Minimum 1.85	
63 – 90 credit hours	Minimum 1.90	
93 – 117 credit hours	Minimum 1.95	
120+ credit hours	Minimum 2.0	

### SUSPENSION

Suspended students must remain out of the Bachelor of Human Ecology - Family Social Sciences Degree Program for one academic year from the date of suspension and must apply for reinstatement at the Admissions Office no later than May 1.

Where mathematically possible for a suspended student to complete the degree by repeating failed courses, a suspended student shall be automatically reinstated after remaining out of the Degree Program for one calendar year, or by achieving a degree GPA above the probationary standard.

### SUSPENSION (ALL ATTEMPTS USED)

Where it is mathematically impossible for a student to complete the degree by repeating failed courses, a suspended student, after remaining out of the faculty for one calendar year, may attempt reinstatement. By completing at least 12 credit hours in one term with a minimum 'D' grade in all courses and a term grade point average of at least 2.0, the student will be reinstated. The student will start the program afresh, with previous grades of 'C' or better applicable to the program.

### Part-time Students

The maximum time allowed for completion of the degree is 10 years. After completion of 24 credit hours, part-time students will be evaluated each May and must conform to the minimum performance levels.

### Direct Entry

**Admissions into the Family Social Sciences program has been suspended. Students interested in Family Social Sciences are advised to review the Bachelor of Health Studies ([https://umanitoba.ca/faculties/health\\_sciences/ihp/bhst.html](https://umanitoba.ca/faculties/health_sciences/ihp/bhst.html)) (Family Health concentration), which is part of the Interdisciplinary Health Program.**

Current Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology Family Social Science Degree Program's assessment

standards. Probationary standing is assessed using the criteria listed.

Direct Entry students who complete fewer than 24 credit hours by May of their first year will not be formally assessed until the following May. Students who complete 9 - 21 credit hours with a grade point average of less than 2.0 will be placed on academic warning.

### Repeating Courses

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>) will not affect registration for the 2022-2023 (including Summer Term 2023).**

A student may repeat any course for the purpose of attaining a better grade. A course or its equivalent that is repeated in Fall 2016 or later will have the highest grade count. There are no supplemental examinations for students who have failed final or deferred examinations.

### Challenge for Credit

A student wishing to challenge a course for credit should contact an Academic Advisor. Letter grades are granted upon completion of the course that is challenged for credit. A list of courses for challenge is available in the Advising Office. An application is required.

### Transfer of Credit

Please refer to Admissions (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>) and Transfer of Credit web site (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>).

### Appeals of Academic Regulations

The Committee on Student Standing considers petitions from students who request special consideration with respect to rules and regulations governing their programs of study and qualification for graduation.

### Dean's Honour List

Eligible students who achieve a term Grade Point Average of 3.5 or higher in at least 12 credit hours per term will be included in the Deans Honour List.

### Degree With Distinction

Students who graduate with a degree GPA of 3.75 and higher will receive a degree with distinction.

### Work Permit for Study Purposes

International students who are registering for courses or programs that require work placement must obtain a valid **Work Permit**, in addition to maintaining a valid Study Permit. Work placement includes, but is not limited to, any **paid or unpaid** practicum, internships, work experience, field placement, and co-op programs that are a required component for the completion of their degree, diploma or certificate. Please contact your program advisor or the International Centre for Students (<https://umanitoba.ca/international/>) for further information.

### Release and Indemnification Forms

In elective courses, students may be required to sign a release form for off-campus activities.

### Written English and Mathematics Requirements

The written English and Mathematics requirements are satisfied by required courses HNSC 2000 (formerly HMEC 2000) and STAT 1000 within the Bachelor of Human Ecology Family Social

Science Degree Program. HNSC 2000 (formerly HMEC 2000) will be available to students upon admission to the Degree.

## Program and Graduation Requirements

**Intake to the Family Social Sciences program has been suspended.**

For students entering the Bachelor of Human Ecology - Family Social Sciences Degree Program:

In order to qualify for a degree, students must complete the 120 credit hours specified for the selected program. Elective choices provided in each program can permit students to transfer between them; however, this opportunity decreases as students progress. Students who transfer to another program must meet the full requirements of that program. There is a quota in effect for intake to each program per academic year. The quota may affect movement into a program after the September intake.

## Advisement

**Intake to the Family Social Sciences program has been suspended.**

The Bachelor of Human Ecology Family Social Sciences Degree Program will provide entering students with orientation information and will refer a student to a program advisor if the student requests. All returning students in the Degree Program must submit a program plan for the succeeding year before the start of registration.

## Human Ecology (The After Degree Program in Family Social Sciences), B.H.Ecol.

### Admission Requirements for Family Social Sciences

**Admissions into the Family Social Sciences program has been suspended.**

Students interested in Family Social Sciences are advised to review the Bachelor of Health Studies ([https://umanitoba.ca/faculties/health\\_sciences/ihp/bhst.html](https://umanitoba.ca/faculties/health_sciences/ihp/bhst.html)) (Family Health concentration), which is part of the Interdisciplinary Health Program. All FMYL courses listed under Family Social Sciences continue to be offered through the Bachelor of Health Studies, in the Family Health concentration, and will continue to do so regardless of the suspension of FSS. All courses listed in this *Calendar* are not offered every year. Students are referred to the Class Schedule ([http://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](http://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/)) for current information.

## Degree Requirements

### Faculty Program Requirements

The following are the guidelines for the program requirements in the Degree Program. The courses outlined in the sections which follow, meet these basic requirements.

All students complete a Degree Program core of 9 credit hours consisting of:

Course	Title	Hours
HEAL 2600	Integration of Health Determinants of Individuals	3
HNSC 2000	Research Methods and Presentation <sup>1</sup>	3
HEAL 3000	Introduction to Social Epidemiology <sup>2</sup>	3

<sup>1</sup> Formerly HMEC 2000.

<sup>2</sup> Formerly HMEC 3000.

- Plus a minimum of 51 additional credit hours within the Degree Program;
- Plus a minimum of 27 additional credit hours outside the Degree Program of which at least 6 credit hours must be from the Faculty of Science and six from the social sciences;
- Plus a minimum of 12 additional credit hours of free electives leading to a degree requirement of 120 (123) credit hours.

#### Notes:

Students admitted before September, 2005 and graduating after May, 2005, will make the following program adjustments:

- Family Social Sciences students must complete an additional 3 credit hours of FMYL electives at the 3000-4000 level.

Students admitted between September 2005 and September 2015 are urged to seek academic advising assistance for advice regarding completion of core course requirements.

### Program Electives

Courses within each program fall into one of three categories:

- Program electives must be chosen from within the program department.
- Outside electives must be chosen from a Faculty other than the Bachelor of Human Ecology Family Social Sciences Degree Program.
- Free electives may be chosen from within or outside the Degree Program.

### The After Degree Program in Family Social Sciences

An After Degree Program (ADP) in Family Social Sciences is offered to students who have completed a previous undergraduate degree. ADP students must complete 60 credit hours in total to earn their second degree in Family Social Sciences. All Family Social Sciences U1 prerequisites are waived. In order to facilitate ADP students completing the program in a timely manner, they will automatically be permitted (without special permission from the course instructor) to take Family Social Sciences 2000 level prerequisites as corequisites for any required Family Social Sciences 3000 and/or 4000 level courses. Please consult with the Academic Advisor when planning programs prior to registration. ADP students are required to choose at least one option and meet its requirements at the second year level and beyond. These 18 credit hours may include courses external to the Bachelor of Human Ecology Social Sciences Degree Program that are required to complete an option. If a second option is not chosen, then these credit hours must be taken within the program. There are no free electives in the ADP.

### Bachelor of Human Ecology Family Social Sciences Degree Program

Course	Title	Hours
<b>Core Courses</b>		
Select 6-9 credits from the following:		6-9

HNSC 2000	Research Methods and Presentation	
HEAL 3000	Introduction to Social Epidemiology	
HEAL 2600	Integration of Health Determinants of Individuals <sup>1</sup>	
<b>Family Social Sciences Requirements<sup>2</sup></b>		
FMLY 2400	Family Financial Health	3
FMLY 2500	Diversity and Families	3
FMLY 3750	Fundamentals of Health Promotion	3
FMLY 3780	Introduction to the Development of Programs for Children and Families	3
FMLY 3790	Introduction to the Evaluation of Programs for Children and Families	3
Select 6 credit hours from the following: <sup>3</sup>		6
FMLY 2600	Foundations of Childhood Developmental Health	
FMLY 2800	Family Violence	
FMLY 2012	Development, Conflict, and Displacement	
FMLY/SWRK/ REC 2650	The Social Aspects of Aging	
<b>Family Social Sciences Options<sup>4</sup></b>		
Select one of the following:		15-18
Aging and Developmental Health Option		
Child and Youth Developmental Health Option		
Family Economic Health Option		
Family Violence Option		
Social Development Option		
<b>Family Social Sciences Electives</b>		
Select 12-15 credit hours in Family Social Sciences Electives <sup>5</sup>		12-15
<b>Statistics</b>		
STAT 1000	Basic Statistical Analysis <sup>1 6</sup>	3
<b>Total Hours</b>		<b>57-66</b>

<sup>1</sup> This choice provides students who have previously taken a research methods course with the option of avoiding redundancy in their program. Students are free to take all three core courses if they feel it would benefit them. If students select 9 credit hours of core courses, the FSS electives component is reduced to 15 credit hours.

<sup>2</sup> This set of courses is currently required of all undergraduate FSS students and is required for students in the ADP.

<sup>3</sup> Students are required to take a minimum of any two (6 credit hours) of the introductory level courses across options. Review the list of options found in the 120 credit hour undergraduate degree program to assist with planning for prerequisites for higher level courses.

<sup>4</sup> Each FSS option is a total of 18 credit hours; ADP students will have taken at least one 2000 level course (3 credit hours) required by the chosen option as part of their program requirements, leaving the remaining 15 credit hours to be completed to fulfil the option. Completion of the option may include courses external to the Bachelor of Human Ecology Family Social Sciences Degree Program that are required to complete an option.

<sup>5</sup> ADP students are encouraged to specialize in two options simultaneously to strengthen and broaden their expertise. If a second option is chosen, these credit hours may include courses external to the Bachelor of Human Ecology Social Sciences Degree Program that are required to complete the option. If students have completed the 2000 level course required for the second option, the requirement to complete the option is 15 credit hours. If a second option is not chosen, then these credit hours must be taken within the department.

<sup>6</sup> Students who have previously completed an undergraduate statistics course can either transfer it in directly (if already assessed as equivalent) or can request to have it assessed for advanced standing; if successful, students will be required to add 3 credit hours to their program from courses selected from Family Social Sciences.

#### Notes:

1. The same entrance requirements will be applied to ADP students in order to maintain current Degree Program standards.
2. Basic social science knowledge is assumed because ADP students have previously completed an undergraduate degree; waiving UI requirements for FSS courses acknowledges the skills, background and maturity of this particular group of students.
3. ADP in FSS is 60 credit hours. If students have taken any of the required courses for this degree, they can be transferred in. ADP students will need to take additional courses in order to fulfill the University of Manitoba's Residency Requirement. This requirement states all students must complete at least 60 credit hours in the Bachelor of Human Ecology - Family Social Sciences degree program at the University of Manitoba. Students may want to discuss additional courses with the Academic Advisor's office.

## Department Academic Regulations

The provisions of the General Academic Regulations (p. 118) and the University Policies and Procedures (p. 37), apply to all students. In addition, the Bachelor of Human Ecology - Family Social Sciences Degree Program has regulations and requirements, published below, that apply specifically to its students.

### Prerequisite, Corequisite, and Course Availability: Definitions

**Prerequisite:** If a course is prerequisite to a second course, the prerequisite must be met in order to continue in the second course. The department giving the second course may require a minimum grade of 'C' in the first course to register in the second course. Some inactive (legacy) courses may be used as prerequisites.

**Corequisite:** If a first course is a corequisite to a second course, the first course (unless previously completed) must be taken in the same term as the second course.

**Course Availability:** Not all courses listed in this Calendar are offered every year. Students are referred to the on-line calendar for courses offered in the year. Family Social Sciences courses at the 3000 and 4000 level are available only to students registered in the Bachelor of Human Ecology - Family Social Sciences Degree Program or one of the minors or options associated with the Degree Program. Courses at the 3000 and 4000 level may be taken with written permission from an Academic Advisor as long as there is space.

### Scholastic Standards

#### GRADUATION AND GRADE POINT AVERAGE

To graduate, a student must have passed 120 credit hours acceptable for credit in the current degree program and have obtained a minimum of 240 quality points. This is equivalent to a Degree Grade Point Average of 2.0. A pass indicates a grade of 'D' or better. A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses which apply at a particular stage. The effective courses consist of all courses passed, in addition to all failures which have not been cleared, or substituted for, in the student's record. A maximum of 150 credit hours

(25 courses or the equivalent) may be attempted in order to obtain the 120 credit hours.

## ASSESSMENT

The status of each student will be assessed in May of each year in which a student is registered. All Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology - Family Social Sciences Degree Program assessment standards. Assessments can include the following comments:

- Faculty minimum met (grade point average meets the standards (p. ));
- Dean's Honour (p. )
- Academic Warning
- Probationary status (p. )
- Suspension (p. 603)
- Suspension - all attempts used (p. )

Academic warning indicates a grade point average between the minimum required at the effective credit hours (year) and the DGPA requirement of 2.0.

There is a maximum of 30 credit hours of attempts allowed for each academic program; once those attempts are used (repeated courses, grades of F or D), it is impossible to graduate.

## PROBATIONARY STANDING

Students must achieve or exceed the following standards at the specified stages in their academic careers. Failure to obtain the standard results in probation. Once placed on probation, students who fail to meet the appropriate performance level at the next assessment following the next registration will be academically suspended. A student is not permitted to be on probation for two consecutive years.

## ASSESSMENT STANDARDS

### Bachelor of Human Ecology Family Social Sciences Degree Program

Credit Hours	Grade Point Average	Comment
9 – 21 credit hours	< 2.0	Academic Warning
24 – 30 credit hours	Minimum 1.80	
33 – 60 credit hours	Minimum 1.85	
63 – 90 credit hours	Minimum 1.90	
93 – 117 credit hours	Minimum 1.95	
120+ credit hours	Minimum 2.0	

## SUSPENSION

Suspended students must remain out of the Bachelor of Human Ecology - Family Social Sciences Degree Program for one academic year from the date of suspension and must apply for reinstatement at the Admissions Office no later than May 1.

Where mathematically possible for a suspended student to complete the degree by repeating failed courses, a suspended student shall be automatically reinstated after remaining out of the Degree Program for one calendar year, or by achieving a degree GPA above the probationary standard.

## SUSPENSION (ALL ATTEMPTS USED)

Where it is mathematically impossible for a student to complete the degree by repeating failed courses, a suspended student, after remaining out of the faculty for one calendar year, may attempt reinstatement. By completing at least 12 credit hours in one term with a minimum 'D' grade

in all courses and a term grade point average of at least 2.0, the student will be reinstated. The student will start the program afresh, with previous grades of 'C' or better applicable to the program.

## Part-time Students

The maximum time allowed for completion of the degree is 10 years. After completion of 24 credit hours, part-time students will be evaluated each May and must conform to the minimum performance levels.

## Direct Entry

**Admissions into the Family Social Sciences program has been suspended. Students interested in Family Social Sciences are advised to review the Bachelor of Health Studies ([https://umanitoba.ca/faculties/health\\_sciences/ihp/bhst.html](https://umanitoba.ca/faculties/health_sciences/ihp/bhst.html)) (Family Health concentration), which is part of the Interdisciplinary Health Program.**

Current Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology Family Social Science Degree Program's assessment standards. Probationary standing is assessed using the criteria listed.

Direct Entry students who complete fewer than 24 credit hours by May of their first year will not be formally assessed until the following May. Students who complete 9 - 21 credit hours with a grade point average of less than 2.0 will be placed on academic warning.

## Repeating Courses

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>) will not affect registration for the 2022-2023 (including Summer Term 2023).**

A student may repeat any course for the purpose of attaining a better grade. A course or its equivalent that is repeated in Fall 2016 or later will have the highest grade count. There are no supplemental examinations for students who have failed final or deferred examinations.

## Challenge for Credit

A student wishing to challenge a course for credit should contact an Academic Advisor. Letter grades are granted upon completion of the course that is challenged for credit. A list of courses for challenge is available in the Advising Office. An application is required.

## Transfer of Credit

Please refer to Admissions (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>) and Transfer of Credit web site (<https://umanitoba.ca/admissions/undergraduate/requirements/transfer-credit/>).

## Appeals of Academic Regulations

The Committee on Student Standing considers petitions from students who request special consideration with respect to rules and regulations governing their programs of study and qualification for graduation.

## Dean's Honour List

Eligible students who achieve a term Grade Point Average of 3.5 or higher in at least 12 credit hours per term will be included in the Deans Honour List.

## Degree With Distinction

Students who graduate with a degree GPA of 3.75 and higher will receive a degree with distinction.

## Work Permit for Study Purposes

International students who are registering for courses or programs that require work placement must obtain a valid **Work Permit**, in addition to maintaining a valid Study Permit. Work placement includes, but is not limited to, any **paid or unpaid** practicum, internships, work experience, field placement, and co-op programs that are a required component for the completion of their degree, diploma or certificate. Please contact your program advisor or the International Centre for Students (<https://umanitoba.ca/international/>) for further information.

## Release and Indemnification Forms

In elective courses, students may be required to sign a release form for off-campus activities.

## Written English and Mathematics Requirements

The written English and Mathematics requirements are satisfied by required courses HNSC 2000 (formerly HMEC 2000) and STAT 1000 within the Bachelor of Human Ecology Family Social Science Degree Program. HNSC 2000 (formerly HMEC 2000) will be available to students upon admission to the Degree.

## Program and Graduation Requirements

**Intake to the Family Social Sciences program has been suspended.**

For students entering the Bachelor of Human Ecology - Family Social Sciences Degree Program:

In order to qualify for a degree, students must complete the 120 credit hours specified for the selected program. Elective choices provided in each program can permit students to transfer between them; however, this opportunity decreases as students progress. Students who transfer to another program must meet the full requirements of that program. There is a quota in effect for intake to each program per academic year. The quota may affect movement into a program after the September intake.

## Advisement

**Intake to the Family Social Sciences program has been suspended.**

The Bachelor of Human Ecology Family Social Sciences Degree Program will provide entering students with orientation information and will refer a student to a program advisor if the student requests. All returning students in the Degree Program must submit a program plan for the succeeding year before the start of registration.

## Family Social Sciences Minor

### Minor Requirements

Students must complete 18 credit hours for the minor.

Course	Title	Hours
6 credit hours of Family Social Sciences courses at the 1000 level <sup>1</sup>		6
3 credit hours of Family Social Sciences courses at the 2000 level <sup>2</sup>		3
3 credit hours of Family Social Sciences courses at the 3000 or 4000 level <sup>2</sup>		3
6 credit hours of Family Social Sciences courses at the 2000-4000 level		6

<sup>1</sup> No more than six (6) credit hours at the 1000 level

<sup>2</sup> Minimum of three (3) credit hours at the 2000, 3000 or 4000 level

**The Family Social Sciences minor is still available to students. Please see here ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/chs/media/FSS-Minor-List-Jan-28-2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/units/chs/media/FSS-Minor-List-Jan-28-2020.pdf)) for more information.**

## Department Academic Regulations

The provisions of the General Academic Regulations (p. 118) and the University Policies and Procedures (p. 37), apply to all students. In addition, the Bachelor of Human Ecology - Family Social Sciences Degree Program has regulations and requirements, published below, that apply specifically to its students.

### Prerequisite, Corequisite, and Course Availability: Definitions

**Prerequisite:** If a course is prerequisite to a second course, the prerequisite must be met in order to continue in the second course. The department giving the second course may require a minimum grade of 'C' in the first course to register in the second course. Some inactive (legacy) courses may be used as prerequisites.

**Corequisite:** If a first course is a corequisite to a second course, the first course (unless previously completed) must be taken in the same term as the second course.

**Course Availability:** Not all courses listed in this Calendar are offered every year. Students are referred to the on-line calendar for courses offered in the year. Family Social Sciences courses at the 3000 and 4000 level are available only to students registered in the Bachelor of Human Ecology - Family Social Sciences Degree Program or one of the minors or options associated with the Degree Program. Courses at the 3000 and 4000 level may be taken with written permission from an Academic Advisor as long as there is space.

### Scholastic Standards

#### GRADUATION AND GRADE POINT AVERAGE

To graduate, a student must have passed 120 credit hours acceptable for credit in the current degree program and have obtained a minimum of 240 quality points. This is equivalent to a Degree Grade Point Average of 2.0. A pass indicates a grade of 'D' or better. A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses which apply at a particular stage. The effective courses consist of all courses passed, in addition to all failures which have not been cleared, or substituted for, in the student's record. A maximum of 150 credit hours (25 courses or the equivalent) may be attempted in order to obtain the 120 credit hours.

#### ASSESSMENT

The status of each student will be assessed in May of each year in which a student is registered. All Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology - Family Social Sciences Degree Program assessment standards. Assessments can include the following comments:

- Faculty minimum met (grade point average meets the standards (p.     ));
- Dean's Honour (p.     )
- Academic Warning
- Probationary status (p.     )

- Suspension (p. 605)
- Suspension - all attempts used (p. )

Academic warning indicates a grade point average between the minimum required at the effective credit hours (year) and the DGPA requirement of 2.0.

There is a maximum of 30 credit hours of attempts allowed for each academic program; once those attempts are used (repeated courses, grades of F or D), it is impossible to graduate.

### PROBATIONARY STANDING

Students must achieve or exceed the following standards at the specified stages in their academic careers. Failure to obtain the standard results in probation. Once placed on probation, students who fail to meet the appropriate performance level at the next assessment following the next registration will be academically suspended. A student is not permitted to be on probation for two consecutive years.

### ASSESSMENT STANDARDS

#### Bachelor of Human Ecology Family Social Sciences Degree Program

Credit Hours	Grade Point Average	Comment
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### SUSPENSION

Suspended students must remain out of the Bachelor of Human Ecology - Family Social Sciences Degree Program for one academic year from the date of suspension and must apply for reinstatement at the Admissions Office no later than May 1.

Where mathematically possible for a suspended student to complete the degree by repeating failed courses, a suspended student shall be automatically reinstated after remaining out of the Degree Program for one calendar year, or by achieving a degree GPA above the probationary standard.

### SUSPENSION (ALL ATTEMPTS USED)

Where it is mathematically impossible for a student to complete the degree by repeating failed courses, a suspended student, after remaining out of the faculty for one calendar year, may attempt reinstatement. By completing at least 12 credit hours in one term with a minimum 'D' grade in all courses and a term grade point average of at least 2.0, the student will be reinstated. The student will start the program afresh, with previous grades of 'C' or better applicable to the program.

### Part-time Students

The maximum time allowed for completion of the degree is 10 years. After completion of 24 credit hours, part-time students will be evaluated each May and must conform to the minimum performance levels.

### Direct Entry

**Admissions into the Family Social Sciences program has been suspended. Students interested in Family Social Sciences are advised to review the Bachelor of Health Studies ([https://umanitoba.ca/faculties/health\\_sciences/ihp/bhst.html](https://umanitoba.ca/faculties/health_sciences/ihp/bhst.html)) (Family Health concentration), which is part of the Interdisciplinary Health Program.**

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### Challenge for Credit

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### Release and Indemnification Forms

In elective courses, students may be required to sign a release form for off-campus activities.

## **Written English and Mathematics Requirements**

The written English and Mathematics requirements are satisfied by required courses HNSC 2000 (formerly HMEC 2000) and STAT 1000 within the Bachelor of Human Ecology Family Social Science Degree Program. HNSC 2000 (formerly HMEC 2000) will be available to students upon admission to the Degree.

## **Program and Graduation Requirements**

**Intake to the Family Social Sciences program has been suspended.**

For students entering the Bachelor of Human Ecology - Family Social Sciences Degree Program:

In order to qualify for a degree, students must complete the 120 credit hours specified for the selected program. Elective choices provided in each program can permit students to transfer between them; however, this opportunity decreases as students progress. Students who transfer to another program must meet the full requirements of that program. There is a quota in effect for intake to each program per academic year. The quota may affect movement into a program after the September intake.

## **Advisement**

**Intake to the Family Social Sciences program has been suspended.**

The Bachelor of Human Ecology Family Social Sciences Degree Program will provide entering students with orientation information and will refer a student to a program advisor if the student requests. All returning students in the Degree Program must submit a program plan for the succeeding year before the start of registration.

# Postgraduate Medical Education

## Overview/Entrance Requirements

**Dean:** Brian Postl

**Associate Dean(s):** (Postgraduate Medical Education): Cliff Yaffe

**Campus Address/General Office:** 260 Brodie Centre, 260-727 McDermot Avenue, Winnipeg MB R3E 3P5

**Telephone:** (204) 789-3290

**Fax:** (204) 789-3929

**Email Address:** PGME@umanitoba.ca

**Website:** [http://umanitoba.ca/faculties/health\\_sciences/medicine/education/pgme/index.html](http://umanitoba.ca/faculties/health_sciences/medicine/education/pgme/index.html) ([http://umanitoba.ca/faculties/health\\_sciences/medicine/education/pgme/](http://umanitoba.ca/faculties/health_sciences/medicine/education/pgme/))

Postgraduate Medical Education (PGME) at the University of Manitoba is comprised of a variety of training programs for graduated medical students interested in obtaining a higher level of education in Family Medicine or medical specialty. Programs are usually organized to be in one of three categories:

- Programs accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).
- Programs accredited by the College of Family Physicians of Canada (CFPC).
- Other training and fellowship programs approved by the Max Rady College of Medicine.

### Programs Accredited by RCPSC and CFPC

Programs in the first two categories are most likely to be recognized towards obtaining a license to practice medicine. The RCPSC and CFPC provide accreditation for the training program content and evaluative processes. After the successful completion of their training, candidates are eligible to challenge the appropriate national specialty exams for their particular programs. The complete listing of these programs follows in this section under the heading Description of Programs. The specific and detailed national requirements for individual programs may be obtained from the Postgraduate Medical Education Office.

The PGME Programs at University of Manitoba are accredited on a scheduled basis by the RCPSC and the CFPC. This allows PGME to oversee the training programs and support them in a variety of ways.

Several hospitals and healthcare facilities are used as training sites. The main teaching sites include: Health Sciences Centre, St. Boniface Hospital, Grace General Hospital, Misericordia Hospital (Ophthalmology) and a number of hospitals outside of Winnipeg for distributed education.

### General Regulations

Once accepted into a RCPSC specialty or Family Medicine training program the learner (now referred to as a "resident") is registered with University of Manitoba by the Postgraduate Medical Education Office. Registration fees are paid by Shared Health. Each resident is registered every subsequent year of his or her training program by the PGME office. The resident must also register with the College of Physicians and Surgeons of Manitoba (CPSM) so that their name is entered on the CPSM Educational Register.

The resident must obtain malpractice insurance, from the Canadian Medical Protective Association or its equivalent. Residents enrolled in postgraduate residency programs are expected to conform to such new requirements as may be adopted from year to year. Residents must apply directly to either the Royal College of Physicians and Surgeons of Canada

or the College of Family Physicians of Canada for assessment of training and for permission to sit the college examinations. Being a resident in a program does not automatically enroll the resident for such examination or certification.

### Eligibility

Graduates of Canadian medical schools are eligible for consideration of PGME training, and are required to challenge the Medical Council of Canada Qualifying Examination, Part I prior to commencing their residencies.

Generally, Canadian citizens or permanent residents once accepted into the PGME program, are eligible for provincial funding for residency training under the contract established with the Professional Association of Residents and Interns of Manitoba (PARIM).

International Medical graduates (IMGs) are eligible to apply for admission after they have challenged the Medical Council of Canada Evaluating Examination. IMGs must be Canadian or permanent residents to be eligible to apply for postgraduate medical training. IMGs may apply for possible residency positions through the CaRMS match (see below).

Internationally (Visa) Sponsored-trainees represent a special training category for entrance to postgraduate medical training. The Internationally (Visa) Sponsored trainee applicant must pass the Medical Council of Canada Evaluating Examination and be sponsored by an agency which has entered into a contract with the University of Manitoba for such training. All residents must receive remuneration from an institution recognized by the Government of Manitoba while registered in a training program in PGME.

### Criteria for Selection

Selection for admission to the various training programs will be made primarily on the basis of scholastic, personal and professional attributes as determined by academic records, personal interviews, letters of reference and in-training evaluation reports. Each particular training program determines the selection process; all programs follow the Best Practices in Application & Selection (BPAS) Report and recommendations endorsed by the Associations of Faculties of Medicine of Canada (AFMC) to ensure appropriate procedures are in place for objective decision-making, transparency, due process and societal responsibility. Admission to the postgraduate training year one (PGY1) for most programs is conducted through the CaRMS PGY1 match outlined below.

The College of Medicine commits to using reasonable accommodations and progressive efforts to ensure that residents with documented disabilities are considered for selection to Residency Programs for which they are academically qualified, ensuring full and safe access to the educational and learning environment and to the University facilities and services.

### Other Training and Fellowship Programs

The following post-PhD programs are offered by PGME at the University of Manitoba: Clinical Psychology, Clinical Microbiology, Clinical Biochemistry, and Molecular Genetics/Cytogenetics.

An Area of Focused Competence (Diploma) or AFC (Diploma) Program is a highly-specialized area of expertise within a medical specialty or subspecialty that addresses a specific societal need but does not meet the Royal College of Physicians and Surgeons of Canada (RCPSC) criteria of an independent specialty or subspecialty discipline. The length of training is typically 1-2 years. Training is competency-based.



Fellowships are programs of specialized training beyond medical residency offered by different clinical departments. The fellowships are usually one-year in duration.

## University Registration

All postgraduate trainees and fellows (not registered with the Faculty of Graduate Studies for M.Sc. or Ph.D. degrees) must be registered as postgraduate trainees in the Max Rady College of Medicine. The normal registration period is June 15 to July 1 each year, and is done by the College PGME Office.

## Program Administration

The departments which provide PGME training programs in the Max Rady College of Medicine are: Anesthesia, Community Health Sciences, Family Medicine, Biochemistry and Human Genetics, Emergency Medicine, Internal Medicine, Medical Microbiology, Obstetrics, Gynecology and Reproductive Sciences, Otolaryngology, Pathology, Pediatrics and Child Health, Psychiatry, Radiology and Surgery. Some departments offer more than one program, and may also offer training in sub-specialty areas.

Each program has a Program Director and a Resident Program Committee to administer the training program. There are also Program Administrators at each training site. The Program Director of each program reports both to the Department Head and the Associate Dean of PGME.

Beyond the program level, administrative matters pertaining to postgraduate residency training programs are the responsibility of the Associate Dean for PGME and the College PGME Executive Committee and its subcommittees. These committees are responsible for reviewing programs, allocation of residency positions, hearing resident appeals, and other duties as outlined in the terms of reference for each committee. The committees make recommendations to both the Associate Dean of the Max Rady College of Medicine and the College Postgraduate Executive Committee.

## Description of Residency Programs

Residency Programs will generally follow one of two pathways leading to licensure eligibility as described below.

### College of Family Physicians of Canada Accredited Programs

The training program for family physicians offers a two-year basic program in outpatient, in-hospital and community settings. This program is composed of several streams (urban, rural, Northern Remote, bilingual and Integrated Care of the Elderly) and the program leads to eligibility for certification with the College of Family Physicians of Canada (CFPC). A small number of positions are also available from time to time for enhanced training within the Family Medicine Training Program for a third year of training in Emergency Medicine, Anesthesia and Palliative Care, Care of the Elderly, Sports and Exercise Medicine, Cancer Care and Women's Health. Some of these enhanced positions may be associated with a return of service requirement.

### Royal College of Physicians and Surgeons of Canada Accredited Programs

The Faculty of Medicine offers a wide range of specialty and sub-specialty programs leading to eligibility for certification with the Royal College of Physicians and Surgeons of Canada. Programs vary in length from 2-7 years of medical training.

### Primary Specialties

- Anatomical Pathology
- Anesthesia

- Cardiac Surgery
- Dermatology
- Diagnostic Radiology
- Emergency Medicine
- General Surgery
- Internal Medicine
- Medical Genetics
- Medical Microbiology
- Neurology (Adult)
- Nuclear Medicine
- Neurosurgery
- Obstetrics and Gynecology
- Ophthalmology
- Orthopedic Surgery
- Otolaryngology
- Pediatrics
- Physical Medicine and Rehabilitation
- Plastic Surgery
- Psychiatry
- Public Health and Preventative Medicine
- Radiation Oncology
- Urology
- Vascular Surgery

### Subspecialty Programs <sup>1</sup>

(available only with completion in a primary specialty):

- Cardiology (Adult)
- Clinical Immunology and Allergy (Child & Adult)
- Critical Care Medicine (Adult)
- Developmental Pediatrics
- Endocrinology and Metabolism
- Emergency Medicine (Child)
- Gastroenterology
- Geriatric Medicine
- Gynecologic Oncology
- Hematology (Child & Adult)
- Infectious Diseases (Child & Adult)
- Maternal and Fetal Medicine
- Medical Oncology
- Neonatal-Perinatal Medicine
- Nephrology (Child & Adult)
- Palliative Medicine
- Respiratory Medicine (Child & Adult)
- Rheumatology (Adult)
- Thoracic Surgery
- Vascular Surgery

<sup>1</sup> These programs require different primary specialty credits, and may not be offered every year at the University of Manitoba.

For learners interested in a career combining health-related research and clinical activities, the University of Manitoba offers a two year Clinician Investigator Program (CIP) sponsored by the RCPSC.

### Application Procedures

All applicants for the PGY1 year of programs accredited by the RCPSC and CFPC must apply through the Canadian Residency Matching Service (CaRMS). All graduates of Canadian medical schools and International medical schools who are Canadian citizens or permanent residents and who have had no prior postgraduate medical training in Canada or the United States are eligible for the CaRMS match.

Applications for positions beyond the entry PGY1 year should be made at the PGME Office, 260 Brodie Centre or to the Program Director for the specific program. Availability of positions will vary from year to year and are not guaranteed for any program. No resident can be accepted unless a funded position is available.

### The Canadian Resident Matching Service (CaRMS)

This matching service is an autonomous, national organization of the Association of Canadian Medical Colleges. It provides an orderly method for students to select where to pursue Postgraduate Medical Education and for Program Directors to rank the applicants they wish to enroll. A second matching process (the second iteration) by CaRMS is subsequently available (after the 1st CaRMS match) to medical students not matched in the first iteration, and other medical graduates who have already received some prior postgraduate training. All information about registration and matching processes is available on the CaRMS website (<https://www.carms.ca/>). There are listings of all programs on their website.

### Assessment of Residents in Postgraduate Medical Education Programs

Assessment at all levels is based primarily on clinical performance in the patient care setting. The Program Director and the Residency Program Committee in each program are responsible for the implementation of the assessment process in their own program. At the end of each clinical rotation or at other appropriate stages of the program, each trainee is assessed by a variety of formative and summative assessment tools appropriate to that program and training level. The assessor(s) discusses the assessment with the trainee; the assessment information is documented in the resident's electronic portfolio and made available to the Program Director and Academic Advisor (if applicable). This ongoing assessment process may be supplemented by written examinations, oral examinations, supervised history and physical examination and by direct observation of clinical and technical skills.

When a resident receives an unsatisfactory assessment or examination result, the Program Director will review the assessment with the resident. Unsatisfactory assessments will also be discussed in a confidential manner at the Residency Program Committee meeting. The committee will make recommendations regarding remedial training. If a subsequent remedial period is also assessed as being unsatisfactory, the Program Director will contact the Associate Dean, PGME and the Probation Protocol and Procedure will be instituted. A failed probation period may result in a resident being dismissed from their training program.

The Faculty College Executive Council reserves the right to require any student to withdraw from the program of enrollment when it believes the student to be unsuited, on general considerations of scholarship, professional fitness or professional conduct for post-graduate medical education. However, the Max Rady College of Medicine does not have a professional unsuitability by-law. The right to require a student to withdraw on the basis of professional unsuitability may arise through the professional unsuitability by-law of the College of Physicians and

Surgeons of Canada. This right prevails notwithstanding any other provision in the faculty regulations.

### Appeals

The appeals process is available on a number of different levels. A postgraduate trainee who wishes to appeal the results of any aspect of the assessment process must follow the written guidelines established by the PGME Committee and the Max Rady College of Medicine. These guidelines may be obtained from the PGME Office.

**Further information on individual Residency Programs and affiliated governing bodies may be found here** ([http://umanitoba.ca/faculties/health\\_sciences/medicine/education/pgme/PGME\\_programs.html](http://umanitoba.ca/faculties/health_sciences/medicine/education/pgme/PGME_programs.html)):

# Undergraduate Medical Education Program (MD)

## Undergraduate Medical Education

### Mission Statement

The Mission of the Max Rady College of Medicine is to develop and deliver high quality educational programs for undergraduate and postgraduate students of medicine, for graduates and post-doctoral fellows in the basic medical sciences and for physicians in practice; conduct research and other scholarly inquiry in the basic and applied medical sciences; and, contribute to the improvement of health status in Manitoba and beyond by providing advice, disseminating information to health professionals and the public, and by cooperating in the planning for the development and delivery of health care services.

The Mission of the Undergraduate Medical Education Program is to develop, deliver and evaluate a high quality educational program for the MD Program.

Our Graduates will approach their profession with a spirit of Discovery by:

- Welcoming and adapting to the ever-changing nature of medicine
- Appreciating the continuum of basic science and human wellness
- Building a broad and unbiased foundation of medical knowledge
- Maintaining openness to practice medicine and conduct broader academic work in urban hubs and in rural and Northern communities, in Canada and around the world

Our Graduates will embrace Scholarship by:

- Pursuing academic excellence at every stage of their careers as clinicians, researchers, academics, and administrators
- Appropriately applying medical research and innovation to patient care
- Committing to the practice of lifelong learning as professionals
- Committing to the lifelong maintenance of an evidence-based practice
- Healing through knowledge and compassion and acting as educators for patients, allied health professionals, and one another

Our Graduates will lead and collaborate within their communities by:

- Advocating for the health and safety needs of individual patients and collective populations
- Communicating effectively with all health care professionals, including generalists, specialists, and allied professionals and those in related sectors
- Exemplifying professionalism and sustaining a climate of respect in all aspects of their lives
- Fostering an atmosphere of cultural safety for all patients and populations by practicing with open-mindedness and unconditional goodwill.
- Providing expert and compassionate medical care to diverse patient populations in Canada and beyond
- In doing so, graduates of the Max Rady College of Medicine at the University of Manitoba will become exemplary physicians prepared to undertake the responsibilities entrusted to them

Medical education in Manitoba is designed to provide students with the knowledge and experience they need to practise medicine in a profession

where new developments in science and public health policy create an ever-changing environment. In the first two years of the program, referred to as Pre-Clerkship, the subject matter is divided into Modules comprised of courses which cover core concepts in Human Biology, Health and Disease. The final two years, referred to as Clerkship are spent in direct contact with patients and doctors in a range of rural and metropolitan clinical settings in which students gain experience with Increasing responsibility for patient care and management.

### Registration Information

#### Initial Registration Access Times

Students in the Max Rady College of Medicine Undergraduate Medical Education Program will be given access time to the registration system (Aurora Student) in July. For instructions on how to register online, please refer to the chapter, "Registration Information: Aurora Student". Registration must be complete prior to the first day of classes.

Each student is registering in the same course for both the **Fall and Winter** sessions. Med III students will be able to register in their **Summer** session in mid-March. Students are asked to contact the Administrator, Enrolment via email: [anna.urbanik@umanitoba.ca](mailto:anna.urbanik@umanitoba.ca) or via telephone: (204) 789-3627 if registering difficulties are encountered.

#### Courses for the Undergraduate Medical Education program are:

Program & Year	College/School Codes	Terms	Dept. Number & Course Number	Lecture Section	Lab Section
Medicine I	05	Fall and Winter	UGME 1000	L01	Not Applicable
Medicine II	05	Fall and Winter	UGME 2000	L01	Not Applicable
Medicine III	05	Fall, Winter and Summer	UGME 3000	L01	Not Applicable
Medicine IV	05	Fall and Winter	UGME 4000; UGME 4990	L01	Not Applicable

#### Web Registration Exceptions

Students who have a failing grade/s registered against them and/or have other outstanding academic matters (i.e. deferred or supplemental examinations, modified program, etc.) in regards to the previous academic session will not be allowed to register using the web registration system. Students who fall into this category should contact the Administrator, Enrolment at (204) 789-3627 for further information.

#### Bachelor of Science in Medicine and Summer Early Exposure Programs

Students approved to participate in summer enrichment programs will be registered by the College.

#### Prior to Registration

New Students: All incoming students must complete an application to the College of Physicians and Surgeons of Manitoba, complete a Heart and Stroke certified course in BLS for Healthcare Providers (HCP-C) and submit the following documentation prior to the first day of class: Immunization records, Adult Criminal Records Check (with Vulnerable Sector search), Child Abuse Registry Self-Check, Adult Abuse Registry Check, Essential Skills and Abilities (Technical Standards) for Admission, Promotion and Graduation in the MD Program, and Accommodation for

Undergraduate Medical Students with Disabilities. If you are unable to submit these documents by the first day of class please contact the Administrator, Enrolment via email: [anna.urbanik@umanitoba.ca](mailto:anna.urbanik@umanitoba.ca) or via telephone: (204) 789-3627.

Returning Students: All returning students must re-certify their CPR in a Heart and Stroke certified course in BLS for Healthcare Providers (HCP-C) and submit a copy of their card to the Max Rady College of Medicine office prior to the first day of class. Returning students must be registered with the College of Physicians and Surgeons of Manitoba by June 30 of each year and must provide current documentation on Adult Criminal Record Check (with vulnerable sector search), Adult Abuse Registry Check and Child Abuse Registry Self-Check prior to the first day of class.

## Faculty Academic Regulations

### Admission to the Max Rady College of Medicine

The Applicant Information Bulletin is the official policy document for Admission ([http://www.umanitoba.ca/student/admissions/media/medicine\\_bulletin.pdf](http://www.umanitoba.ca/student/admissions/media/medicine_bulletin.pdf)). The Applicant Information Bulletin is reviewed and updated annually and may be subject to change.

#### Degrees Offered

- Doctor of Medicine (M.D.)
- BSc (Med) - Bachelor of Science in Medicine
- MD/PhD

#### Program Pools and Streams

The 4 year general MD Program is open to the following applicant pools and streams:

- Manitoba Applicant Pool
- Bilingual (French/English) Stream
- Canadian Indigenous Applicant Pool
- Out of Province Applicant Pool

#### Eligibility Requirements for Admission

Refer to the Applicant Information Bulletin ([http://www.umanitoba.ca/student/admissions/media/medicine\\_bulletin.pdf](http://www.umanitoba.ca/student/admissions/media/medicine_bulletin.pdf)) for the Eligibility Requirements.

#### Additional Requirements

- Technical Standards Requirement: the Max Rady College of Medicine has identified the requisite skills and abilities for admission, promotion and graduation in the MD program. These standards can be found here ([http://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/policies.html](http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/policies.html)).
- The University of Manitoba and the Max Rady College of Medicine is committed to providing all students equal access to learning opportunities. If you are a student with a diagnosed learning disability (permanent, chronic, or temporary) who may require academic accommodations, please contact Student Accessibility Services (<http://umanitoba.ca/student/accessibility/new-and-future-students.html>) at 204-474-7423 or by email ([student\\_accessibility@umanitoba.ca](mailto:student_accessibility@umanitoba.ca)) to learn more about the confidential supports that are available.
- Adult Criminal Record, Child Abuse Registry and Adult Abuse Registry Checks: all applicants must complete a self-declaration regarding adult criminal records, pending criminal charges and registration on the child abuse registry as an offender. This self-declaration must be done at the time of application. An adult criminal record check,

declaration of pending criminal charges and child abuse registry self-check are required at the time of registration and annually thereafter.

- Professional Registration: all medical students must be eligible for and become registered with the College of Physicians and Surgeons of Manitoba (CPSM) by the time of registration. Eligibility requirements can be viewed on the CPSM website (<http://www.cpsm.mb.ca>).
- Immunization requirements can be viewed here ([http://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/immunestatus.html](http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/immunestatus.html)).
- Students must have CPR designated as "Health Care Provider Level C" acceptable to the standards of the Heart and Stroke Foundation at the time of registration in Year 1. Students must have annual renewal of their CPR registration acceptable to the standards of the Heart and Stroke Foundation throughout the Undergraduate Medical Education Program. Evidence of current renewal must be provided on an annual basis prior to the beginning of the academic year. Failure to comply may result in exclusion from all academic programs until renewal is obtained.

#### Eligibility Requirements for Transfer

Applications for transfer are only accepted from students registered and in good standing in a medical school accredited by CACMS or LCME. Transfers can only be considered if there is a seat available through attrition. Details regarding the transfer policy can be found here ([http://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Transfer\\_Policy\\_approved\\_by\\_Senate\\_11.7.18.pdf](http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Transfer_Policy_approved_by_Senate_11.7.18.pdf)).

## Academic Regulations

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (p. 55)) will not affect registration for the 2021-2022 Academic Year.**

The provisions of the General Academic Regulations (p. 118) and the University Policies and Procedures (p. 37), apply to all students. Max Rady College of Medicine regulations and requirements change from time to time. Detailed information concerning the general regulations governing admissions, evaluation, academic progress and withdrawal for an undergraduate medical student may be obtained from the Undergraduate Medical Education Office. These regulations include the following:

- A student will not be permitted to register unless the student is in good academic and financial standing from the previous year.
- No year may be repeated more than once.
- A student who withdraws from the Max Rady College of Medicine without prior written notice will be considered to have terminated connection with the College and will not be eligible for re-admission.
- A student who withdraws from the College having given due notice of intention to withdraw is eligible for re-admission. If re-admission is approved the student will be required to conform to the rules and regulations, fee schedules, sequence of courses, in effect at the time of such readmission.
- A student may, after completion of the work of a full year, be granted a leave of absence for one year subject to certain conditions related to the purpose of the leave of absence and on subsequent registration will be required to conform to the rules and regulations, fee schedules, and sequence of courses in effect at the time of such registration. The Leaves of Absence (LOA) Policy can be viewed at the following link ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/pgme/policies.html#Assess](https://umanitoba.ca/faculties/health_sciences/medicine/education/pgme/policies.html#Assess)).

- A student who has been or expects to be prevented from attending any regular examination by reason of illness or other cause beyond the student's control should at once notify the Associate Dean, Student Affairs and must abide by the requirements of the Deferred Examination Policy and Procedures found at the following link ([http://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Deferred\\_Exam\\_Policy\\_with\\_Form\\_Final.pdf](http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Deferred_Exam_Policy_with_Form_Final.pdf)).
- The College Executive Council reserves the right to require a student to withdraw from the program for which the student is enrolled when it believes the student to be unsuited, on general considerations of scholarship, or conduct for the profession, or the field within the profession, to which the program of studies normally leads. This right prevails notwithstanding any other provision in the college regulations.
- Each student is required to present the personal and professional appearance, attitudes and behaviours expected of members of the medical profession. The Max Rady College of Medicine has a process through which lapses in professionalism are reported, investigated, and, when necessary, will result in remedial or punitive actions up to and including dismissal. The College of Medicine Professionalism website provides additional information at the following link (<http://umanitoba.ca/faculties/medicine/education/undergraduate/professionalism.html>).
- Each student must complete the undergraduate program for the M.D. degree of the Max Rady College of Medicine within seven years of entry to first-year Medicine, exclusive of those students undertaking additional academic pursuits which are acceptable to the Progress Committee. The Leaves of Absence (LOA) Policy can be viewed at the following link ([http://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Leaves\\_of\\_Absence\\_Policy\\_10.24.18.pdf](http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Leaves_of_Absence_Policy_10.24.18.pdf)). ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/pgme/policies.html#Assess](https://umanitoba.ca/faculties/health_sciences/medicine/education/pgme/policies.html#Assess)) When a student fails to complete the program, Progress Committee will review the academic record of the student. The reasons for the prolonged duration of the student's program are confidential but must be approved as valid by the Associate Dean, UGME.

### Requirements for the Degree of Doctor of Medicine (M.D.)

Every candidate for the degree of Doctor of Medicine must have satisfied the following requirements:

- Subsequent to the successful completion of the required university studies, a student must have attended four full sessions of not less than nine months each in this or some other school of medicine approved by the University of Manitoba, the last two years of which must have been spent as a student of the University of Manitoba.
- A student must have completed the required work, have fulfilled satisfactorily all special requirements, have received satisfactory grades throughout the entire medical program, and have discharged all indebtedness to the university.

Degrees: All degrees in Medicine will be conferred by the Senate of the university on the recommendation of the College Executive Council at a regular meeting of the University Senate or at a meeting specially called for that purpose.

### Requirements for Registration to Practise Medicine

A university degree in medicine does not in itself confer the right to practice the profession of medicine in Canada. That right is obtained from a provincial registering body in the particular province in which the

graduate desires to practice, and follows the successful completion of the Medical Council of Canada's two qualifying examinations.

### Federal Registration: The Medical Council of Canada

The Medical Council of Canada was established in 1912 by the Canada Medical Act. Its purpose is to grant a qualification to practice medicine acceptable for license in every province of Canada. It is not a licensing body, but "anyone who secures the diploma of the Medical Council of Canada by examination is registered on the Canadian Medical Register. This registration entitles one to become licensed to practice medicine in any province in Canada upon payment of the necessary fee and on meeting other provincial requirements."

The Medical Council of Canada examinations are normally taken by undergraduate medical students of the University of Manitoba at the end of the fourth year. There is a fee for this examination. Examinations are held annually in Winnipeg in May and November, and registration for these examinations may be made with:

The Registrar, Medical Council of Canada  
2283 St. Laurent Boulevard  
Ottawa, ON K1G 5A2

The deadline for application is usually in December; candidates are advised to contact the Medical Council of Canada (<https://mcc.ca/>) for current information.

### Provincial Registration

The College of Physicians and Surgeons of Manitoba is the regulation body for the physicians in Manitoba. Each medical student must be registered with the College of Physicians and Surgeons of Manitoba in each year of the academic program. For information on registration in Manitoba contact:

The College of Physicians and Surgeons of Manitoba  
1000–1661 Portage Ave.  
Winnipeg, MB R3G 3T7  
Telephone: (204) 774 4344  
Website: <http://cpsm.mb.ca/>

## The Program for the M.D. Degree

### Governance

The program and its curriculum are the responsibility of the Curriculum Executive Committee. The policies, regulations, implementation and modifications of the educational program for the M.D. degree are determined by the Curriculum Executive Committee on the recommendation of the College Executive Council, Pre-Clerkship Curriculum Committee and the Clerkship Curriculum Committee. The Curriculum Executive Committee is chaired by the Associate Dean, UGME. The Terms of Reference for this committee and committee membership can be viewed at the following link ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Curriculum\\_Executive\\_Committee\\_TOR.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Curriculum_Executive_Committee_TOR.pdf)). The Curriculum Executive Committee is responsible for the curriculum and teaching in the educational program leading to the M.D. degree.

### General Statement

The UGME program has undergone an exhaustive comprehensive curriculum renewal process which commenced in 2010. The new clerkship was introduced in August 2013, and the new pre-clerkship was introduced in August 2014. The curriculum was created to be a fully integrated spiral scaffold curriculum throughout all 4 years that fulfills UGME global objectives, *Future of Medical Education* (FMEE) recommendations and LCME/CCME standards. It was fashioned to be a

Person to Community Centered curriculum (as opposed to organ system or department-based).

The program is a continuum over the four years but is divided into the Pre-Clerkship, Years 1 and 2, and the Clerkship, Years 3 and 4, for administrative purposes. The mission and objectives of the program can be found at the following link ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/chs/educational\\_programs/preclerkship.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/chs/educational_programs/preclerkship.html))

The Max Rady College of Medicine does not support students' limitation of their studies to only fields and disciplines of personal interest. Nonetheless, students are encouraged to pursue areas of interest and to develop their own education through clerkship electives and summer clinical exposures or research experiences. Students learn to use information, skills and behaviour from multiple sources of teaching to prevent and solve the health care issues that face their patients and society. Students learn that physicians are part of an interdisciplinary team and health care system that provides accessible, continuous and comprehensive health care.

In order to modify and enhance the educational program, the opinions of students and their evaluation of the program and its teachers are formally sought and respected by faculty. This information is used by the Curriculum Executive Committee to improve the program.

### The Plan of the Curriculum Professionalism

Professionalism, that is the behaviour and attitudes befitting medical professionals, is an important component of the Undergraduate Medical Education curriculum. Our goal is to instill the attributes of professionalism and to emphasize to medical learners that professional characteristics and attributes are necessary during the practice of medicine and for the development of their identity as physicians.

The Max Rady College of Medicine has developed a professionalism charter that serves as a framework for defining and demonstrating medical professionalism.

In cases where lapses in the level of professionalism necessary to underpin medical education are recognized, the Max Rady College of Medicine uses a Professionalism Report by which single egregious or recurrent lapses in student professionalism can be brought to the school's attention. A summary statement will be included on an individual's Medical Student Performance Record if two or more validated reports have been received. The Max Rady College of Medicine maintains the option to dismiss students on the basis of unprofessional behaviour, regardless of performance in the curriculum.

### Pre-Clerkship Program

The goals and objectives of the UGME Pre-Clerkship curriculum are based on the mission and objectives of the undergraduate program as outlined in the following link ([http://umanitoba.ca/faculties/medicine/education/undergraduate/ugme\\_mission\\_objectives.html](http://umanitoba.ca/faculties/medicine/education/undergraduate/ugme_mission_objectives.html)). Student assessment is based on achievement of the learning objectives provided to students on-line via a curriculum management system known as Entrada.

The curriculum framework is based upon the principles of scaffolding and integration. The program comprises **Human Biology, Health and Disease Modules** commencing with a four week module – **Foundation of Medicine**. This module provides a basic science foundation relevant to the study and practice of medicine with the focus on principles, themes and overarching framework- these include normal structure and function of molecules, cells and tissues and how homeostasis is maintained at

these levels; how cells respond to perturbations in homeostasis and some of the possible consequences; major mechanisms that underlie the development of disease, and exogenous factors that threaten health.

This is followed by 23 weeks of the **Human Biology and Health Modules** which in sequence are: Blood and Immunology 1, Cardiovascular 1, Respiratory 1, Neuroscience 1, Musculoskeletal 1, Endocrine/ Metabolism 1, Woman's Reproductive Health 1, Gastroenterology , Hepatology, Nutrition 1 and Urinary Tract 1 courses. These courses cover the normal development, anatomy, histology, physiology and processes for the various systems, predominantly basic sciences with clinical cases (normal or abnormal) to contrast or help illustrate normal. Each course will include an overview of burden of illness or diseases related to that system. The courses will be presented in the mornings while the afternoons will consist of five *Longitudinal Courses* that will proceed throughout all four years. These include:

1. Clinical Reasoning
2. Professionalism
3. Population Health
4. Clinical Skills
5. Indigenous Health

The content, where relevant will parallel the morning module courses.

Following completion of the **Human Biology and Health Modules**, the same course names will appear as **Human Health and Disease Modules**. This is 36 weeks in total with the first 9 weeks completing year 1 of study. **Health and Disease Modules** starts with an Introduction to Infectious Disease and Therapeutics course followed by Cardiovascular 2 and Respiratory 2. Year 2 of study commences with the remainder of the M2 courses in sequence: Blood and Immunology 2, Principles of Oncology, Neuroscience 2, Endocrine/Metabolism 2, Woman's Reproductive Health 2, Gastroenterology, Hepatology and Nutrition 2, Urinary Tract 2 and Musculoskeletal 2. All the courses are presented as abnormal processes, predominantly clinical cases with review and application of basic sciences. Modules will be presented in the mornings while the afternoons will be five Longitudinal Courses again including:

1. Clinical Reasoning
2. Professionalism
3. Population Health
4. Clinical Skills
5. Indigenous Health

The content, where relevant, will parallel the morning module courses. Each course provides an overview of burden of illness and societal impact of diseases, and for each specific abnormality or disease where relevant the epidemiology, scientific basis and anatomy review, prevention and screening, cultural, social and ethical issues, natural history and prognosis, diagnosis, therapeutics and disease management. These may be covered during the morning module course or the afternoon Longitudinal course. The impact of Translational Research, Evidence Based Medicine and Health Care Systems will be highlighted where appropriate.

Year 1 will conclude with a one week rural primary care exposure.

Year 2 will conclude with a 9 week **Consolidation module**. The module will ensure all the content from the previous modules are assimilated, and includes single symptom presentations with broad differential diagnosis, multisystem disease such as complicated diabetes, "Themes"

or disciplines such as pediatrics, geriatrics and systemic diseases such as HIV, SLE and multiple myeloma. The consolidation module begins with the pain management curriculum and the dermatology course. The subsequent weeks will be small group case based discussions to ensure all the 137 **Essential Clinical Presentations** have been covered at appropriate level.

The two-year Pre-Clerkship curriculum brings together teachers and facilitators from across all College Departments, other healthcare related faculties and disciplines as well as members of the public. All basic medical sciences, including anatomy, molecular biology, biochemistry, human genetics, immunology, microbiology, physiology contribute to the curriculum as do the clinically applied basic sciences of pathology, pharmacology and community health sciences. Clinical departments including anaesthesia, clinical health psychology, family medicine, internal medicine, obstetrics, gynaecology, ophthalmology, otolaryngology, paediatrics, psychiatry, surgery are involved in all aspects of the curriculum.

An overview of the UGME Framework within the Pre-Clerkship component of the Undergraduate Medical Education program can be viewed at the following link ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/ugme\\_mission\\_objectives.html](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/ugme_mission_objectives.html))

### Methods of Teaching

A variety of approaches are used to facilitate learning. These include self-directed learning, small group sessions, whole group sessions, lab practicals and simulation.

### Methods of Assessment

Formative and summative assessments are provided throughout the Pre-Clerkship curriculum. These include self-reflection, learning portfolios, tutor feedback, instructional tests, multiple choice examinations, practical examinations, and short and long answer examinations.

### Attendance

Certain learning sessions within the UGME program are designated as "mandatory attendance" sessions. These are generally sessions in which students are learning in a small group format, patients or their families are involved; clinical skills are being taught; or clinical care is being provided. Attendance at these sessions is recorded and reported to the UGME office, and contributes to the evaluation of the learner's professionalism. The Attendance Policy can be viewed at the following link ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Pre-Clerkship\\_Student\\_Attendance\\_Policy\\_August\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Pre-Clerkship_Student_Attendance_Policy_August_2020.pdf)).

The procedures outlined in this policy do not preclude course directors, session leaders and instructors from tracking student learner attendance in their sessions and discussing any concerns related to attendance with the learners.

### Clerkship Program

The Clerkship component of Curriculum Renewal introduced in 2013 was created to facilitate the integrated 4 year scaffold curriculum with central governance, supervised responsibility for patient care and mandatory academic time with frequent feedback and evaluation. The program is governed by the Clerkship Curriculum Committee for which the terms of reference and membership can be viewed on the website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/Clerkship%20Curriculum%20Committee.html](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/Clerkship%20Curriculum%20Committee.html))

The Clerkship (Years 3 and 4) consists of **Transition to Clerkship** (5 weeks), **Core Clinical Rotations** (48 weeks), **Electives**, and CaRMS interviews (20 weeks), and **Transition to Residency** (12 weeks)

### Transition to Clerkship (TTC) (5 weeks)

The goal of TTC is for the students to expand their focus from learning during pre-clerkship years to the actual provision of care in various health care settings. This will help the students translate the knowledge gained in pre-clerkship to the clinical setting and the actual provision of care. This includes the supervised responsibilities that accompany provision of preventative health and management of disease by use of simulation, patient assessments, small group sessions and shadowing experiences.

The **Transition to Clerkship** is launched with a prominent local keynote speaker and reciting of Hippocratic Oath, includes three weeks in various didactic, simulation, and community settings.

### Core Clerkship Rotations (48 weeks)

There are four 12 week blocks comprising 8 major clinical disciplines combining 2 disciplines per block to facilitate delivery of joint academic time: Surgery and Anesthesia/Ophthalmology/Radiology, Internal Medicine and Emergency Medicine, Pediatrics and Obstetrics/Gynecology and Psychiatry with Family Medicine/Public Health. For more specific outline see UGME Program Overview ([http://umanitoba.ca/faculties/medicine/education/undergraduate/program\\_overview.html](http://umanitoba.ca/faculties/medicine/education/undergraduate/program_overview.html)). The primary responsibility of the clerks in the program is the care of patients under the supervision of postgraduate students and faculty. Settings for the clerkship experience are varied, including wards and outpatient facilities of the hospitals, doctors' offices, rural settings and community-based hospitals. A formal Academic Half Day occurs weekly with mandatory attendance shared and created equally by the UGME Office and Longitudinal Courses, and the respective core clinical rotations. The Longitudinal Courses are those that proceed throughout all four years and include:

1. Clinical Reasoning
2. Professionalism
3. Population Health
4. Clinical Skills
5. Indigenous Health

The UGME academic time includes reflection exercises and assignments. An Evidence Based Medicine Course and Capstone Project is included during this time period. The core rotations each have additional scheduled academic sessions.

### Electives and CaRMS National Interview Period (20 weeks)

There are 17 weeks of electives prior to the CaRMS National Interview Period. Throughout the elective periods, students must pursue education in a minimum of three different disciplines with a minimum duration of two weeks and maximum duration of eight weeks each. Electives may be pursued in a setting of the student's own choice (including beyond the university), but must be approved by the Director, Electives. Students are responsible for all costs associated with electives and CaRMS interviews, e.g. transportation, accommodation etc.

### Transition to Residency (12 weeks)

Following completion of the CaRMS interviews will be two 3 week selective periods selected from a catalogue of options including international selectives and university exchange programs, sandwiching CaRMS match week. During this time period students will be participating in an Evidence Based Medicine Course and Capstone Project. The CaRMS match week will include preparation for PGME sessions including types of practise, leadership skills, team work and medical legal/

licensure sessions. Transition to Residency will conclude with a 4 week Comprehensive Review and Advanced Cardiac Life Support (ACLS) course

### Requests for Conscience-Based Objections

The College of Medicine acknowledges that at times, learners may object to participating in educational activities. Learners who object to participation in educational activities may refer to the Conscience Based Exemptions Policy available online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/media/Conscience-Based-Exemptions-Policy-June-26-2019.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/media/Conscience-Based-Exemptions-Policy-June-26-2019.pdf)) in order to seek a Conscience-Based Objection.

## Student Assessment and Academic Progress

### Responsibility

The policies and procedures for the assessment of the students in the program for the M.D. degree are the responsibility of the College Executive Council.

*Progress Committee:* The Progress Committee meets regularly to evaluate the performance and progress of students enrolled in the Undergraduate Medical Education program.

The responsibilities of the Progress Committee include:

- Recommending to the College Executive Council the academic standards by which the progress of students are judged and ensuring that examiners have followed the policies and procedures set by the College Executive Council.
- Determining which students may proceed to the next stage of the program or to graduation.
- Determining which students should write supplemental examinations, or be required to take remedial study, or be required to repeat all or part of the academic year before promotion to the next stage of the program or graduation.
- Placing students on Monitored Academic Status or Probationary Academic Status.
- Ensuring that the Student Evaluation Committees have followed the policies and regulations of evaluation that have been approved by the College Executive Council.

The Preclerkship and Clerkship Student Evaluation Committees (PSEC, CSEC) conduct the assessment of the students. The knowledge, clinical and communication skills, attitudes and behaviour of the students are evaluated by examination, assessment of performance and completion of assignments.

**The responsibilities of the PSEC, and CSEC include:**

- Planning and administration of all aspects of student assessment and performance.
- Planning and administration of all supplemental examinations.
- Planning and administration of all other measures of academic performance.
- Planning and administration of remedial training for students with unsatisfactory academic performance.
- The reporting of the results of examinations, supplemental examinations, other academic performance evaluation and remedial training to the Progress Committee.

### Evaluation in the Pre-Clerkship Program Summative Examinations

The PSEC will inform the students of the pre-determined pass mark for each examination at the beginning of their course or module. The

students, however, will be given the overall as well as the actual marks obtained in the different sections of the examination. Student results will be reported to them as a pass or fail. Grades and relative performance will be recorded in the students' active files. A student can view his or her active file in accordance with the Student Records Policy and procedures online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/policies.html#ACADEMIC](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/policies.html#ACADEMIC))

The Max Rady College of Medicine uses a Pass/Fail system where grades are not reported external to the Max Rady College of Medicine. Transcripts and Medical Student Performance Reports will indicate only whether a student has passed or failed a year, course, or module. However, within the Max Rady College of Medicine, student grades will be used to help identify students at academic risk and to help select students for distinctions such as awards and specialized programs.

For modular courses, there are written comprehensive examinations based on the objectives at the end of each course or module. In addition, there are mid-course or mid-modular assessments (often examinations) for each course. Each examination may use various methods of assessment: multiple choice questions, short answer questions, etc. There may also be take-home assignments in each course that contribute to the final mark. Longitudinal courses will have multiple forms of assessment throughout the year, and may include written examinations, take-home assignments, OSCE examinations, or other forms of assessment.

Expectations for student conduct and information related to pass marks for summative examinations can be found in the following UGME policies.

- Examination Conduct Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Examination\\_Conduct\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Examination_Conduct_Policy_May_2020.pdf))
- Examination Results Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Examination\\_Conduct\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Examination_Conduct_Policy_May_2020.pdf))
- Deferred Examinations Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Deferred\\_Exam\\_Policy\\_with\\_Form\\_Final\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Deferred_Exam_Policy_with_Form_Final_May_2020.pdf))
- Examination Accommodation Procedures ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/pgme/media/Essential\\_Skills\\_Accommodation\\_Policy.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/pgme/media/Essential_Skills_Accommodation_Policy.pdf))

### Failures of the Evaluation in Pre-Clerkship Years 1 and 2

The UGME Promotion and Failure Policy governs decisions related to student promotion and failure at the Pre-Clerkship level can be viewed [here](#)

Students failing a number of examinations up to the maximum allowable failures for modular courses or up to two longitudinal courses are permitted to sit supplementary examinations in accordance with the Supplemental Examination Policy that can be viewed online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Supplemental\\_Assessments\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Supplemental_Assessments_Policy_May_2020.pdf)).

Students who fail any supplementary examination in a first or second year modular course will be given a third attempt to pass the particular course via a second supplemental examination. Students who fail this third attempt will fail the year. Students who fail any supplemental examination in a first or second year longitudinal course will fail that year.



Students who are granted supplemental privileges are expected to undertake remedial study at a time determined by the Director, Remediation. Remediation usually occurs during the summer period. Following the remediation, a student will sit a supplemental examination comparable but different from that failed. The performance of students during the remedial period will be assessed by a preceptor and will normally include an oral and/or written examination and/or repeated OSCE. Students who fail to reach the standard expected after remediation will fail the year.

Students in Year 1 and Year 2 who are successful on the supplemental examination(s) will be promoted.

Students who fail Year 1 or Year 2 will be required to repeat that particular year.

### Formative Assessment in Pre-Clerkship

A variety of formative assessments are conducted in Pre-Clerkship including instructional tests, practice questions, reflective writing, self-evaluation, and peer-evaluations.

### Remediation in Pre-Clerkship

A student who fails an examination is required to meet with the Director, Remediation for a remediation assessment. The exact nature of the remediation may vary and will be determined on a case by case basis by the Director, Remediation in conjunction with the Course Coordinator. The student will also be required to meet with the Associate Dean, Student Affairs, who may also direct the student to other college members or services for students. Remediation Policy and Procedures can be viewed online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Remediation\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Remediation_Policy_May_2020.pdf)).

### Evaluation of Students in the Clerkship Program

The Max Rady College of Medicine concluded a significant period of Curriculum Renewal in 2018.

### For Students beginning Clerkship prior to August 2013:

During the clerkship years students will be evaluated on their competence and this will include assessment of their cognitive knowledge and understanding, clinical skills, problem solving and judgement, technical skills, interpersonal attributes and general professional responsibility. Assessment will be the responsibility of the CSEC.

### Methods of Summative Assessment (General)

The policy and procedures applicable for evaluation are:

- Examination Conduct Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Examination\\_Conduct\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Examination_Conduct_Policy_May_2020.pdf))
- Examination Results Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Examination\\_Conduct\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Examination_Conduct_Policy_May_2020.pdf))
- Deferred Examinations Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Deferred\\_Exam\\_Policy\\_with\\_Form\\_Final\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Deferred_Exam_Policy_with_Form_Final_May_2020.pdf))
- Examination Accommodation Procedures ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/pgme/media/Essential\\_Skills\\_Accommodation\\_Policy.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/pgme/media/Essential_Skills_Accommodation_Policy.pdf))

Various methods will be used to assess students, including the final evaluation reports (FITERs); written external NBME examinations and OSCE-type exams. Student performance for evaluation purposes during examinations may be recorded in writing, orally, by computer, by audio or by video taping. All material necessary to generate the mark such as

papers, computer records and tapes will be destroyed once the student has passed that assessment. Such material can be of help to a student needing remediation before the examination.

To achieve this quality assurance, the Clerkship Student Evaluation Committee may use direct observation or indirect observation by audio and video monitoring. Quality assurance material is subject to the aforementioned regulations of the university and the College. Furthermore, this material, which could identify the individual student will not be released to anyone, other than the Dean and Clerkship Student Evaluation Committee without the written consent of the student.

### The Introduction to Clerkship (ITC)

The goal of Introduction to Clerkship (ITC) is to prepare the student for clerkship rotations. Students will be assessed for attendance and performance in learning groups. The purpose of student evaluations in ITC is to ensure that students are ready to begin the clerkship rotations.

Readiness for clerkship must be demonstrated in many areas including: basic medical knowledge and its application; clinical skills in evaluating patients; analysis of clinical data; problem identification and diagnosis; planning of investigation; planning of management and therapy; relationships to patients and staff. These attributes will be assessed in a variety of ways throughout ITC.

Method of Assessment:

Students failing to attend mandatory sessions will be reported to the Associate Dean UGME, who will inform the Clerkship Student Evaluation Committee. Each student will receive a warning from the Associate Dean's office. If this warning is ignored the student's attendance record and performance will be considered by the Clerkship Student Evaluation Committee and the student may be failed for the sessions missed. A suitable remedial period may be provided. If the student does not perform satisfactorily in the remedial period the ITC will be failed.

The student must be informed of a recommendation for failure within seven working days of the end of the session. The pass/fail decision will be given by the departmental representative to the Clerkship Student Evaluation Committee. In the case of a failing evaluation the reasons for failure must be documented and submitted to the Clerkship Student Evaluation Committee.

### Remediation

Failure for Inadequate Attendance:

The coordinator of the module of sessions missed may, with approval of the Director, Clerkship Curriculum, provide the student with a remedial course, of comparable educational experience in that subject; the student will have to attend and perform satisfactorily to pass the ITC.

### The Major Clinical Clerkships

Method of Assessment:

The evaluation of the students during the clinical clerkship rotations may be assessed by review of clinical performance, written examinations, and projects.

Clinical Performance:

The objectives of the Clerkship Program are consistent with the Undergraduate Medical Education Objectives found online

The Midpoint In-Training Report (MITER) is a formative assessment in rotations of four weeks or longer. The student uses this report to complete a self-assessment which is then discussed with the student's

preceptor. If a student's early performance is likely to lead to a failure, the Clerkship Director must advise the student of an impending failure by the midway point of the rotation. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will collect preceptor assessments throughout the rotation. The Clerkship Director, or designate, will use all assessments to make a final decision on the student's performance at the end of the rotation in that department. A Final In-Training Evaluation Report (FITER) of each student's achievement of these objectives will be completed for each rotation.

A failing student must be informed of the failure by the Clerkship Director, or designate, preferably before the end of the rotation but not later than seven working days after the rotation is complete. All results will be submitted to the undergraduate committee of the department, who, for a failure, will review all the assessments and preceptors' pass/fail assessments and determine the overall pass/fail standing for the student during the rotation in question.

The pass/fail recommendation, with the FITER and any supporting evidence for that decision, will be submitted by the departmental representative to the Clerkship Student Evaluation Committee. The pass/fail decision will be reviewed and affirmed if there is a majority vote of the members of Clerkship Student Evaluation Committee present at the first meeting of the Clerkship Student Evaluation Committee following the completed rotation. In the case of a tie, the chair of Clerkship Student Evaluation Committee will have the deciding vote, otherwise he or she will not vote.

On occasions, Progress Committee may deem it necessary to forward feed student summative assessment information to subsequent Clerkship Directors, or designates. In such instances, the student will be informed and the process will follow that outlined in the Forward Feeding Policy and Procedures found online

Clerkship Written Examinations:

Students will take the National Board of Medical Examiners (NBME) subject examinations at the end of the following clerkship periods: Obstetrics/ Gynaecology, Paediatrics, Psychiatry, and Surgery. For Internal Medicine, the NBME examination will take place after the Internal Medicine Selective rotation. For Core Surgery the NBME examination will take place following the major surgery rotation. The passing standard for the NBME examinations will be set by the CSEC on an annual basis, based on an Equated Percent Score as recommended by the NBME. Students failing a NBME examination will re-sit this examination as outlined in the Supplemental Examination Policy found online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Supplemental\\_Assessments\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Supplemental_Assessments_Policy_May_2020.pdf))

### **The Comprehensive Clinical Examination (CCE)**

The goal of the Comprehensive Clinical Examination (CCE) is to objectively assess student clinical competence in generic skills of data collection, interpersonal relationships, along with the content of the case for diagnosis, investigation, and management of common clinical problems. This examination frequently uses standardized patients to test these clinical skills. The CCE committee is a sub-committee of the Clerkship Student Evaluation Committee and is chaired by the CCE coordinator. The CCE is marked to a standard predetermined by the CCE committee and the results of the examination are submitted to the Clerkship Student Evaluation Committee.

### **The Multiple Specialty Rotation in Clerkship (MSR)**

Method of Assessment:

The assessment of students during each component of the MSR clerkship rotation includes assessments of attendance, performance and could include College prepared examinations. Students will be expected to attend all clinical, small group, and laboratory sessions. Clinical performance will be judged, where applicable, as in the major clerkships. The Clerkship Director, or designate, must advise each student by the midway point of each component of the rotation if his or her performance is likely to lead to a failing assessment in that component. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will use all assessments to make a final decision on the student's performance at the end of each component of that rotation. A failing student must be informed of the failure by the preceptor, Clerkship Director, or designate preferably before the end of the rotation but not later than seven working days after the rotation is complete. All results will be submitted to the undergraduate committee of the department, who, in the case of a failure will review all the assessments and preceptor(s) pass/fail assessments to determine the overall, pass/ fail standing for the student in that department.

### **The Elective Periods**

Method of Assessment:

Electives are evaluated in a similar manner to other clerkship rotations and students are required to obtain a completed elective assessment form for every elective pursued. These evaluations will be reviewed by the Director, Electives, and unsatisfactory assessments will be submitted to the Clerkship Student Evaluation Committee.

### **Remediation during Clerkship**

A student who has received a failing FITER on a non-elective clinical rotation, shall be required to meet with the Director, Remediation for a remediation assessment. Remediation during the clerkship is typically scheduled during electives or other time as determined suitable by the College. The Director, Remediation in consultation with the Clerkship Director, or designate will coordinate this remediation, which will include further clinical experience. The policy and procedures governing remediation may be found online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Remediation\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Remediation_Policy_May_2020.pdf)).

Clerkship Clinical Performance Remediation:

The Clerkship Student Evaluation Committee will provide the student who has failed a clinical rotation an appropriate remedial period with the department in which the rotation was failed. The rotation will be an equivalent educational experience to the clerkship failed, and its goal will be to assist the student to reach the expected standard of clinical competence. A similar process of evaluation will be used. The remedial rotation will usually be taken during an elective period.

Remediation for NBME Examination Failures:

Students failing any two NBME examinations (in the same subject or different subjects) will be required to meet with the Director, Remediation for remediation assessment. The policy and procedures governing remediation may be found online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Remediation\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Remediation_Policy_May_2020.pdf)). Where a student has failed two successive NBME examinations in the same subject, the student will be required to complete a remedial period of training from the relevant. The Director, Remediation in conjunction with the Clerkship Director, or

designate, will coordinate the remediation; further clinical experience may be needed to meet that purpose. Such a remedial period will be a maximum of four weeks and will usually be taken in an elective period, and followed by a third attempt at the National Board examination.

Remediation for Failure in the CCE:

The Clerkship Student Evaluation Committee will devise an appropriate remedial period which will take into account the areas of weakness demonstrated by the CCE and will usually be taken during elective time. This remediation will be assessed by a clinical assessment and may include an oral and/or written exam.

Remediation for an MSR Clerkship Failure:

The Clerkship Student Evaluation Committee will provide the student who has failed a clinical component of the MSR with a remedial period in the department in which the rotation was failed. This period is flexible but can be up to the same length as the failed rotation. Such a remedial rotation will be an equivalent educational experience to that failed and its goal will be for the student to reach the expected standard of clinical performance. A similar process of assessment will be used and may be supplemented by a clinical oral and/ or written examination if the department deems it necessary. The remedial will usually be taken in an elective period.

Remediation for an Electives Failure:

The Clerkship Student Evaluation Committee will devise a remedial period of up to four weeks which will take into account the areas of weakness revealed by the student's elective evaluation. This will be taken in the next available free time for the student. The remedial period will be evaluated by clinical assessment.

### Failure of a Student in the Clerkship Program

The Clerkship Program is a continuum held over Year 3 and Year 4. A failure of the Clerkship Program is considered to be a failure of one year, please refer to Academic Regulations. (p. 611)

Failure of the Clerkship:

The student will be determined to have failed the Clerkship Program if:

#### 1. Failure of Clinical Assessments

The student has received failing assessments in one or more of the following:

- a. Two major clerkships in different disciplines (Internal Medicine, Internal Medicine Selective, Surgery, Surgery Selective, Paediatrics, Obstetrics/ Gynaecology, Psychiatry, and Family Medicine)

or

- b. One major clerkship and:
  - i. its remedial, or
  - ii. an ITC remedial, or
  - iii. an MSR remedial, or
  - iv. an elective remedial

or

- c. Remedials in two of the following:
  - i. Anesthesia
  - ii. Emergency Medicine
  - iii. Otolaryngology
  - iv. Ophthalmology
  - v. Community Health Sciences

vi. Elective

vii. ITC

#### 2. Failure of Examinations

The student has failures in one or more of the following:

- a. A single NBME subject examination three times

or

- b. A total of five NBME examinations

or

- c. The CCE after remediation

#### 3. Remediation Related Failures

If the remediation period recommended for a student, for whatever cause, requires more than eight weeks, then the student will be deemed to have failed the Clerkship Program.

Complete information related to promotion and failure in any year of the Undergraduate Medical Education program can be found in the Undergraduate Medical Education Promotion and Failure Policy and Procedures online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/media/Promotion\\_and\\_Failure\\_Policy\\_Edit\\_Check.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/media/Promotion_and_Failure_Policy_Edit_Check.pdf)).

### Terms for the Repeat Clerkship

A student who fails the Clerkship Program, be it because of failure of clinical assessments, failure of examinations, or failure of remediation (as above), immediately ceases in the program, and will be required to repeat the Clerkship Program. The Repeat Clerkship will consist of the following, at a minimum: Six-week rotations in each of Core Internal Medicine, Core Surgery, Paediatrics, Family Medicine, Psychiatry, and Obstetrics/ Gynaecology, plus 12 to 16 weeks of electives. A student in the Repeat Clerkship will also be required to complete the ACLS course (0.5 weeks), the LMCC refresher course (4.5 weeks). The student will be granted 3 weeks for CaRMs interviews and two weeks for vacation. Furthermore, if the failure occurred prior to the completion of the Medicine Selective, Surgery Selective, Multiple Specialty Rotation (MSR), or Community Health Sciences Project, then these will be required components of the Repeat Clerkship as well. The student must satisfactorily meet all clinical assessments, examinations, the CCE, as well as remedial rotations (as appropriate), regardless of whether they had been passed previously. The terms of the Repeat Clerkship will be submitted to the Progress Committee for review and final approval.

### Terms for Failure of the Repeat Clerkship

The terms for failure of the Repeat Clerkship are the same as "Failure of a Student in the Clerkship Program (p. 618)." A student who has failed the Repeat Clerkship will be required to withdraw from the Max Rady College of Medicine program.

### For Students beginning Clerkship on August 2013 or later

During the clerkship years students will be assessed on their competence and this will include assessment of their cognitive knowledge and understanding, clinical skills, problem solving and judgement, technical skills, interpersonal attributes and general professional responsibility. Assessment will be the responsibility of the Clerkship Student Evaluation Committee (CSEC).

### Methods of Summative Evaluation (General):

The policy and procedures applicable for evaluation are:

- Examination Conduct Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Examination\\_Conduct\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Examination_Conduct_Policy_May_2020.pdf))

- Examination Results Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Formative\\_Assessment.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Formative_Assessment.pdf))
- Deferred Examinations Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Deferred\\_Exam\\_Policy\\_with\\_Form\\_Final\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Deferred_Exam_Policy_with_Form_Final_May_2020.pdf))
- Examination Accommodation Procedures ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/pgme/media/Essential\\_Skills\\_Accommodation\\_Policy.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/pgme/media/Essential_Skills_Accommodation_Policy.pdf))

Various methods will be used to assess students, including the final evaluation reports (FITERs); written external NBME examinations and OSCE-type exams. Student performance for assessment purposes during examinations may be recorded in writing, orally, by computer, by audio or by videotaping. All material necessary to generate the mark such as papers, computer records and tapes will be destroyed once the student has passed that evaluation. Such material can be of help to a student needing remediation before the examination.

To achieve this quality assurance, the CSEC may use direct observation or indirect observation by audio and video monitoring. Quality assurance material is subject to the aforementioned regulations of the university and the College. Furthermore, this material, which could identify the individual student will not be released to anyone, other than the Dean and Clerkship Student Evaluation Committee, without the written consent of the student.

### The Transition to Clerkship (TTC)

The goal of Transition to Clerkship (TTC) is to prepare the student for clerkship rotations. Students will be assessed for attendance and performance in learning groups. The purpose of student assessment in TTC is to ensure that students are ready to begin the clerkship rotations.

Readiness for clerkship must be demonstrated in many areas including: basic medical knowledge and its application; clinical skills in evaluating patients; analysis of clinical data; problem identification and diagnosis; planning of investigation; planning of management and therapy; relationships to patients and staff. These attributes will be evaluated in a variety of ways throughout TTC.

#### Method of Assessment:

Students failing to attend mandatory sessions will be reported to the Associate Dean UGME, who will inform the Clerkship Student Evaluation Committee. Each student will receive a warning from the Associate Dean's office. If this warning is ignored the student's attendance record and performance will be considered by the Clerkship Student Evaluation Committee and the student may be failed for the sessions missed. A suitable remedial period may be provided. If the student does not perform satisfactorily in the remedial period the TTC will be failed.

The student must be informed of a recommendation for failure within seven working days of the end of the session. The pass/fail decision will be given by the departmental representative to the Clerkship Student Evaluation Committee. In the case of a failing evaluation the reasons for failure must be documented and submitted to the Clerkship Student Evaluation Committee.

### TTC Remediation

#### Failure for Inadequate Attendance:

The coordinator of the block of sessions missed may, with approval of the Director, Clerkship Curriculum, provide the student with a remedial course,

of comparable educational experience in that subject; the student will have to attend and perform satisfactorily to pass the TTC.

### The Major Clinical Clerkships

The Major Clinical Clerkships for students Beginning Clerkship in August 2013 are:

- Family Medicine
- Internal Medicine
- Internal Medicine Selective
- Surgery
- Surgical Specialties
- Musculoskeletal Rotation
- Obstetrics/Gynecology
- Pediatrics
- Psychiatry

The Major Clinical Clerkships for students Beginning Clerkship in August 2014 or later are:

- Family Medicine
- Internal Medicine
- Surgery (Surgical Specialties is a part of this rotation.)
- Obstetrics/Gynecology
- Pediatrics
- Psychiatry
- Anaesthesia
- Emergency Medicine

#### Method of Assessment:

The assessment of the students during the clinical clerkship rotations may be assessed by review of clinical performance, written examinations, and projects.

#### Clinical Performance:

The objectives of the Clerkship Program are consistent with the Undergraduate Medical Education Objectives found online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/ugme\\_mission\\_objectives.html](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/ugme_mission_objectives.html)).

The Midpoint In-Training Report (MITER) is a formative assessment in rotations of four weeks or longer. The student uses this report to complete a self-assessment which is then discussed with the student's preceptor. If a student's early performance is likely to lead to a failure, the Clerkship Director must advise the student of an impending failure by the midway point of the rotation. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will collect preceptor assessments throughout the rotation. The Clerkship Director, or designate, will use all assessments to make a final decision on the student's performance at the end of the rotation in that department. A Final In-Training Evaluation Report (FITER) of each student's achievement of these objectives will be completed for each rotation.

All results will be submitted to the undergraduate committee of the department, who, for a failure, will review all the assessments and preceptors' pass/fail assessments and determine the overall pass/fail standing for the student during the rotation in question.

The pass/fail recommendation, with the FITER and any supporting evidence for that decision, will be submitted by the departmental representative to the CSEC. The pass/fail decision will be reviewed and affirmed if there is a majority vote of the members of CSEC present at the first meeting of the CSEC following the completed rotation. In the case of a tie, the chair of CSEC will have the deciding vote, otherwise he or she will not vote.

On occasions, Progress Committee may deem it necessary to forward feed student summative assessment information to subsequent Clerkship Directors, or designates. In such instances, the student will be informed and the process will follow that outlined in the Forward Feeding Policy and Procedures found online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/media/Forward\\_Feeding\\_Policy\\_and\\_Procedures\\_Edit\\_Check.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/media/Forward_Feeding_Policy_and_Procedures_Edit_Check.pdf))

Clerkship Written Examinations:

Students will take the National Board of Medical Examiners (NBME) subject examinations at the end of the following clerkship periods: obstetrics/gynaecology, paediatrics, family medicine and psychiatry. For internal medicine, the NBME examination will take place after the internal medicine/emergency medicine block. For surgery, the NBME examination will take place after the surgery/anesthesia block. For students beginning their clerkship in August 2020 or later, the passing standard for the NBME examinations will be set by the CSEC on an annual basis, based on an Equated Percent Score as recommended by the NBME. Students failing a NBME examination will re-sit this examination as outlined in the Supplemental Examination Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Supplemental\\_Assessments\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Supplemental_Assessments_Policy_May_2020.pdf)).

The Major Clinical Clerkships:

As an alternative to the tradition block rotation described above, students will have the opportunity to apply for the Brandon Longitudinal Integrated Clerkship (LInC). This clerkship will cover the same clinical presentations and academic material of the traditional block rotation. Moreover, the program will be delivered in a longitudinal fashion with students getting exposure to the major clinical areas multiple times throughout the year. In the family medicine portion of the clerkship students will be exposed to the same preceptors over the course of the entire year for approximately one day a week including small communities around Brandon.

Evaluation and examinations will be the same as the traditional block rotation. The primary benefits of this form of clerkship are to allow students to develop relationships with preceptors, and to provide an exposure to medicine in a rural setting. Opportunities to get more one on one and hands on experience will be enhanced in this environment.

### **The Comprehensive Clinical Examination (CCE)**

The goal of the Comprehensive Clinical Examination (CCE) is to objectively assess student clinical competence in generic skills of data collection, interpersonal relationships, along with the content of the case for diagnosis, investigation, and management of common clinical problems. This examination frequently uses standardized patients to test these clinical skills. The CCE committee is a sub-committee of the CSEC and is chaired by the CCE coordinator. The CCE is marked to a standard predetermined by the CCE committee and the results of the examination are submitted to the CSEC.

### **The Minor Clinical Clerkships**

The Minor Clinical Clerkships for Students beginning Clerkship in August 2013 are:

- Emergency Medicine
- Anesthesia
- Public Health
- Electives

The Minor Clinical Clerkships for Students beginning Clerkship in August 2014 are:

- Internal Medicine Selective
- Musculoskeletal Rotation
- Public Health
- Electives

The Minor Clinical Clerkships for Students beginning Clerkship in August 2015 or later are:

- Internal Medicine Selective
- Musculoskeletal Rotation
- Any of the assessments integral to the Population Health Course or Professionalism Course (if applicable)
- Public Health
- Evidence-Based Medicine Practice Course
- Electives
- Transition to Residency Selectives

Method of Assessment:

The assessment of the students during the clinical clerkship rotations may be assessed by review of clinical performance, written examinations, and projects..

Clinical Performance:

The objectives of the Clerkship Program are consistent with the Undergraduate Medical Education Objectives found online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/ugme\\_mission\\_objectives.html](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/ugme_mission_objectives.html)).

The Midpoint In-Training Report (MITER) is a formative assessment in rotations of four weeks or longer. The student uses this report to complete a self-assessment which is then discussed with the student's preceptor. If a student's early performance is likely to lead to a failure, the Clerkship Director must advise the student of an impending failure by the midway point of the rotation. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will collect preceptor assessments throughout the rotation. The Clerkship Director, or designate, will use all assessments to make a final decision on the student's performance at the end of the rotation in that department. A Final In-Training Evaluation Report (FITER) of each student's achievement of these objectives will be completed for each rotation.

All results will be submitted to the undergraduate committee of the department, who, for a failure, will review all the assessments and preceptors' pass/fail assessments and determine the overall pass/fail standing for the student during the rotation in question.

The pass/fail recommendation, with the FITER and any supporting evidence for that decision, will be submitted by the departmental representa-

tive to the CSEC. The pass/fail decision will be reviewed and affirmed if there is a majority vote of the members of CSEC present at the first meeting of the CSEC following the completed rotation. In the case of a tie, the chair of CSEC will have the deciding vote, otherwise he or she will not vote.

On occasions, Progress Committee may deem it necessary to forward feed student summative assessment information to subsequent Clerkship Directors, or designates. In such instances, the student will be informed and the process will follow that outlined in the Forward Feeding Policy and Procedures found online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/media/Forward\\_Feeding\\_Policy\\_and\\_Procedures\\_Edit\\_Check.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/media/Forward_Feeding_Policy_and_Procedures_Edit_Check.pdf))

### **The Transition to Residency (TTR)**

The goal of the Transition to Residency (TTR) is to prepare students for residency programs. Students will be assessed for performance on TTR selectives and in the Evidence-Based Medicine Practice Course. Attendance is mandatory for TTR.

Method of Assessment:

Students failing to attend mandatory sessions will be reported to the Associate Dean UGME, who will inform the CSEC. Each student will receive a warning from the Associate Dean's office. If this warning is ignored the student's attendance record and performance will be considered by the CSEC and the student may be failed for the sessions missed. A suitable remedial period may be provided if determined appropriate by the College. If the student does not perform satisfactorily in the remedial period the TTR will be failed.

The TTR selectives and Evidence-Based Medicine Practice Course will be assessed by FITER.

The student must be informed of a recommendation for failure within seven working days of the end of the session. The pass/fail decision will be given by the departmental representative to the CSEC. In the case of a failing evaluation the reasons for failure must be documented and submitted to the CSEC.

### **Remediation During Clerkship**

A student who has received a failing FITER on a clinical rotation, shall be required to meet with the Director, Remediation for a remediation assessment. Remediation during the clerkship is typically scheduled during electives or other time as determined suitable by the College. The Director, Remediation in consultation with the Clerkship Director, or designate will coordinate this remediation which will include further clinical experience. The policy and procedures governing remediation may be found online ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Remediation\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Remediation_Policy_May_2020.pdf)).

Clerkship Clinical Performance Remediation:

The CSEC will provide the student who has failed a clinical rotation an appropriate remedial period with the department in which the rotation was failed. The rotation will be an equivalent educational experience to the clerkship failed, and its goal will be to assist the student to reach the expected standard of clinical competence. A similar process of assessment will be used. The remedial rotation will usually be taken during an elective period.

Remediation for NBME Examination Failures:

Students failing any two NBME examinations (in the same subject or different subjects) will be required to meet with the Director, Remediation for a remediation assessment. Where a student has failed two successive NBME examinations in the same subject, the student will be required to complete a remedial period of training from the relevant rotation. The Director, Remediation in conjunction with the Clerkship Director, or designate, will coordinate the remediation; further clinical experience may be needed to meet that purpose. Such a remedial period will be a maximum of four weeks and will usually be taken in an elective period, and followed by a third attempt at the National Board examination.

Remediation for Failure in the CCE:

The CSEC will devise an appropriate remedial period which will take into account the areas of weakness demonstrated by the CCE and will usually be taken during elective time. This remediation will be evaluated by a clinical assessment and may include an oral and/or written exam.

### **Failure of a Student in the Clerkship Program**

The Clerkship Program is a continuum held over Year 3 and Year 4. A failure of the Clerkship Program is considered to be a failure of one year, please refer to Academic Regulations. (p. 611)

Failure of the Clerkship:

The student will be determined to have failed the Clerkship Program if:

#### **1. Failure of Clinical Assessments**

The student has received failing evaluations in one or more of the following:

- a. Two major clerkships in different disciplines

**or**

- b. One major clerkship and:
  - i. its remedial, or
  - ii. a TTC remedial, or
  - iii. a remedial of a minor clerkship

**or**

- c. Remedials in two of the following:
  - i. A minor clerkship
  - ii. TTC

#### **2. Failure of Examinations**

The student has failures in one or more of the following:

- a. A single NBME subject examination three times

**or**

- b. A total of five NBME examinations

**or**

- c. The CCE after remediation

#### **3. Remediation Related Failures**

If the remediation period recommended for a student, for whatever cause, requires more than ten weeks, then the student will be deemed to have failed the Clerkship Program.

Complete information related to promotion and failure in any year of the Undergraduate Medical Education program can be found in the Undergraduate Medical Education Promotion and Failure Policy and Procedures ([https://umanitoba.ca/faculties/health\\_sciences/medicine/media/Promotion\\_and\\_Failure\\_Policy\\_Edit\\_Check.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/media/Promotion_and_Failure_Policy_Edit_Check.pdf))

### **Terms for the Repeat Clerkship**

A student who fails the Clerkship Program, be it because of failure of clinical assessments, failure of examinations, or failure of remediation (as above), immediately ceases in the program, and will be required to repeat

the Clerkship Program. The Repeat Clerkship will consist of the following, at a minimum: Six-week rotations in each of Internal Medicine, Surgery, Paediatrics, Family Medicine, Psychiatry, and Obstetrics/Gynaecology, plus up to fourteen weeks of electives. The number of elective weeks may be reduced (from fourteen) by the number of weeks of electives already successfully completed. A student in the Repeat Clerkship will also be required to complete the ACLS course (if not already passed) (0.5 weeks), the LMCC refresher course (if not already passed) (4.5 weeks). The student will be granted 3 weeks for CaRMs interviews and two weeks for vacation. Furthermore, if the failure occurred prior to the completion of the Medicine Selective, Musculoskeletal Rotation, Emergency Medicine Rotation, Anesthesia Rotation, Population Health course, Professionalism Course, TTR selectives, Evidence-Based Medicine Practice Course, then these will be required components of the Repeat Clerkship as well. The student must satisfactorily meet all clinical assessments, examinations, the CCE, as well as remedial rotations (as appropriate), regardless of whether they had been passed previously. The terms of the Repeat Clerkship will be submitted to the Progress Committee for review and final approval.

#### Terms for Failure of the Repeat Clerkship

The terms for failure of the Repeat Clerkship are the same as listed above in "Failure of a Student in the Clerkship Program (p. 618)." A student who has failed the Repeat Clerkship will be required to withdraw from the Max Rady College of Medicine program.

#### Regulations for Students Taking Leave from the Clerkship Program

Students may, for health or personal reasons, withdraw from clinical rotations or take temporary leave. For planned leave, prior permission must be obtained from the Associate Dean, UGME and/or Associate Dean, Student Affairs or designate. For leaves due to sudden or unexpected circumstances, the Associate Dean, UGME, the Director, Clerkship, and the Clerkship Director or designate of the rotation must be informed. Written documentation of the reason for leave will be required by the Associate Dean, UGME. The information is confidential to the Associate Dean, UGME and Associate Dean, Student Affairs or designate. Further information please refer to the Leaves of Absence (LOA) Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Leaves\\_of\\_Absence\\_Policy\\_10.24.18.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Leaves_of_Absence_Policy_10.24.18.pdf)).

Students who require an extended leave from the Clerkship Program may have a delayed graduation.

If a student misses more than 25% of a rotation, the student will not receive credit for the rotation regardless of the reason. The student will be required to repeat the entire rotation.

Brief periods of leave may be taken upon notification and approval by the Director, Clerkship. For complete details on attendance during clerkship please refer to the Student Attendance Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Policy\\_Clerkship\\_Attendance\\_Sept\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Policy_Clerkship_Attendance_Sept_2020.pdf)).

Generally, the Clerkship program is completed in 79 weeks, excluding CaRMS interview time and holiday time. When, due to leaves of absence, a student will take more than 79 weeks, including elective periods, to complete the Clerkship Program the Clerkship Student Evaluation Committee will review the student's record (clinical assessments and examinations) during the Clerkship Program to ensure that the time lost has not compromised the overall achievement of the student.

#### Reappraisal and Appeal of Failed Rotations and Examinations

A student who has received a failing grade in any course or on any FITER may be permitted to request a reappraisal

of the assessment in accordance with the Reappraisal of Student Assessment Policy ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/Reappraisal\\_of\\_Student\\_Assessments\\_Policy\\_May\\_2020.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Reappraisal_of_Student_Assessments_Policy_May_2020.pdf)).

If the student is not accepting of the decision reached by a Reappraisal Committee as outlined in the above stated policy, the student can appeal the decision to the Undergraduate Student Appeals Committee ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/undergraduate/media/UGME\\_Student\\_Appeals\\_Final\\_Aug\\_2018.pdf](https://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/UGME_Student_Appeals_Final_Aug_2018.pdf)).

A student can appeal a decision of the Undergraduate Student Appeals Committee to the Max Rady College of Medicine Student Appeals Committee and a student appeal of the Max Rady College of Medicine Student Appeals Committee can be brought to the Senate Committee on Student Appeals.

The Max Rady College of Medicine will not accept requests for reappraisal of external examinations. The National Board of Medical Examiners (NBME) provides a Score Recheck Service, details of which are posted on the NBME website (<https://www.nbme.org/>). Students are responsible for the cost of a Score Recheck that may be requested on their behalf by the Max Rady College of Medicine.

## Academic Research in Medical Education

### Intro Medicine

Part of the educational responsibility of the Max Rady College of Medicine is to perform research on innovations and effectiveness in medical education. Whenever students are the research subjects, all such research must have approval from the Max Rady College of Medicine Research Ethics Board. Where students are studied individually their participation will be voluntary. Research findings will not identify individuals.

## Bachelor of Science in Medicine (B.Sc. (Med.)) Program

### General Information

The Bachelor of Science in Medicine program is offered over two summer terms; following the first and second year of the undergraduate program in Medicine. The B.Sc. (Med) program is designed to provide the under-graduate medical student with an opportunity to gain firsthand experience in medical research. A large variety of basic science, translational and clinical research projects are available for the student to choose from each year.

The program consists of three components with the option of clinical exposure:

- Research project
- Written report
- Dissertation

The program is open to undergraduate students in the Max Rady College of Medicine and, if approved by the B.Sc. (Med) Committee. The work for this degree may be carried out in any department of the Max Rady College of Medicine at the University of Manitoba. This full-time program may not be taken concurrently with the MED II Research program or any part of the medical curriculum nor combined with any other programs such as traveling scholarships. The BSc.(Med) Program is only open to students who are in good academic standing and the students must

be enrolled in the Max Rady College of Medicine at the University of Manitoba.

To enroll in the B.Sc.(Med) program the student must find a supervisor in any field within the Max Rady College of Medicine. Every September the Program Coordinator posts a list of abstracts with the supervisor's contact information listed. The abstracts provide a snap shot of the research project and also briefly outline what the BSc(Med) student will be doing within the project. Students are welcome to select an abstract from the posted list and contact the supervisor individually or they can seek out a supervisor that is not listed on the posted abstract list. The main requirement for the supervisor is that they must hold a minimum appointment of Assistant Professor within the Max Rady College of Medicine. Together, the student and supervisor submit an application which includes an abstract and project proposal to the B.Sc. (Med) Committee. If the project proposal is accepted by the committee, students are accepted into the B.Sc. (Med) Program and can then be registered with the university for the B.Sc.(Med) summer sessions. All accepted projects require both a primary supervisor from the Max Rady College of Medicine and a Co-supervisor from any faculty or school at the University of Manitoba. Primary and Co-supervisors must hold a minimum appointment within their academic setting of Assistant Professor. All accepted projects must receive the applicable institutional ethics, biosafety or other approvals prior to commencement of the term. As well, any projects focusing on topics pertaining to indigenous peoples, must be submitted with approval from the appropriate regulatory bodies, such as First Nations and Inuit Branch, etc.

All students are required to present their research findings in both a written report and oral presentation at the conclusion of their second summer. Students are encouraged to produce an interim report due in the second year of their undergraduate training. Students will be evaluated by their Supervisor after the first summer and by the B.Sc.(Med) committee following the completion of the requirements for the B.Sc.(Med) degree. Students will be required to withdraw from the program if they make unsatisfactory progress after the first summer of research.

The B.Sc.(Med) degree will be conferred at the same time as the M.D. degree unless the student, having satisfactorily completed the requirements for the B.Sc.(Med) degree, discontinues the study of Medicine at the University of Manitoba or other approved institution. In this case, the B.Sc. (Med) degree will not be conferred. Students may defer their final dissertation upon approval by the B.Sc.(Med) Director.

The program is on a Pass/Fail basis. Withdrawal from the program (without permission from the Director) outside of the normal voluntary withdrawal time frame will be considered a fail. Authorization for withdrawal while enrolled in the program is through written application to the Director. Withdrawal without permission will result in a Fail grade.

## Program Fees

The program fees will be additional to the Max Rady College of Medicine tuition fees. Program fees change annually.

## Program Terms

The program runs for 2 summer terms. Each term is generally between 12 and 13 weeks (subject to Max Rady College of Medicine schedule). Students are entitled to a 2 week paid vacation during each term (to be scheduled with project supervisor).

## Stipendiary Support

Students receive stipendiary support for each term. Presently support is in the amount of \$7500.00 per term.

## Optional Clinical Exposure

If chosen, students are entitled to a minimum of 48 hours of in-clinic exposure over the two summers of the BSc (Med) Program.

## MD/PhD Program

### Purpose

The MD/PhD Program in the Max Rady College of Medicine is designed to produce academic clinician scientists who are interested in a career that combines both research and clinical medicine, providing them advanced clinical, academic and research skills.

### Duration

The minimum program of study is the total required by the Max Rady College of Medicine for the MD program (4 years) plus the minimum requirements of the Faculty of Graduate Studies (normally two years beyond the level of the Master's degree, or three years beyond the level of a Bachelor's degree; see Faculty of Graduate Studies Academic Guide (p. 1339)). Typically, students undertake a 3-6 year research training interval to successfully complete doctoral training. Most students complete training in 4-5 years. Students who obtained advanced/graduate training prior to admission may be granted advanced standing. Students will be considered to be full-time graduate students throughout the entire period. They then return to third year Medicine to begin Clerkship full time.

### Eligibility

Medical Students are eligible to apply upon initial admission to Medicine and at any time during the first two years of the MD program. Eligibility criteria should be reviewed on the Advanced Degree website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/research/grad\\_undergrad/6696.html](https://umanitoba.ca/faculties/health_sciences/medicine/research/grad_undergrad/6696.html)).

### Application Process

Potential applicants should carefully review full details on the application process posted on the program website. Students wishing to apply should contact the Director of the Program early in the process. Acceptance will minimally require: 1) identification of a supervisor (within a department at the University of Manitoba which has an approved PhD program) who has adequate resources for the research expenses necessary for proposed program of study and whose department recommends acceptance, 2) submission of application dossier to the Program Admissions and Advisory Committee (PAAC) and their recommendation for acceptance and 3) acceptance by the Faculty of Graduate Studies.

### Program Fees

The total tuition fees payable are the sum of the fees required for the MD and PhD programs of study. Continuing fees (Faculty of Graduate Studies) are also applicable. MD/PhD trainees that remain in good standing receive renewable stipend funding of \$25,000 per annum for up to 6 years, or until successful defense and submission of their approved final PhD thesis. The stipend is terminated once the student has successfully defended their thesis and submitted the final corrected version to the Faculty of Graduate Studies. The 6 years of support is NOT



lengthened by any years of support the student receives external to the program.

### Administration

After initial assessment of the complete application dossier by the Advanced Degrees in Medicine Program Director, the program advisory and admission committee (PAAC), chaired by the Program Director, reviews all eligible applications and makes a recommendation to the host research department. The Program will:

1. review whether adequate resources are available for delivery of the program,
2. be a liaison with the trainee's host research department, the Max Rady College of Medicine, and Faculty of Graduate Studies, and
3. monitor student progress.

Please note, the graduate student activities of applicants accepted into the program are governed by the FGS regulations and/or supplemental regulations approved by the host research department.

### Coursework

The minimum course requirements of the Faculty of Graduate Studies, as defined by individuals host research department supplementary regulations, are applicable in addition to the normal curriculum of undergraduate medical studies.

### Research/Thesis Requirements

The student is required to dedicate their full time to the graduate program to make timely and effective progress towards meeting degree requirements (research and academic) for successful completion. The quality and quantity of research supporting the thesis shall be consistent with that required for all other doctoral candidates in the field. A completed thesis submitted to the students PhD examining committee is required prior to returning to third year Medicine to begin Clerkship full time.

### Additional Program Elements: Seminar Series and Research Progress Evaluations

Expectations for both the student and advisor are outlined in the Advisor Student Guidelines- Thesis/Practicum Programs, which must be reviewed and signed prior to any research. Students are required to regularly attend the designated research seminar series or journal clubs organized by the host research department. Students are also encouraged to seek out professional development opportunities offered by the host research department or University encompassing topics including effective writing, teaching training, and academic integrity. Students will be assessed a minimum of once per academic year, as per FGS guidelines. Students are required to prepare semi-annual updates for distribution to their advisory committee and the program director. Starting in the second year of the PhD training, trainees are eligible to receive up to \$1000 funding per year towards attending and presenting their research at national or international conferences.

### Conferment of the Dual Degrees of MD/PhD

Normally the graduate degree is conferred on the next available date after successful defense of the thesis and submission of the final approved thesis. For simultaneous conferral of both the MD and graduate degree, an application for notification of delayed convocation must be made to and approved by the Faculty of Graduate Studies.

## MD/MSc Program

### Purpose

The combined-degree MD/MSc Program in the Max Rady College of Medicine is designed to begin development of academic clinician scientists by providing them advanced clinical, academic and research skills.

### Duration

The minimum program of study is the total required by the Max Rady College of Medicine for the MD program (4 years) plus the minimum requirements of the Faculty of Graduate Studies (the minimum time is equivalent to two academic terms; see FGS Academic Guide (p. 1339). Completion of most programs requires more than this and students should review the host research department's supplemental regulations regarding specific requirements. Students who obtained advanced/graduate training prior to admission may be granted advanced standing. Students will be considered to be full-time graduate students (see (Faculty of Graduate Studies guidelines pertaining to Full-Time Status) throughout the entire period. Typically, following completion of Med II, students undertake at least a 2 year interval away from MD training to undertake and complete MSc training. They may also transfer to the MD/PhD Program. They then return to third year Medicine to begin Clerkship.

### Eligibility

Medical Students are eligible to apply upon initial admission to Medicine and at any time during the first two years of the MD program. Eligibility criteria should be reviewed on the Advanced Degree website ([http://umanitoba.ca/faculties/medicine/research/grad\\_undergrad/6696.html](http://umanitoba.ca/faculties/medicine/research/grad_undergrad/6696.html)).

### Application Process

Potential applicants should carefully review full details on the application process posted on the program website. Students wishing to apply should contact the Director of the Program early in the process. Acceptance will minimally require:

1. identification of a supervisor (within a department at the University of Manitoba which has an approved MSc program) who has adequate resources for the research expenses necessary for proposed program of study and whose department recommends acceptance,
2. submission of application dossier to the Program Admissions and Advisory Committee (PAAC) and their recommendation for acceptance, and
3. acceptance by the Faculty of Graduate Studies. The MD MSc program provides the Student Stipend and limited Conference travel expenses for approved applicants.

### Program Fees

The total tuition fees payable are the sum of the fees required for the MD and MSc programs of study. Continuing fees (Faculty of Graduate Studies) are also applicable. MD/MSc trainees that remain in good standing receive renewable stipend funding of \$21,000 per annum for time spent actively engaged in full-time research (approximately 2-2.5 years). Trainees are also eligible to obtain up to \$1000 research allowance per year (for up to 2 years) to support: laboratory consumables, applicable software, journal fees, or conference related travel expenses and presentation expenses.

### Administration

After initial assessment of the complete application dossier by the Advanced Degrees in Medicine Program Director, the program advisory

and admission committee (PAAC), chaired by the Program Director, reviews all eligible applications and makes a recommendation to the host research department. The Program will:

1. review whether adequate resources are available for delivery of the program,
2. be a liaison with the trainee's host research department, the Max Rady College of Medicine, and Faculty of Graduate Studies, and
3. monitor student progress.

Please note, the graduate student activities of applicants accepted into the program are governed by the FGS regulations and/or supplemental regulations approved by the host research department.

## **Coursework**

The minimum course requirements of the Faculty of Graduate Studies, as defined by individuals host research department supplementary regulations, are applicable.

## **Research/Thesis Requirements**

The student is required to dedicate their full time to the graduate program to make timely and effective progress towards meeting degree requirements (research and academic) for successful completion. The quality and quantity of research supporting the thesis shall be consistent with that required for all other MSc candidates in the field. A completed thesis submitted to the students MSc examining committee is required prior to returning to third year Medicine to begin Clerkship full time.

## **Additional Program Elements: Seminar Series and Research Progress Evaluations**

Expectations for both the student and advisor are outlines in the Advisor Student Guidelines- Thesis/Practicum Programs, which must be reviewed and signed prior to any research. Students are required to regularly attend the designated research seminar series or journal clubs organized by the host research department. Students are also encouraged to seek out professional development opportunities offered by the host research department or University encompassing topics including effective writing, teaching training, and academic integrity. Students will be assessed a minimum of once per academic year, as per FGS guidelines. Students are required to prepare semi-annual updates for distribution to their advisory committee and the program director.

## **Conferment of the Dual Degrees of MD/MSc**

Normally the graduate degree is conferred on the next available date after successful defense of the thesis and submission of the final approved MSc thesis. For simultaneous conferral of both the MD and graduate degree, an application for notification of delayed convocation must be made to and approved by the Faculty of Graduate Studies.

# Post-Baccalaureate Diploma in Medical Physiology and Pathophysiology

**Dean:** Dr. Peter Nickerson

**Department Head:** Peter Cattini

**Program Director:** Brent Fedirchuk

**Administrative Support:** Pei San Lew

**General Office:** 432 Basic Medical Sciences Building, RFHS, MRCoM

**Telephone:** 204 789 3696

## Introduction

The Post-baccalaureate Diploma in Medical Physiology and Pathophysiology is a one year, stand-alone program based in the Department of Physiology and Pathophysiology in the Max Rady College of Medicine, Rady Faculty of Health Sciences. To be eligible for this program, students must have completed a three or four year Bachelor's degree with an appropriate combination of required courses.

This program has a course-based curriculum with a total of 27 credit hours of 5000 level courses. These courses provide students with foundational knowledge of Medical Physiology and Pathophysiology at the cellular level, in addition to considering each of the respiratory, cardiovascular, endocrine and nervous systems in a 'system-based' context. In addition, a course dedicated to laboratory physiology and pathophysiology provides opportunity for experience in a biomedical or health-related science research laboratory.

In order to qualify for a Post-baccalaureate Diploma in Medical Physiology and Pathophysiology, students must complete the required 27 credit hours at the 5000 level with a minimum degree grade point average of 3.0 with no grade below B in all courses.

Course	Title	Hours
<b>Year 1</b>		
PHGY 5002	Respiratory Physiology and Pathophysiology	3
PHGY 5004	Cardiovascular Physiology and Pathophysiology	3
PHGY 5006	Endocrine Physiology and Pathophysiology	3
PHGY 5008	Neurophysiology and Pathophysiology	3
PHGY 5010	Cell Physiology and Pathophysiology	3
PHGY 5012	Laboratory Physiology and Pathophysiology <sup>1</sup>	12
<b>Hours</b>		<b>27</b>
<b>Total Hours</b>		<b>27</b>

<sup>1</sup> Staff within the Department of Physiology & Pathophysiology Office will identify potential research projects for PHGY 5012, and provide the student with a written description of the project as well as expected experience(s) or outcomes, as well as the location and instructor contact information. Staff will also be prepared to arrange the first student and instructor(s) meeting.

# Post-Baccalaureate Diploma in Medical Physiology and Pathophysiology Academic Regulations

## Admission Requirements

All applicants to the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program must have attained a minimum GPA of 3.5 or higher based on the last 60 credit hours of university degree level courses. Applicants must have a three or four-year bachelor's degree completed from a university recognized by the University of Manitoba.

Applicants must have completed either:

Course	Title	Hours
6 credit hours in Biology, Microbiology, Botany, Ecology, Genetics, and/or Zoology		6
and		
3 credit hours in Chemistry and 3 credit hours in Physics		6
or		
6 credit hours in Animal or Human Physiology		6

Applicants who meet the minimum requirements for admission to the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program at the University of Manitoba are not guaranteed admission.

## Required Documents

Applicants must submit all documentation required for application in English to undergraduate admissions at the University of Manitoba. Final official transcripts from any university or college attended other than the University of Manitoba are required. Copies or photocopies are not acceptable. Transcripts become the property of the University of Manitoba and will not be returned.

## English Language Proficiency Requirements

All applicants whose primary language is not English and do not qualify for a waiver under the University of Manitoba's English language proficiency regulations will be required to demonstrate proficiency in English through one of the options listed at the University of Manitoba Admissions - International web site (<https://umanitoba.ca/admissions/undergraduate/requirements/english-language-proficiency/>).

## Application Deadline

Term	Start Date	Canadian/US	International
Fall Term	September	April 1	April 1

## Selection Process

The minimum 27 credit hour course-based program is offered annually starting in September. There is no minimum requirement for the number of students registered. However, the number of students admitted will be dependent on the number of available research projects and associated instructors in the Fall and Winter terms for PHGY 5012 (<https://catalog.umanitoba.ca/search/?P=PHGY%205012>) Laboratory Physiology and Pathophysiology, and whether an accommodation, if requested and required by a student, can be reasonably met in a given laboratory setting. As such, the program coordinator will normally liaise with the Admissions Office with regard to the number of research projects and specifically the resulting student spaces available in the Post-baccalaureate Diploma program. Research projects and instructors for PHGY 5012 (<https://catalog.umanitoba.ca/search/?P=PHGY%205012>) may come from outside the Department of Physiology &

Pathophysiology; specifically, other departmental or affiliated units of the University of Manitoba. This would require appropriate unit and course coordinator approvals. In the event that applicants outnumber available positions for entry into the program, decision for entry will be made based on highest GPA on the last 60 credit hours of university degree level courses, by increasing the number of significant figures used in the calculation. Where a tie still exists, the application that was received first will be used to break the tie. All completed applications are time stamped upon submission; in the case of a paper application, these applications will be time stamped after they have been entered into the system by a University of Manitoba Admissions Office staff member.

### Notification of Decision

Applicants will be notified by e-mail, asking them to log into their application portal to view the decision. Students that are offered admission will be required to confirm their acceptance. If the applicant does not accept the offer by the deadline date indicated in the letter, their offer will lapse and the applicant will need to contact the Admissions Office to discuss the possibility of an extension. It is the applicant's responsibility to ensure that their e-mail account is active, and will accept messages from the University of Manitoba, and is checked in their absence. Acceptance to the Post-baccalaureate Diploma program is valid only for the term for which it is issued. If the applicant does not register for courses in this term and subsequently wishes to register for courses in a later term, they must reapply and be readmitted.

## Academic Regulations

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/>)) will not affect registration for the 2022-23 Academic Year.**

The provisions of the General Academic Regulations (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/>), and the University Policies and Procedures (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/>), apply to all students. In addition, the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program has regulations and requirements, published below, that apply specifically to its students.

### Course Availability

Courses and Transfer Credit

Students are expected to complete all courses required with registration in the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program.

### Examinations and Scholastic Standards

#### Deferred Examinations

A student may request a deferred examination in PHGY 5002 (<https://catalog.umanitoba.ca/search/?P=PHGY%205002>), PHGY 5004 (<https://catalog.umanitoba.ca/search/?P=PHGY%205004>), PHGY 5006 (<https://catalog.umanitoba.ca/search/?P=PHGY%205006>), PHGY 5008 (<https://catalog.umanitoba.ca/search/?P=PHGY%205008>) or PHGY 5010 (<https://catalog.umanitoba.ca/search/?P=PHGY%205010>) on the grounds listed in the University's Deferred Examination policy (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/final-examinations-grades-policy/>) which are:

- participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event;
- religious obligations; or
- a medical condition.

Students requesting a deferred examination due to a known condition as listed above must file an application normally twenty (20) working days prior to the day of the scheduled examination with the Department.

Applications for a deferred examination after the examination has been missed will also be considered for medical or compassionate reasons, but must be filed within two working days of the date of the missed examination to the course instructor and Department Office staff. A medical certificate or other appropriate documentation may be required.

For PHGY 5012 (<https://catalog.umanitoba.ca/search/?P=PHGY%205012>), the student is normally required to complete two research projects, one in each of the Fall and Winter terms. Completion of at least one research project is required and a literature review project is available as an option in the event a second research project is not available. Thus, a student may defer a "research project" in the Fall term but will be required to complete a research project in the Winter term, and must apply for a deferred examination as described above. If a student has completed a research project in the Fall term, and applies and is approved for a deferred examination in the Winter term, this will take the form of a literature review project. In addition, a student can make a request to the course coordinator for an "incomplete" in PHGY 5012 (<https://catalog.umanitoba.ca/search/?P=PHGY%205012>) and if approved could be provided with additional time to complete the course.

All deferred examinations for PHGY 5002 (<https://catalog.umanitoba.ca/search/?P=PHGY%205002>), PHGY 5004 (<https://catalog.umanitoba.ca/search/?P=PHGY%205004>), PHGY 5006 (<https://catalog.umanitoba.ca/search/?P=PHGY%205006>), PHGY 5008 (<https://catalog.umanitoba.ca/search/?P=PHGY%205008>), PHGY 5010 (<https://catalog.umanitoba.ca/search/?P=PHGY%205010>) and PHGY 5012 (<https://catalog.umanitoba.ca/search/?P=PHGY%205012>) are normally scheduled to take place within 30 working days from the end of the final PHGY 5008 (<https://catalog.umanitoba.ca/search/?P=PHGY%205008>) Neurophysiology and Pathophysiology examination. The date of the deferred examination for a particular course(s) will be set by the program coordinator no later than May 15 and in consultation with the course instructor(s). The deferred examination for PHGY 5012 (<https://catalog.umanitoba.ca/search/?P=PHGY%205012>) will normally be a literature review project.

### Continuation in the Post-Baccalaureate Diploma Program

A student must complete all required courses with no grade below a B. Students that fail to maintain this standing will be required to withdraw. However, the Department will allow one supplemental examination in each of PHGY 5002 (<https://catalog.umanitoba.ca/search/?P=PHGY%205002>), PHGY 5004 (<https://catalog.umanitoba.ca/search/?P=PHGY%205004>), PHGY 5006 (<https://catalog.umanitoba.ca/search/?P=PHGY%205006>), PHGY 5008 (<https://catalog.umanitoba.ca/search/?P=PHGY%205008>) and PHGY 5010 (<https://catalog.umanitoba.ca/search/?P=PHGY%205010>) to improve a failing grade. Passing the supplemental examination will result in replacement of the previous course attempt by a B grade on the student's record. A supplemental examination option is available for PHGY 5012 (<https://catalog.umanitoba.ca/search/?P=PHGY%205012>) in the form of a literature review project but only applies if at least one research project (of two required projects) is successfully completed with a B grade. In the event that the supplemental examination is not successfully passed for PHGY 5002 (<https://catalog.umanitoba.ca/search/?P=PHGY%205002>), PHGY 5004 (<https://catalog.umanitoba.ca/search/?P=PHGY%205004>), PHGY 5006 (<https://catalog.umanitoba.ca/search/?P=PHGY%205006>), PHGY 5008 (<https://catalog.umanitoba.ca/search/?P=PHGY%205008>), or PHGY 5010 (<https://catalog.umanitoba.ca/search/?P=PHGY%205010>), the course

must be repeated again in the next term the course is offered. The grade obtained will replace the grade of the previous course attempt in the Degree Grade Point Average. This option only applies to PHGY 5012 (<https://catalog.umanitoba.ca/search/?P=PHGY%205012>) if the requirement for at least one completed research project has been met.

### **Appeals**

Students who feel that they have received an unfair grade in a course should appeal to the instructor. If the matter is not thereby resolved or is related to academic matters other than grade appeals, it should be raised with the program coordinator and subsequently the Department's Undergraduate Program Committee. By default, the Undergraduate Program Committee is composed of members of the Department Executive Committee (that includes the four Heads of the major Divisions in the Department (or Department Head approved designate) and the Department Head).

### **Attendance**

This will be monitored by the course instructor(s). If absences exceed 10% of class or laboratory time without explanation then a warning may be given, and this will be reported to the program coordinator. If attendance continues to be unsatisfactory, the instructor has the authority to exclude the student from classes, laboratory and/or examinations. Such cases shall be reported to the program coordinator and the Undergraduate Program Committee at the first opportunity and within two working days. Students who are excluded from an examination for inadequate attendance will receive a failing grade.

### **Maximum Time to Completion**

Students are expected to complete all program requirements within one-year of entry. However, all requests for extensions must be made to the program coordinator, and must be made in writing by June 30th. Only one request for an extension will normally be considered and must be accompanied by a realistic timeline for completion, but with a maximum total extension period of one year. Requests for an extension will be reviewed by the program coordinator in consultation with instructors on a case by case basis.

### **Voluntary Withdrawal**

The date for voluntary withdrawal for the Fall and Winter terms can be found in the Academic Schedule (<https://catalog.umanitoba.ca/undergraduate-studies/academic-schedule/>), but is normally within the 2nd-3rd week of November and the 2nd-3rd week of March, respectively, for regular courses. For irregular courses, a formula for determining a withdrawal date can be found on the Registrar's Office website (<https://umanitoba.ca/registrar/important-dates-deadlines/>) It is the sole responsibility of the student to initiate a withdrawal, and no voluntary withdrawals are permitted after the deadlines for voluntary withdrawal without academic penalty.

### **Part-time Students**

The Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program is not available as an option for part-time students.

# Dr. Gerald Niznick College of Dentistry

## General Office

**Dean:** Dr. Anastasia Kelekis-Cholakis

**Campus Address/General Office:** D113 Dentistry Building, Bannatyne Campus

**Telephone:** (204) 789 3631

**Fax:** (204) 789 3912

**Email Address:** info\_dent@umanitoba.ca

**Website:** <http://umanitoba.ca/healthsciences/dentistry/>

**Academic Staff:** Please refer to the Faculty website at [umanitoba.ca/dentistry](http://umanitoba.ca/dentistry) (<http://umanitoba.ca/healthsciences/dentistry/>)

## The Profession of Dentistry

The Dr. Gerald Niznick College of Dentistry is dedicated to educating dental, dental hygiene and graduate students in a progressive learning environment, conducting research in oral health, and serving the community and the oral health professions as a source of knowledge and expertise. The college serves as a bridge between the fundamental scientific foundation of the profession and its translation into health care for the public. Dentists enhance and promote the total health of patients through oral health management. Dentists are concerned with promoting oral health and preventing and alleviating the effects of oral diseases and conditions in order to contribute to the well-being of their patients.

The curriculum is designed to ensure that students graduate as competent dentists prepared to meet the oral health care needs of their patients. It provides the knowledge of basic biomedical, behavioural and clinical sciences and biomaterials, the cognitive and behavioural skills, and the professional and ethical values necessary for practice as a dental professional.

Information on the Dental Hygiene program is in the chapter, School of Dental Hygiene (p. 637).

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Dental Medicine, D.M.D. (p. 634)	4	154	
Dental Medicine, D.M.D. International Dentists Degree Program (IDDP) (p. 635)	2 (plus 8 week summer orientation)	74	
Dentistry, B.Sc. Dent (p. 636)	2 summers (normally commencing after first year)		

## Faculty Academic Regulations

### Admission Requirements

#### Doctor of Dental Medicine

Minimum time to graduation: Six years (University 1, plus one year in the Faculty of Science or Arts or Extended Education; or 2 years in the Faculty of Science or Arts; plus four years in the Dr. Gerald Niznick College of Dentistry).

The following is a summary of the admission requirements. Equivalent academic courses completed at recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in an application bulletin that is available

## National Examining Body

Graduates of this college are required to sit a written examination and an objective structured clinical examination during the calendar year of their graduation, administered by the National Dental Examining Board of Canada (<https://ndeb-bned.ca/en/>). The NDEB certification granted to graduates who pass these examinations, entitles them to apply for a license to practice in all provinces of Canada. The provinces of Ontario and Quebec have additional requirements. For information contact:

The Registrar, National Dental Examining Board  
80 Elgin Street, 2nd Floor  
Ottawa, Ontario K1P 6R2  
Telephone (613) 236 5912  
E-mail: [director@ndeb.ca](mailto:director@ndeb.ca)

## Licensing Requirements

A graduate of the Dr. Gerald Niznick College of Dentistry, who has received NDEB certification, is entitled to apply to the Manitoba Dental Association (<https://www.manitobadentist.ca/>) to obtain a license to practice within the province of Manitoba. For information on licensing requirements and the application process please contact:

The Registrar, Manitoba Dental Association  
202 - 1735 Corydon Avenue  
Winnipeg, Manitoba R3N 0K4;

Telephone (204) 988 5300  
E-mail: [office@manitobadentist.ca](mailto:office@manitobadentist.ca)

## Other Licensing Bodies

For regulations governing licensure in other areas (e.g., other provinces, the United States), candidates are advised to write the licensing body in the province/state in which they are interested.

## Programs

from on the university's website (dentistry). ([https://umanitoba.ca/student/admissions/media/dentistry\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/dentistry_bulletin.pdf))

Minimum 60 credit hours of pre-Dentistry study including:

Course	Title	Hours
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	6
Select one of the following:		6
CHEM 1100 & CHEM 1110	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics and Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	

and		
CHEM 1120	Introduction to Chemistry Techniques	3
CHEM 2100 & CHEM 2110	Organic Chemistry 1: Foundations of Organic Chemistry and Organic Chemistry 2: Foundations of Organic Synthesis <sup>1</sup>	6
and		
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2700 & CHEM 2710	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy and Biochemistry 2: Catabolism, Synthesis, and Information Pathways <sup>1</sup>	6
and		
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
Select one of the following:		6
PHYS 1020 & PHYS 1030	General Physics 1 and General Physics 2	
PHYS 1050 & PHYS 1070	Physics 1: Mechanics and Physics 2: Waves and Modern Physics	
6 credit hours of English (taught through the English Department, usually with ENGL prefix)		6
6 credit hours of Humanities/Social Sciences, which must be in the non-applied sciences or non-pure sciences		6
The remaining 3 full year courses or 6 half year courses are your electives. We do not recommend specific courses.		18
<b>Total Hours</b>		<b>69</b>

<sup>1</sup> The former CHEM 1300 and CHEM 1310 in combination can be used in lieu of CHEM 1100 and CHEM 1110 and CHEM 1120. Students having completed only CHEM 1300 must complete CHEM 1110 and CHEM 1120 to fulfill the Introductory Chemistry requirement.

The former CHEM 2210 and CHEM 2220 in combination can be used in lieu of CHEM 2100 and CHEM 2110 and CHEM 2122. Students having completed only CHEM 2210 must complete CHEM 2110 and CHEM 2122 to fulfill the Organic Chemistry requirement.

The former CHEM 2360 and CHEM 2370 in combination can be used in lieu of CHEM 2700 and CHEM 2710 and CHEM 2720. Students having completed only CHEM 2360 must complete CHEM 2710 and CHEM 2720 to fulfill the Biochemistry requirement.

The designation of Humanities/Social Science courses can be found on the Faculty of Arts website

All science courses must include the laboratory component.

### Other Requirements

High school prerequisites: Chemistry 40S, Pre-Calculus Mathematics 40S or Applied Mathematics 40S, Physics 40S and Biology 40S.

The 6 credit hours of English satisfies the written English requirement; the mathematics requirement must be met in the first 60 credit hours even though it is not a specific admissions requirement (PHYS 1020(M) meets the mathematics "M" requirement).

The English Canadian Dental Aptitude Test (DAT)<sup>1</sup> must be written no later than November prior to the application deadline.

<sup>1</sup> Effective date June 30, 2021

A personal interview is required.

Admission is competitive.

Information on the admission process may be accessed through the Dr. Gerald Niznick College of Dentistry website (<https://umanitoba.ca/healthsciences/dentistry/>) or by visiting the Admission website (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>).

Selection criteria: Grades (AGPA), interview and DAT score equally weighted.

Students should be aware that if admitted they must provide an official Adult Criminal Record Check (including Vulnerable Persons Screening), an Adult Abuse Registry Check<sup>1</sup> and a Child Abuse Registry Check<sup>1</sup> as well as a signed acknowledgement of the *Essential Skills and Abilities for Admission, Promotion and Graduation in the DMD Program* document prior to registration. Please refer to College Academic Regulations. (p. 630)

<sup>1</sup> The College will provide further information on the application process (to be completed through the College).

### Bachelor of Science in Dentistry

In addition to the basic professional degree, the college offers the Bachelor of Science in Dentistry degree to interested **dental students** wishing to undertake research during their undergraduate program. The program is designed to assure that participation in it will not interfere with the student's dental degree. Through active participation in a research program, the students will be given the opportunity to develop skills in applying scientific knowledge to dental practice and an interest in dental research. In addition, the program will serve as a preparatory step for entry into various graduate programs. Information on admission to this program is available from the Dean's Office and through the Dr. Gerald Niznick College of Dentistry website. (<https://umanitoba.ca/healthsciences/dentistry/>)

### International Dentist Degree Program (IDDP)

The Dr. Gerald Niznick College of Dentistry, University of Manitoba, offers the International Dentist Degree Program (IDDP) to graduates of international dental programs that are not accredited by the Commission on Dental Accreditation of Canada. After a summer orientation program, students enter the 3rd year of the regular dental program of the College. Upon satisfactory completion of the 3rd and 4th years of the dental program, IDDP participants will be awarded the Doctor of Dental Medicine (DMD) degree. All graduates of DMD programs in Canada, once having passed the National Dental Examining Board of Canada (NDEB) examinations, are eligible for licensure/registration as a dentist in all provinces in Canada.

Requirement to the IDDP program can be found at the Dr. Gerald Niznick College of Dentistry website (<https://umanitoba.ca/explore/programs-of-study/international-dentist-degree-program-iddp/>).

Please note that there are two tracks which may be applied to.

Should you have specific questions that cannot be answered from the above website, please call the IDDP Coordinator at (204) 977-5611.

### College Academic Regulations

All students are asked to note that some academic policies and regulations are under review and are subject to change. Please check the Web Calendar at [umanitoba.ca](http://umanitoba.ca) for updated information.

**Limited Access (see University Policy and Procedures-Limited Access section 2.5)** (<https://catalog.umanitoba.ca/undergraduate-studies/>)

policies-procedures/repeated-course-policy/#Limited%20Access) **will not affect registration for the 2022-2023 (including Summer Term 2023).**

The provisions of the chapter, General Academic Regulations and Requirements (p. 118), and the chapter, University Policies (p. 37), apply to all students. In addition, the Dr. Gerald Niznick College of Dentistry has regulations and requirements, published below that apply specifically to its students.

The Dr. Gerald Niznick College of Dentistry expects all students to participate fully in their educational experience. This means participation above and beyond the requirements of individual courses. For example, as a part of their clinical experiences, all students must learn skills of a clinical nature, such as local anesthesia, rubber dam placement, etc. Our teaching approach includes having students practice these skills on each other. All students are expected to participate in these activities.

Further, the college has an expectation of all students that they are aware of and maintain attitudes and behaviours which exhibit a level of professionalism, empathy, and consideration of all members of their community, including faculty, staff, students or patients, similar to what is expected of an oral health practitioner.

The following policies have been adopted by the College to aid students in understanding the value the College places on these conducts/ behaviours.

### **Essential Skills and Abilities for Admission, Promotion and Graduation in the DMD Program**

As an accredited Canadian dental program, the Dr. Gerald Niznick College of Dentistry, Rady Faculty of Health Sciences at the University of Manitoba is responsible for providing a program of study that ensures graduates have the necessary qualifications (academic knowledge, clinical skills, and professional behaviors and attitudes) to enter the regulated profession of Dentistry in Canada. Becoming and being a dentist requires a wide range of highly specialized skills and abilities. Some of these are taught in dental school, while others must be brought by the individual as an innate set of essential skills and abilities. The criteria for becoming registered/ licensed as a dentist in Canada requires a level of motor skills and other attributes that are not necessary in other professional occupations. Similarly, the ability to provide reasonable accommodation for special learning needs in dentistry may not be the same as it is for other academic programs.

It is important to note that an offer of admission to the Dr. Gerald Niznick College of Dentistry is not evidence that the dental program has verified that an applicant has the prerequisite skills and abilities for success in the program or in obtaining future professional licensure. However, these skills and abilities are essential if students are to be successful in achieving the competency standards of the profession.

For progression in, and graduation, from the dental program, all students must conduct themselves in a professional manner, and must have the Essential Skills and Abilities (Technical Standards) discussed under the following five broad areas: Observation/perception; Communication; Motor/tactile function; Cognition; Emotional functioning

All applicants to the undergraduate program of the Dr. Gerald Niznick College of Dentistry are expected to review *The Essential Skills and Abilities for Admission, Promotion and Graduation in the DMD Program* document to assess their ability to meet these standards; all applicants offered admission will be required to acknowledge such review and assessment. Any candidate for the DMD degree who cannot demonstrate

the required skills and abilities throughout their course of study may be requested to withdraw from the program.

Detailed information for the above policy, please refer to this link ([https://umanitoba.ca/faculties/health\\_sciences/dentistry/dentalhygiene/student\\_governance.html](https://umanitoba.ca/faculties/health_sciences/dentistry/dentalhygiene/student_governance.html)).

### **Policy on Student Attendance**

The Dr. Gerald Niznick College of Dentistry has a social mandate to ensure that graduating dentists are caring, skilled healthcare providers who are worthy of the public trust endowed upon them. In fulfilling this mandate, the Dr. Gerald Niznick College of Dentistry has developed comprehensive programs of education and experience to ensure that graduates meet these high expectations. Unlike non-professional education programs, where students can pick and choose their education and experiences based on personal preferences, Dental School requires students to attend and participate actively in all components of the program.

While students are required to complete assignments and pass examinations, these are not considered to be equivalent to attending Dental School. When the University confers the DMD degree, it attests to society not only that the student has shown successful examination performance, but that the student has participated in the entire educational experience defined by the Dr. Gerald Niznick College of Dentistry and has thereby demonstrated an appropriate level of professional learning and responsibility.

Students at the University of Manitoba, Dr. Gerald Niznick College of Dentistry, are required to attend all scheduled classes, examinations, small group sessions, laboratories, pre-clinical labs, and clinics unless expressly indicated otherwise by the course coordinator in the course outline/syllabus.

Students are required to be on time for all scheduled classes, examinations, small group sessions, laboratories, and pre-clinical labs. Students arriving more than 10-minutes late will be recorded as absent.

Students who do not comply with the Student Attendance Policy will face academic consequences.

Detailed information for the above policy, please refer to the Dean's Office, Dr. Gerald Niznick College of Dentistry ([Susan.Petras@umanitoba.ca](mailto:Susan.Petras@umanitoba.ca)).

### **Dr. Gerald Niznick College of Dentistry/School of Dental Hygiene Professional Unsuitability By-Law**

Students must at all times demonstrate suitability for the dental profession. In this regard students are obligated to act with integrity and diligence in carrying out their professional responsibilities, and their behaviour and conduct in relation to others must be characterized by consideration, respect and good faith.

The Dr. Gerald Niznick College of Dentistry may require a student to withdraw from the College when the student has been found unsuited for the practices of dentistry or dental hygiene because the student has been found to have engaged in unprofessional behaviour. A student may be required to withdraw at any time throughout the academic year.

Grounds which may require withdrawal are: demonstrated behaviour which is exploitive, irresponsible, intentionally injurious or destructive to patients; and/or compromised professional judgment through self-interest and/or conflict of interest; and/or an acquired criminal conviction, either in Canada or any other jurisdiction, which is of such a nature as to place in question his/her fitness for the dental professions;



and/or participation in any activity related to patient care or any activity related to the practice of the dental professions while under the influence of alcohol or drugs or while abusing prescription drugs; and/or engaging in behaviour or conduct that if engaged in by a practising dentist/dental hygienist would likely result in disciplinary action, including suspension or revocation of the license to practise, by the Manitoba Dental Association or the College of Dental Hygienists of Manitoba.

Detailed information for the above policy, please contact the Dean's Office, Dr. Gerald Niznick College of Dentistry. (susan.petras@umanitoba.ca)

### **Criminal Record/Adult Abuse Registry/Child Abuse Registry**

An adult criminal record, an adult abuse registry and a child abuse registry self-declaration will be required of all applicants at the time of application. A formal Adult Criminal Record Check (including vulnerable sector screening), a formal Adult Abuse Registry Check and a formal Child Abuse Registry Check are required at the time of registration (prior to the first day of classes), and annually thereafter keeping in accordance with existing policies of other health, education and social service programs at the University of Manitoba.

Failure to provide these documents may impact on registration and a student's ability to progress in the Dental program.

### **Immunization and Blood Borne Diseases Policy**

The Dr. Gerald Niznick College of Dentistry and School of Dental Hygiene maintain comprehensive immunization requirements to protect the wellbeing of our students and the health of patients and communities with whom they will have contact during their curriculum.

All students enrolled in the Dr. Gerald Niznick College of Dentistry must have immunity demonstrated against the following diseases: tetanus, diphtheria, pertussis, polio, measles, mumps, rubella, varicella (chickenpox), and hepatitis B. Students need to undergo testing for tuberculosis (TB) infection, unless the student already has a past history of TB infection or TB disease documented. Students must receive yearly influenza vaccinations. Students who cannot receive certain immunizations due to allergies or pregnancy must provide a physician's certificate stating this.

Before the first day of classes, all students must complete and return the University of Manitoba Immune Status Consent Form, as provided by the Dr. Gerald Niznick College of Dentistry Dean's Office. Please note that any supplemental immunization documentation provided to support this document and/or any future submissions of immunization materials must be signed by a physician or nurse. All students are responsible for updating their immunizations as needed.

Students **will not be permitted to attend clinics** until all immunization requirements are satisfied.

For the collection and management of student immunization records, the Dr. Gerald Niznick College of Dentistry/School of Dental Hygiene partner with the Rady Faculty of Health Science Immunization Program. The Director of Immunizations and the Program Assistant collect and organize immunization data as well as provide immunization services to students at the Bannatyne campus.

All students are expected to comply with the requirements of the Rady Faculty of Health Science Immunization Program which may change from time to time due to the immunization requirements of external health

care facilities where students will be expected to attend as a part of their dental/dental hygiene program.

The Dr. Gerald Niznick College of Dentistry is compliant with the Association of Canadian Faculties of Dentistry (ACFD) Guidelines for Infectious Disease and Healthcare Workers document and its recommendations regarding barring students from clinical activities who do not meet these guidelines. Further information on the ACFD guidelines can be found on the web site (<https://acfd.ca/>).

Any student applicant with an infectious disease should either delay their application to the program or disclose this information upon being accepted into the Dr. Gerald Niznick College of Dentistry. Should a student who has been accepted into the program but has been found to be unable to meet the immunization requirements/guidelines, every effort will be made to accommodate the student until the guidelines are met. In some cases, it may be necessary to suspend or terminate the student from the program if it is shown that the immunization requirements/guidelines are unable to be met.

### **CPR Certification**

Accepted candidates will be required to show proof of CPR (Health Care Provider level) certification by September 15 of each year. This certification must be maintained on a yearly basis up to the date of graduation. CPR Certification levels accepted by the Dr. Gerald Niznick College of Dentistry are:

- Canadian Red Cross: ACLS (Advanced Cardiovascular Life Support for Health Care Providers)
- Heart & Stroke Association: BLS for HCP + AED
- St. John Ambulance: Health Care Provider Level C and AED

### **PHIA**

Students are required to maintain confidentiality of patient records and abide by PHIA (Personal Health Information Act) legislation which governs and controls the sharing of personal health information. Students will be required to attend a PHIA orientation and sign a pledge of confidentiality in their first year of the program. This orientation includes content that satisfies PHIA requirements for student participation at external clinical sites under the direction of the Winnipeg Regional Health Authority (WRHA).

### **Sharing of Student Personal Information**

Once admitted to the Dr. Gerald Niznick College of Dentistry, University of Manitoba, students' personal information is protected by FIPPA (Freedom of Information and the Protection of Privacy Act) legislation. However, prior to first registration, some personal information (name, e-mail, photo) is shared with external partners to facilitate student involvement. Please see further information below:

### **Mentorship Program**

In a partnership between the Dr. Gerald Niznick College of Dentistry and the Manitoba Dental Association (MDA), first year Dental students are assigned a Mentor who is a member of the MDA and a practicing Dentist within the community. Each year, the MDA holds a "Welcome to the Profession" dinner where incoming students are invited to meet their Mentors. Students will then attend two to four Mentorship meetings each year throughout the four year program. The Dr. Gerald Niznick College of Dentistry provides the names, e-mail (U of M) and photographs of all first year Dental students to MDA personnel for the purpose of facilitating student participation in the Mentorship program.

### Vital Source Textbook Database

Dentistry student's text books are accessible through an electronic textbook database called Vital Source. In order to provide all Dentistry students with access to their text books, the Dr. Gerald Niznick College of Dentistry will provide Vital Source with the names and e-mail (U of M) of all students for the purpose of authenticating users and providing access to their on-line content.

### Manitoba Dental Students Association/Manitoba Dental Hygiene Students Association

Students in the Dr. Gerald Niznick College of Dentistry/School of Dental Hygiene become members of and are represented by the Manitoba Dental Students Association/Manitoba Dental Hygiene Students Association. These Associations provide student representation on College/School and University Committees as well as represent students on various external organizations (CDA/MDA/MDHA, etc.). The Dr. Gerald Niznick College of Dentistry/School of Dental Hygiene provides the names, e-mail (U of M) and photographs of all first year Dental and Dental Hygiene students with the respective student Associations for the purpose of facilitating student participation.

Student information will not be used or disclosed for other purposes, unless permitted by The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection or use of your personal information, contact the:

Access & Privacy Office (tel. 204-474-9462)  
233 Elizabeth Dafoe Library  
University of Manitoba  
Winnipeg, MB, R3T 2N2

### Instruments Computers and Textbook

Students entering the Dr. Gerald Niznick College of Dentistry must own or purchase a PC laptop computer (the College only supports PC's given the software used in our clinical facilities) that is compliant with University computer standards (see Bookstore - Computers on Campus for annual listing) and Vital Source Technology software requirements (see Vital source (<https://www.vitalsource.com/en-ca/>) for details). The expenditure of a computer may range approximately from \$1000 to \$4000 within the first year of the program. The Vital Source Technologies cost is approximately \$1450 per year for DMD and \$2050 per year for IDDP. These fees will be assessed annually on students accounts under "Electronic Textbook Fee".

Students are responsible for Clinical Instrument Fees which represent the cost of dental instruments and supplies required for clinical education. These fees will be assessed annually on student accounts under "Clinic Instrument Fee". these instruments and supplies are the property of students and are retained by the students after graduation. It is the students' responsibility to maintain the condition of their instruments and stay within allotted supply levels. Any damaged/lost instruments or excessive use of supplies may result in additional charges to students. Over the 4 years of the DMD program, the clinic instrument fees will amount to approximately \$13,500 (\$15,300 for the IDDP program). Note that the above noted fee totals are based on previous year amounts and are subject to change.

The college is unable to provide refunds for clinical instrument or electronic textbook fees and will not accept returns of any student computer software (including Vital Source Technologies), clinical instruments or other items, should a student leave the college for whatever reason and upon graduation.

### Voluntary Withdrawal

Students intending to withdraw from a portion or all of their courses must report immediately in person or in writing to the Dean's Office. No fees will be refunded without the authorization of the dean. **Please Note: Computer Software, Clinical Instrument fees and/or Clinical Instrument items are non-refundable.** See also the chapter on General Academic Regulations and Requirements.

Students who withdraw from the Dr. Gerald Niznick College of Dentistry without notice will be considered to have terminated their connection with the college. If a subsequent application for registration is approved, they will be required to conform to the rules and regulations, fee schedules, sequence of courses, etc., in effect at the time of such subsequent application.

In cases where a student is obliged to withdraw after the final date of withdrawal published in the Calendar because of ill health or other sufficient reasons, their cases will be considered by the dean of the college.

### Required Withdrawal

The Senate of the university has approved bylaws granting certain faculties, colleges and schools the authority to require a student to withdraw on the basis of unsuitability for the practice of the profession to which the program of study normally leads. Senate has approved such a bylaw for the Dr. Gerald Niznick College of Dentistry. (p. 631)

Full policy information can be found on this page ([http://umanitoba.ca/faculties/health\\_sciences/dentistry/students/1097.html.html](http://umanitoba.ca/faculties/health_sciences/dentistry/students/1097.html.html)).

### Decisions Concerning Academic Promotions

The letter grade "D" is the lowest acceptable level of performance in each undergraduate course leading to the degree of D.M.D. when the work of any given year is being taken for the first time. (In the case of a repeated year, the minimum passing grade in each course is "C".)

A student who has a failing grade registered against them may not register for the program of the subsequent year, but may, at the discretion of Dental College Council, be permitted to repeat the failed year.

A minimum term GPA of 2.0 in each year is required to qualify a student for standing in that year.

A student who fails to obtain a minimum term GPA of 2.0 and who is not granted supplemental privileges will be considered to have failed the year.

Except by special permission of Dental College Council, no student may repeat more than one year in Dentistry, nor may any year be repeated more than once.

The work requirements of any repeated year may be modified, even increased, at the discretion of the Dental College Council.

The passing grade in each course of a repeated year in Dentistry is "C".

If a student receives an "F" grade in a fourth year clinical course, they will be required to register and pay a fee for the entire repeated year, and the work in that year may be modified or even increased by Dental College Council.

### Incomplete Standing in the Dr. Gerald Niznick College of Dentistry

The incomplete "I (F)" designation is restricted to clinical courses.

Successful completion of clinical course requirements is through extended clinics rather than supplemental assessment.

A student who is unable to complete the quantitative clinical requirements in a course by the end of the academic year may apply for an incomplete grade classification ["I (F)"] and extension of time. Details of this application procedure can be obtained from the College.

### Supplemental Examinations

A "Supplemental Examination" is an examination which may be offered as a privilege to a student who has failed a course or failed to achieve a satisfactory result. Such examinations are offered in order to grant the student an opportunity to rectify the inadequacy without repeating the course.

Information on Supplemental Examinations can be found in the, General Academic Regulations (p. 118).

The following information regarding the policy of supplemental examination privilege is specific to the Dr. Gerlad Niznick College of Dentistry:

Supplemental examinations are permitted for all courses **except those in which remediation is not realistically feasible (pre-clinical and/or clinical courses are not eligible for supplemental examination).**

The student will be notified in a letter from the Dean's Office if they are granted this examination privilege by Dental College Council. A student who is granted supplemental privileges is obliged to sit the examination at the soonest opportunity prior to the start of the next academic session.

The student must contact their Course Coordinator within 14 days of the date the notification letter from the Dean's Office to schedule a date to write their supplemental examination.

A student in first, third or fourth year who has failed in not more than two courses, at the regular final examinations of any year, or who fails to obtain a sessional (combined fall & winter GPA) grade point average of 2.0 for all courses taken by them, may, at the discretion of Dental College Council, be awarded the privilege of one or two supplemental examinations.

A student in second year who has failed in not more than three courses, or who failed to obtain a sessional (combined fall & winter GPA) grade point average of 2.0 for all courses taken by them, may, at the discretion of Dental College Council, be awarded the privilege of one, two or three supplemental examinations.

If a student has any failures they must have a minimum sessional (combined fall & winter GPA) grade point average of 2.0, including the failure(s), in order to qualify for supplemental privileges.

If a student has no failures but fails to obtain a minimum sessional (combined fall & winter GPA) grade point average of 2.0, that student may be eligible for supplemental privileges.

When students are allowed to write supplemental examinations for the purpose of raising their sessional (combined fall & winter GPA) grade point average to the minimum standard of 2.0, Dental College Council will specify the courses in which the student may write supplemental examinations. For the purpose of calculating such a student's cumulative grade point average, grade points attained in supplemental examinations will replace the grade points previously attained in the same course. Students are normally required to carry a full-time program in order to be eligible for supplemental privileges.

The passing grade in supplemental examinations is "C" in each course. A student failing a supplemental examination will be considered to have failed the year. A student may only write a supplemental once in any course; otherwise the course must be repeated.

### Honours and Awards

Dean's Honour List: awarded to students in each year of the dental program who have achieved a minimum sessional (fall & winter term combined) G.P.A. of 3.8.

To qualify for Graduation with Honours, a candidate for the D.M.D. degree must qualify for the Dean's Honour List in both third and fourth year.

A student who repeats a year at their own request, i.e., not at the request of Dental College Council, is not eligible for the Dean's Honour List or to receive any awards for the work in that repeated year.

The following policy applies to the eligibility of part-time students for academic awards: in allocating any award, the only academic performance of a student to be considered is that attained during the year(s) for which the award is made. Therefore, a part-time student is not eligible for any purely academic award, other than one in an individual course. However, a part-time student who is carrying 80 per cent or more of the normal course load for the year is eligible for any award where conditions other than academic merit apply, and further, subject to the provisions set forth above, any part-time student is eligible for any award in the individual courses taken in the year for which the award is made.

### E-Mail Accounts

All students are expected to have an e-mail account with the University of Manitoba and check it regularly. The Dr. Gerald Niznick College of Dentistry does not support communications with its students through external e-mail addresses.

### Financial Aid

A number of loan and bursary funds are available to dental students. Applications and further information are available through the University of Manitoba's Financial Aid and Awards Office. (<https://umanitoba.ca/financial-aid-and-awards/>)

### Registration Exceptions

Upon receipt of initial (and annually thereafter) Criminal Record (including Vulnerable Sector Screening), Adult Abuse Registry Check and Child Abuse Registry Check, the Dr. Gerald Niznick College of Dentistry completes registration for all students in their courses.

Students who have a failing grade/s registered against them and/or have other outstanding academic matters (i.e. deferred or supplemental examinations, modified program, etc.) in regards to the previous academic session will not be registered in the next ensuing academic session until all outstanding matters have been cleared. Students who fall into this category should contact the student advisor for further information.

A student advisor (Susan.Petras@umanitoba.ca) is available in D113 Dental Building or by calling (204) 789-3484.

## Dental Medicine, D.M.D.

### Bachelor of Science in Dentistry

In addition to the basic professional degree, the college offers the Bachelor of Science in Dentistry degree to interested **dental students** wishing to undertake research during their undergraduate program. The program is designed to assure that participation in it will not interfere

with the student's dental degree. Through active participation in a research program, the students will be given the opportunity to develop skills in applying scientific knowledge to dental practice and an interest in dental research. In addition, the program will serve as a preparatory step for entry into various graduate programs. Information on admission to this program is available from the Dean's Office and through the Dr. Gerald Niznick College of Dentistry website. (<https://umanitoba.ca/healthsciences/dentistry/>)

Course	Title	Hours
<b>Year 1</b>		
DDSS 1100	Periodontology 1	1
DDSS 1110	Radiology 1	1
DENT 1202	Early Clinical Experience	3
DENT 1210	Dental Practice Management 1	1
ORLB 1302	Cell and Tissue Biology	4
ORLB 1310	Head, Neck and Nervous System, Part 1	4
ORLB 1320	Head, Neck and Nervous System, Part 2	3
ORLB 1330	Human Growth and Development	3
ORLB 1340	Oral Tissues, Structure and Function	3
RSTD 1500	Dental Materials 1	2
RSTD 1512	Operative Dentistry 1	6
RSTD 1520	Dental Anatomy	3
RSTD 1530	Occlusion	2
RSTD 1550	Introduction to Dentistry	2
<b>Hours</b>		<b>38</b>

<b>Year 2</b>		
DDSS 2100	Periodontology2	2
DDSS 2110	Radiology 2	1
DDSS 2122	Oral Pathology	5
DDSS 2130	Pain and Anxiety Control 1	1
DENT 2202	Introduction to Comprehensive Care	4
ORLB 2300	Pathology and Microbiology 1	1
ORLB 2312	Structure and Function of Major Organ Systems	4
ORLB 2320	Cariology and Plaque Associated Diseases	3
ORLB 2330	Nutrition in Dentistry	2
PDSO 2410	Pediatric Dentistry- 1	3
PDSO 2420	Dental Public Health	1
PDSO 2430	Introduction to Orthodontics	1
RSTD 2502	Dental Materials-2	2
RSTD 2510	Operative Dentistry-2	3
RSTD 2520	Endodontology-1	2
RSTD 2532	Fixed Prosthodontics 1	6
RSTD 2540	Removable Partial Denture Prosthodontics	3
RSTD 2552	Complete Denture Prosthodontics	4
<b>Hours</b>		<b>48</b>

<b>Year 3</b>		
DDSS 3102	Periodontology 3	3
DDSS 3112	Oral Diagnosis and Radiology 1	2
DDSS 3120	Pain and Anxiety Control 2	1
DDSS 3132	ORAL AND MAXILL SURGERY 1	2
DDSS 3142	Medicine	2

DDSS 3152	Temporomandibular Disorders and Orofacial Pain	2
DDSS 3162	Pharmacology and Therapeutics	3
DENT 3210	Dental Practice Management 3	1
ORLB 3300	Pathology and Microbiology 2	1
PDSO 3402	Orthodontics 3	2
PDSO 3404	Dental Public Health 2	3
PDSO 3412	Pediatric Dentistry 2	3
RSTD 3512	Operative Dentistry 3	5
RSTD 3522	Endodontology 2	3
RSTD 3532	Fixed Prosthodontics 2	5
RSTD 3542	Complete and Removable Partial Denture Prosthodontics	3
<b>Hours</b>		<b>41</b>

<b>Year 4</b>		
DDSS 4122	Oral & Maxillofacial Surgery 2	1
DDSS 4150	Hospital Dentistry	1
DENT 4202	Interdisciplinary Patient Centred Care Case Studies	2
DENT 4210	Dental Practice Management 4	2
DENT 4222	General Practice Dentistry	10
DENT 4232	General Practice Seminars	2
DENT 4240	Dental Jurisprudence	1
PDSO 4402	Orthodontics 4	2
PDSO 4412	Pediatric Dentistry 3	2
PDSO 4422	Community Dentistry Externship	4
<b>Hours</b>		<b>27</b>
<b>Total Hours</b>		<b>154</b>

## Dental Medicine, D.M.D. International Dentists Degree Program (IDDP)

Course	Title	Hours
<b>Year 3</b>		
DDSS 3102	Periodontology 3	3
DDSS 3112	Oral Diagnosis and Radiology 1	2
DDSS 3120	Pain and Anxiety Control 2	1
DDSS 3132	ORAL AND MAXILL SURGERY 1	2
DDSS 3142	Medicine	2
DDSS 3152	Temporomandibular Disorders and Orofacial Pain	2
DDSS 3162	Pharmacology and Therapeutics	3
DENT 3210	Dental Practice Management 3	1
ORLB 3300	Pathology and Microbiology 2	1
PDSO 3402	Orthodontics 3	2
PDSO 3404	Dental Public Health 2	3
PDSO 3412	Pediatric Dentistry 2	3
RSTD 3512	Operative Dentistry 3	5
RSTD 3522	Endodontology 2	3
RSTD 3532	Fixed Prosthodontics 2	5
RSTD 3542	Complete and Removable Partial Denture Prosthodontics	3
<b>Hours</b>		<b>41</b>

**Year 4**

DDSS 4122	Oral & Maxillofacial Surgery 2	1
DDSS 4150	Hospital Dentistry	1
DENT 4202	Interdisciplinary Patient Centred Care Case Studies	2
DENT 4210	Dental Practice Management 4	2
DENT 4222	General Practice Dentistry	10
DENT 4232	General Practice Seminars	2
DENT 4240	Dental Jurisprudence	1
PDSO 4402	Orthodontics 4	2
PDSO 4412	Pediatric Dentistry 3	2
PDSO 4422	Community Dentistry Externship	4
	<b>Hours</b>	<b>27</b>
	<b>Total Hours</b>	<b>68</b>

\* IDDP Students must also complete a summer Orientation program prior to commencing the 3rd year of the program (DENT 2440, IDDP Orientation- 6 credit hours)

## Dentistry, B.Sc. Dent

### Bachelor of Science in Dentistry

In addition to the basic professional degree, the college offers the Bachelor of Science in Dentistry degree to interested **dental students** wishing to undertake research during their undergraduate program. The program is designed to assure that participation in it will not interfere with the student's dental degree. Through active participation in a research program, the students will be given the opportunity to develop skills in applying scientific knowledge to dental practice and an interest in dental research. In addition, the program will serve as a preparatory step for entry into various graduate programs. Information on admission to this program is available from the Dean's Office and through the Dr. Gerald Niznick College of Dentistry website. (<https://umanitoba.ca/healthsciences/dentistry/>)

# School of Dental Hygiene

## General Office

**Director:** Mary Bertone

**Campus Address/General Office:** D212 Dental Building, Bannatyne Campus

**Telephone:** (204) 789 3683

**Fax:** (204) 789 3948

**Email Address:** dent\_hygiene@umanitoba.ca

**Website:** [umanitoba.ca/faculties/dentalhygiene](http://umanitoba.ca/faculties/dentalhygiene/) (<http://umanitoba.ca/faculties/dentalhygiene/>)

**Academic Staff:** Please refer to the School website: [umanitoba.ca/faculties/dentalhygiene](http://umanitoba.ca/faculties/dentalhygiene/) (<http://umanitoba.ca/faculties/dentalhygiene/>)

## Degree Programs Offered

### The Profession of Dental Hygiene

Dental hygiene is a self-regulated health service profession concerned primarily with the prevention of oral disease and the promotion of optimum oral health. As a licensed professional, the dental hygienist's scope of practice is regulated by provincial legislation. The dental hygiene process of care consists of five components: assessment, dental hygiene diagnosis, planning, implementation, and evaluation. Current practice settings include: Private dental practice, community health centres, institutions (e.g., hospitals, long-term care facilities), primary health care centres, home care and other outreach programs, educational institutions (e.g., universities, community colleges), the military, research, and industry. Dental hygienists acquire competence through instruction

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Dental Hygiene, B.Sc.D.Hyg. (p. 644)	1-2	19-120	
Dental Hygiene, Dip.D.Hyg. (p. 645)	3	101	

## Faculty Academic Regulations

### Admission Requirements

#### Diploma in Dental Hygiene

The following is a summary of admission requirements. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office, Enrolment Services (p. 129), 424 University Centre; this information is also posted on the university's website ([https://umanitoba.ca/student/admissions/media/dental\\_hygiene\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/dental_hygiene_bulletin.pdf)).

#### Direct Entry

##### General Direct Entry/University of Manitoba Admission Requirements

Manitoba high school graduation, with five full credits at the Grade 12 level, in courses designated S (Specialized), G (General), or U (Dual Credit –University).

##### Specific Requirements for the School of Dental Hygiene

A minimum 85% average over the four required courses with no less than 60% in each required course.

- Any English 40S
- Mathematics: either Applied 40S or Pre-Calculus 40S
- Chemistry 40S
- Another academic 40S course

in basic sciences, oral health sciences, the humanities and clinical practice. Through more than 600 hours of a competency-based clinical curriculum, students are prepared to meet the needs of a broad range of population groups.

The School of Dental Hygiene Mission Statement: In a dynamic environment of excellence and progressive learning, the University of Manitoba, School of Dental Hygiene prepares future dental hygienists to enhance the health and wellbeing of the public through oral health promotion, disease prevention and therapeutic means; and to be active members of the global health care community.

### Practice Requirements

After successful completion of the National Dental Hygiene Certification Board Examination, in Manitoba, graduates must apply to the College of Dental Hygienists of Manitoba for a license to practice as a dental hygienist. Dental hygienists must fulfil the requirements of the respective provincial regulatory authorities licensing bodies. The minimum educational credential for licensure in the province of Manitoba is the Diploma in Dental Hygiene. Licensed dental hygienists may continue their education by completing a Bachelor of Science Degree in Dental Hygiene.

Note: Students admitted to the School of Dental Hygiene must register annually with the College of Dental Hygienists of Manitoba. Further information regarding student registration requirements can be found in Faculty Academic Regulations. (p. 637)

## Programs

**Notes:** Candidates must meet the specific subject requirements, minimum grades, average or other requirements as listed for the program. Should demand exceed available positions, higher averages may be required to be competitive (higher than 85%). Only Canadian Citizens and Permanent Residents will be considered for admission.

Selection criteria: 100 per cent based on academic standing.

### Advanced Entry Applicants

The following is a summary of the admission requirements for Advanced Entry. Applicants to this category must successfully complete the following courses prior to application. Course are normally completed within University 1, however, equivalent academic courses completed at recognized universities elsewhere will be considered.

Course	Title	Hours
Any 3 credit hour ENGL course at the 1000 level or higher		3
CHEM 1100 & CHEM 1110	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics and Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	6
and		
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
PSYC 1200	Introduction to Psychology	6
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3

STAT 1000	Basic Statistical Analysis 1 (CHEM 1310::Course no longer offered)	3
6 credit hours of electives (Sociology is strongly recommended)		6
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> The former CHEM 1300 and CHEM 1310 in combination can be used in lieu of CHEM 1100 and CHEM 1110 and CHEM 1120. Students having completed only CHEM 1300 must complete CHEM 1110 and CHEM 1120 to fulfill the Introductory Chemistry requirement.

All science courses must include the laboratory component.

### Other Requirements

Minimum GPA for consideration: 3.00 with no grade less than C, with the exception of English which requires the minimum grade of C+. Admission is competitive.

Selection criteria: 100 per cent based on academic standing for the Regular Applicant Category. An interview, biographical sketch and letters of reference are considered within the Special Applicant Category. Preference will be given to Manitobans in the Special Applicant Category (includes the Canadian Indigenous/Aboriginal Peoples applicant category) and on the alternate list.

### Bachelor of Science in Dental Hygiene, Degree Completion Program

The program will be available to dental hygiene diploma graduates of the University of Manitoba or other accredited dental hygiene educational institutions wishing to complete requirements for the baccalaureate degree on a full-time or part-time basis. Transfer of credit for courses completed at other institutions will be possible through appropriate University procedures. The School will evaluate credits from other institutions on an individual basis. The following is a summary of the admission requirements. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the university's website (<https://umanitoba.ca/explore/programs-of-study/dental-hygiene-degree-completion-program-bscdh/>).

#### Admission to the degree completion program requires of students that:

- They must possess a Diploma in Dental Hygiene from either a university or community college program accredited by either the Commission on Dental Accreditation of Canada or the American Dental Association's Commission on Dental Accreditation.
- They must possess the National Dental Hygiene Certification Board (NDHCB) Certificate
- They must hold current licensure to practice dental hygiene in Canada and be eligible for licensure to practice in Manitoba.
- They must possess all the pre-requisite course requirements prior to admission (see prerequisite requirements, options A & B below)

### Prerequisite Requirements

#### Option A:

This option is for those graduate of accredited dental hygiene programs who completed a proscribed pre-professional year of university studies prior to entry into their dental hygiene program

Required Prerequisites (minimum C grade in each course):

Course	Title	Hours
Select one of the following:		3
REHB 2450	Research Methodology for Medical Rehabilitation	
PSYC 2250	Introduction to Psychological Research	
PSYC 2260	Introduction to Research Methods in Psychology	
Or equivalent		
STAT 1000	Basic Statistical Analysis 1 (or equivalent)	3
<b>Total Hours</b>		<b>6</b>

#### Option B:

This option is for dental hygienists who are graduates of accredited two year programs which did not require a pre-professional year of university studies

Required Prerequisites (minimum C grade in each course):

Course	Title	Hours
REHB 2450	Research Methodology for Medical Rehabilitation (or equivalent)	3
STAT 1000	Basic Statistical Analysis 1 (or equivalent)	3
Free Choice Electives		15
<b>Total Hours</b>		<b>21</b>

The required minimum grade for specified prerequisite courses including electives is a C. There is a **required minimum overall grade point average of 3.0 (B) in the candidates Diploma in Dental Hygiene or Associated Degree Program.**

Selection is competitive. In the event of a surplus number of applicants, selection will be based on the grade point average (GPA) over the most recently completed 60 credit hours of study completed at the accredited post-secondary level.

## Faculty Academic Regulations

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

All students are asked to note that some academic policies and regulations are under review and are subject to change. Please refer to the Governance website (<https://umanitoba.ca/governance/governing-documents/>) for updated information.

The provisions of the General Academic Regulations (p. 118) and the University Policies and Procedures (p. 37), apply to all students. In addition, the School of Dental Hygiene has regulations and requirements that apply specifically to its students.

Direct Entry students are to be aware that as they will be registered in courses outside of the School of Dental Hygiene (non HYGN courses), they may be subject to the rules and regulations of the faculty/school in which those courses reside (primarily the Faculties of Arts and Science).

Direct Entry students are encouraged to become familiar to the rules and regulations of these faculties/schools. Please contact the School of Dental Hygiene ([https://umanitoba.ca/faculties/health\\_sciences/dentistry/dentalhygiene/](https://umanitoba.ca/faculties/health_sciences/dentistry/dentalhygiene/)) for further information.

## Dental Hygiene Diploma Program

### Essential Skills and Abilities for Admission, Promotion and Graduation

As an accredited Canadian dental hygiene program, the Dr. Gerald Niznick College of Dentistry, School of Dental Hygiene at the University of Manitoba is responsible for providing a program of study that ensures graduates have the necessary qualifications (academic knowledge, clinical skills, and professional behaviors and attitudes) to enter the regulated profession of Dental Hygiene in Canada. Becoming and being a dental hygienist requires a wide range of highly specialized skills and abilities. Some of these are taught in dental hygiene school, while others must be brought by the individual as an innate set of essential skills and abilities. The criteria for becoming registered/ licensed as a dental hygienist in Canada requires a level of motor skills and other attributes that are not necessary in other professional occupations. Similarly, the ability to provide reasonable accommodation for special learning needs in dental hygiene may not be the same as it is for other academic programs.

It is important to note that an offer of admission to the Dr. Gerald Niznick College of Dentistry, School of Dental Hygiene is not evidence that the dental hygiene program has verified that an applicant has the prerequisite skills and abilities for success in the program or future professional licensure. However, these skills and abilities are essential if students are to be successful in achieving the competency standards of the profession.

For progression in, and graduation, from the dental hygiene program, all students must conduct themselves in a professional manner, and must have the Essential Skills and Abilities (Technical Standards) discussed under the following five broad areas: Observation/perception; Communication; Motor/tactile function; Cognition; Emotional functioning.

All applicants to the dental hygiene diploma program of the Dr. Gerald Niznick College of Dentistry, School of Dental Hygiene are expected to review the **Essential Skills and Abilities for Admission, Promotion and Graduation in Dental Hygiene Diploma Program** document to assess their ability to meet these standards; all applicants offered admission will be required to acknowledge such review and assessment.

Any candidate for the diploma in dental hygiene program who cannot demonstrate the required skills and abilities throughout their course of study may be requested to withdraw from the program.

For detailed information on the above policy please refer to this link (<https://umanitoba.ca/health-sciences/rady-faculty-health-sciences-policies/>).

### College of Dental Hygienists of Manitoba (CDHM)

The College of Dental Hygienists of Manitoba (CDHM) is a separate entity from the University of Manitoba. Students admitted into the dental hygiene degree program must be registered with CDHM in order to practice/study as a dental hygiene student in Manitoba. Re-registration is required each academic year.

Students will receive application information during the first week of classes and must complete and return the application to CDHM prior to September 15th of each year. Note that evidence of completion of a CPR – Level C course in the last 12 months is required for the application process.

Failure to register with CDHM will result in being restricted from participating in classes until registration is complete.

For further information please contact the CDHM at 204-219-2678 or [cdhm@cdhm.info](mailto:cdhm@cdhm.info).

### Dr. Gerald Niznick College Of Dentistry/School Of Dental Hygiene Professional Unsuitability By-Law

Students must at all times demonstrate suitability for the dental/dental hygiene profession. In this regard students are obligated to act with integrity and diligence in carrying out their professional responsibilities, and their behaviour and conduct in relation to others must be characterized by consideration, respect and good faith.

The Dr. Gerald Niznick College of Dentistry, School of Dental Hygiene may require a student to withdraw from the College/School when the student has been found unsuited for the practices of dentistry or dental hygiene because the student has been found to have engaged in unprofessional behaviour. A student may be required to withdraw at any time throughout the academic year.

Grounds which may require withdrawal are: demonstrated behaviour which is exploitive, irresponsible, intentionally injurious or destructive to patients; and/or compromised professional judgment through self-interest and/or conflict of interest; and/or an acquired criminal conviction, either in Canada or any other jurisdiction, which is of such a nature as to place in question his/her fitness for the dental professions; and/or participation in any activity related to patient care or any activity related to the practice of the dental professions while under the influence of alcohol or drugs or while abusing prescription drugs; and/or engaging in behaviour or conduct that if engaged in by a practising dentist/dental hygienist would likely result in disciplinary action, including suspension or revocation of the license to practise, by the Manitoba Dental Association or the College of Dental Hygienists of Manitoba.

Detailed information for the above policy can be found on this page (<https://cdhm.info/>).

### Criminal Record/Adult Abuse Registry/Child Abuse Registry

An adult criminal record, an adult abuse registry and a child abuse registry self-declaration will be required of all applicants at the time of application. A formal Adult Criminal Record Check (including vulnerable sector screening), a formal Adult Abuse Registry Check<sup>1</sup> and a formal Child Abuse Registry Check<sup>1</sup> are required at the time of registration, and annually thereafter keeping in accordance with existing policies of other health, education and social service programs at the University of Manitoba.

Direct Entry students will be required to provide these documents upon admission to the program and prior to October 1 of that year.

Failure to provide these documents may impact on registration and a student's ability to progress in the Dental Hygiene program.

<sup>1</sup> The School will provide information on the application process (through the School).

### Immunization and Bloodborne Diseases Policy

The Dr. Gerald Niznick College of Dentistry and School of Dental Hygiene maintain comprehensive immunization requirements to protect the wellbeing of our students and the health of patients and communities with whom they will have contact during their curriculum.

All students enrolled in the School of Dental Hygiene must have immunity demonstrated against the following diseases: tetanus, diphtheria,



pertussis, polio, measles, mumps, rubella, varicella (chickenpox), and hepatitis B. Students need to undergo testing for tuberculosis (TB) infection, unless the student already has a past history of TB infection or TB disease documented. Students must receive yearly influenza vaccinations. Students who cannot receive certain immunizations due to allergies or pregnancy must provide a physician's certificate stating this.

Before the first day of classes, all students must complete and return the University of Manitoba Immunization Record Form (Package A), as provided by the School of Dental Hygiene/Dentistry Student Services Office. Please note that any supplemental immunization documentation provided to support this document and/or any future submissions of immunization materials must be signed by a physician or nurse. All students are responsible for updating their immunizations as needed.

Students **will not be permitted to attend clinics** until all immunization requirements are satisfied.

For the collection and management of student immunization records, the Dr. Gerald Niznick College of Dentistry/School of Dental Hygiene partner with the Faculty of Health Science Immune Program. The Director of Immunizations and the Program Assistant collect and organize immunization data as well as provide immunization services to students at the Bannatyne campus.

All students are expected to comply with the requirements of the Rady Faculty of Health Science Immune Program which may change from time to time due to the immunization requirements of external health care facilities where students will be expected to attend as a part of their dental/dental hygiene program.

The Dr. Gerald Niznick College of Dentistry and School of Dental Hygiene are compliant with the Association of Canadian Faculties of Dentistry (ACFD) *Guidelines for Infectious Disease and Healthcare Workers* document and its recommendations regarding barring students from clinical activities who do not meet these guidelines. Further information on the ACFD guidelines can be found at the following web-site (<https://acfd.ca/>).

Prospective students should refer to and be familiar with the Dr. Gerald Niznick College of Dentistry's (School of Dental Hygiene) Infectious Diseases Policy Statement on the College/School website ([http://umanitoba.ca/healthsciences/dentistry/dentalhygiene/future/dh\\_preReq.html.html](http://umanitoba.ca/healthsciences/dentistry/dentalhygiene/future/dh_preReq.html.html)). Any student applicant with an infectious disease should either delay their application to the program or disclose this information upon being accepted into the Dr. Gerald Niznick College of Dentistry/School of Dental Hygiene. Should a student who has been accepted into the program but has been found to be unable to meet the policy requirements, every effort will be made to accommodate the student until the guidelines are met. In some cases, it may be necessary to suspend or terminate the student from the program if it is shown that the policy guidelines are unable to be met.

Direct Entry students are responsible to have all immunization requirements in place prior to their entrance into their second year (first clinical year) of the program. Further information will be provided upon admission to the School.

### CPR Certification

Accepted candidates will be required to show proof of CPR (Health Care Provider level) certification by September 15 of each year. This certification must be maintained on a yearly basis up to the date of graduation. CPR Certification levels accepted by the School of Dental Hygiene are:

- Canadian Red Cross: ACLS (Advanced Cardiovascular Life Support for Health Care Providers)
- Heart & Stoke Foundation of Canada: BLS for HCP + AED
- St. John Ambulance: Health Care Provider Level C and AED
- Life Saving Society: CPR for Health Care Providers (HCP)
- Canadian Ski Patrol: Advanced First Aid (AFA)

Direct Entry students will not need to provide this certification in year 1 of their program; they will be expected to complete this requirement by September 15th of their first clinical year.

### PHIA

Students are required to maintain confidentiality of patient records and abide by PHIA (Personal Health Information Act) legislation which governs and controls the sharing of personal health information.

Students will be required to attend a PHIA orientation and sign a pledge of confidentiality in their first clinical year of the program. This orientation includes content that satisfies PHIA requirements for student participation at external clinical sites under the direction of the Winnipeg Regional Health Authority (WRHA).

### Sharing of Student Personal Information

Once admitted to the School of Dental Hygiene, University of Manitoba, students personal information is protected by FIPPA (Freedom of Information and the Protection of Privacy Act) legislation. However, prior to first registration, some personal information (name, e-mail, photo) is shared with external partners to facilitate student involvement. Please see further information below:

### Student Licensure and Mentorship Program

To better administer Student Licensure, the School of Dental Hygiene provides the College of Dental Hygienists of Manitoba (CDHM) with a list of advanced entry and Year 2 direct entry students, which includes names and U of M e-mail addresses.

In addition, as a partnership between the School of Dental Hygiene and the Manitoba Dental Hygienist Association (MDHA), these same students are assigned a Mentor who is a member of the MDHA and a practicing Dental Hygienist within the community.

### Vital Source Textbook Database

Most Dental Hygiene student's text books are accessible through an electronic textbook database called Vital Source. In order to provide all Dental Hygiene students with access to their text books, the Dr. Gerald Niznick College of Dentistry/School of Dental Hygiene will provide Vital Source with the names and e-mail (U of M) of all students for the purpose of authenticating users and providing access to their on-line content.

### Manitoba Dental Students Association/Manitoba Dental Hygiene Students Association

Students in the Dr. Gerald Niznick College of Dentistry/School of Dental Hygiene become members of and are represented by the Manitoba Dental Students Association/Manitoba Dental Hygiene Students Association.

These Associations provide student representation on College/School and University Committees as well as represent students on various external organizations (CDA/MDA/MDHA, etc.). The College of Dentistry/School of Dental Hygiene provides the names, e-mail (U of M) and photographs of all first year Dental and Dental Hygiene students with the respective student Associations for the purpose of facilitating student participation.

Student information will not be used or disclosed for other purposes, unless permitted by *The Freedom of Information and Protection of Privacy*

Act (FIPPA). If you have any questions about the collection or use of your personal information, contact:

Access & Privacy Office  
33 Elizabeth Dafoe Library, University of Manitoba  
Winnipeg, MB, R3T 2N2  
(Telephone: 204-474-9462)

### Instruments, Computer, Textbooks and Uniforms

Students entering the School of Dental Hygiene must own or purchase a PC laptop computer (the School only supports PC's given the software used in our clinical facilities) that is compliant with University computer standards (see Bookstore - Computers on Campus for annual listing) and Vital Source Technologies software requirements (see VitalSource (<https://www.vitalsource.com/>) for details). The expenditure of a computer may range approximately from \$1000 to \$4000 within the first year of the program. The Vital Source Technologies cost is approximately \$2250 per year. These fees will be assessed annually on student accounts under "Electronic Textbook Fee".

Students are responsible for Dental Hygiene Clinical Instrument Fees which represent the costs of dental instruments and supplies required for clinical education. These fees will be assessed annually on student accounts under "Clinic Instrument Fee". These instruments and supplies are the property of students and are retained by students after graduation. It is the students' responsibility to maintain the condition of their instruments and stay within allotted supply levels. Any damaged/lost instruments or excessive use of supplies may result in additional charges to students. Over the 2 years of the program, these clinic instrument fees will amount to approximately \$7,200. Note that the above noted fee totals are based on previous year amounts and are subject to change.

The college is unable to provide refunds for Electronic Textbook or Dental Hygiene Clinical Instrument Fees and will not accept returns of any clinical instruments or other items, should a student leave the college for whatever reason and upon graduation.

Direct entry students will not be expected to purchase a laptop computer, Vital Source Software, or be charged Dental Hygiene Clinical Instrument fees until the start of their second year of the program (first clinical year).

Please Note: Electronic Textbook Fees, Clinical Instrument fees and/or Clinical Instrument items are non-refundable.

### Progression Rules/Promotions

Some of the following may not apply to Direct Entry students during their first year of the program, but will come into effect once they are registered in years two and three of the program. Further clarification will be communicated to Direct Entry Students upon admission to the School of Dental Hygiene.

Regardless if students are admitted via Direct Entry or Advance Entry admission categories, years 2 and 3 of the dental hygiene program must be taken on a full-time basis and in their entirety as detailed in the University of Manitoba Academic Calendar & Catalog at the time of admission.

#### 1. Rules and Regulations - Direct Entry Year 1 – DH 1

The letter grade of "C" is the lowest acceptable level of performance per course in DH 1 (pre-professional year), with the exception of English, which is a C+, to progress further in the dental hygiene program.

Students admitted to the School via Direct Entry must complete the first year (DH 1) curriculum, including electives, **within 2 years of admission**. If students do not successfully complete the first year course requirements within this time frame, they will, except under special circumstances under the discretion of the Director of the School of Dental Hygiene, be required to withdraw from the program; this does not preclude these students from re-applying to the program via the advanced entry route.

Direct entry students must achieve a minimum term grade point average of 2.0 in all terms during the completion of their pre-professional program (DH 1).

#### 2. Rules and Regulations - Years DH 2 and DH 3

In years DH 2 and DH3 the lowest acceptable grade is a "D" if the course is being taken for the first time (see below for a minimum requirement of repeated courses).

A minimum sessional grade point average of 2.0 in years DH 2 and DH 3 of the program is required to qualify a student for standing in that year. A student in years DH 2 and DH 3 who fails to obtain a minimum sessional grade point average of 2.0 and who is not granted supplemental privileges will be considered to have failed the year.

Except by special permission of Dental College Council, no student in years DH 2 and DH 3 may repeat more than one year of the program, nor may any single year be repeated more than once. The work requirements of any repeated dental hygiene course year may be modified at the discretion of the Dental College Council. The passing grade in each course of a repeated year in Dental Hygiene is "C".

A student in DH 2 or DH 3 who has obtained a grade of "F" in more than two subjects or who fails to obtain a sessional G.P.A. of 2.0 will be regarded as having failed the year and will be required to repeat the work of that year in a succeeding annual session.

#### 3. Attendance

Regular attendance is expected of all students in all School of Dental Hygiene courses. Students should make themselves familiar with School of Dental Hygiene attendance policies and should be aware that there may be academic consequences with not complying with these regulations. For details on these policies please see the University of Manitoba's Attendance Policy as listed in the on-line Calendar as well as individual HYG course outlines for specific course requirements.

Only under exceptional circumstances may students be granted approval for absences exceeding one day for reasons other than illness. Students must make such a request in advance from the Director of the School to obtain prior approval.

Students registered in the School of Dental Hygiene are expected to conform to any new requirements that may be adopted from year to year. Any student returning to resume studies after an interval away is expected to conform to any new requirements that have been adopted during their absence.

### Examinations Deferred Examinations

A deferred examination is a privilege that may be granted to a student who is unexpectedly unable to write an examination as scheduled or a student who knows in advance that he or she is unable to write an

examination at the scheduled time. Making a false or misleading claim may be considered an offence under the Student Discipline Bylaw. Penalties may range from a failed grade in the course to suspension or expulsion.

A dental hygiene student (DH 1, 2 and 3) who is unable to sit an examination because of illness or other affliction may file an application for a deferred examination with the Director of the School of Dental Hygiene. Application for deferral must normally be filed **within 48 hours of the missed examination, for students in DH 1**, and within seven days of the examination, **for students in DH 2 and DH 3**, and must be accompanied by a medical certificate or an otherwise appropriate document certifying the inability of the student to write the examination at the regular scheduled time, and, where possible, indicating the period of disability. Based on the overall application submission, the Director shall determine if the application is approved.

When an application for a deferred **HYGN** examination is approved, the Director, in consultation with the course coordinator concerned may:

1. Permit a student to take a deferred examination in such a form as the Director/course coordinator may determine.
2. Grant standing in a course without examination. In such cases a grade shall be assigned to the course on the basis of term work and assignments.

### Supplemental Examinations

A supplemental examination is an examination that may be offered as a privilege to a dental hygiene student who has failed a dental hygiene (HYGN) course or failed to achieve a satisfactory result. Such examinations are offered in order to grant the student an opportunity to rectify the inadequacy without repeating the course.

Supplemental examination privileges are permitted in the School of Dental Hygiene for all HYGN courses with the **exception** of those in which remediation/re-examination is not realistically feasible. Such privileges must be approved by Dental College Council. Students seeking supplemental privileges should contact the Director indicating her/his request. Applications to write a supplemental examination must be accompanied by the paid fee before the supplemental examination can be written. The student will be notified in a letter from the Director's Office if she/he is granted the privilege and under what specific conditions.

A student in DH 2 and DH 3 who has failed in not more than two HYGN courses at the end of the regular term, may, at the discretion of the Director and with approval from Dental College Council, be awarded the privilege of one or two supplemental examination(s). A student must maintain a minimum sessional (combined Fall and Winter terms) GPA of 2.0 in that year in order to be eligible for supplemental privileges.

The passing grade in supplemental examinations is "C" for each course.

A student who is granted supplemental privileges is obliged to sit the examination at the earliest opportunity. The student must contact the course coordinator within 7 days of the date the notification letter from the Director's Office to schedule a plan for remediation and a date to write their supplemental examination. Supplemental examinations must be held prior to the opening of the Fall academic session.

A student who has not successfully exercised supplemental privileges will be considered to have failed the year and may be required to repeat the entire year or a modified program as required by Dental College

Council. If/when the condition is removed in that session, the student will be regarded as having completed the year to which the condition applied.

**Note:** DH 1 students (direct entry in pre-professional program) should note that supplemental examination privileges are not normally permitted within the courses in which they will be registered. Failure of any course/s in year DH 1 of the program (pre-professional year) will normally require the course/s to be repeated during the next available offering of the course. DH 1 students should be aware that this may impact the student's ability to progress in the dental hygiene program.

### Honours and Awards

Dean's Honours: awarded to students in each year of the dental hygiene Diploma program who have achieved a minimum sessional (fall & winter term combined) G.P.A. of 3.8. In addition, only students registered for 80 per cent or more of the normal course load during a regular session are eligible for Honours Standing.

A student who fails in one or more subjects, or who fails the year at the regular final examination, is not eligible to obtain Honours Standing or to receive any awards for the work of that year.

A student repeating a year's work is not eligible to obtain Honours Standing or to receive any awards for the work of that year.

The following policy applies to the eligibility of part-time students for academic awards:

- A student who is carrying less than 80 per cent of the normal course load for the year is only eligible for an award in the individual subjects taken by him/her.
- A student who is repeating a course may not be eligible for an award in that subject.

### Voluntary Withdrawal

Students intending to withdraw from a portion or all of their courses must report immediately in person or in writing to the Director's Office. Please note: Computer Software (Including Vital Source Technology software), Dental Hygiene Clinical Instrument fees and/or Clinical Instrument items are non-refundable. See also the General Academic Regulations. (p. 123)

Students who withdraw from the School of Dental Hygiene without notice will be considered to have terminated their connection with the school. If a subsequent application for registration is approved, they will be required to conform to the rules and regulations, fee schedules, sequence of courses, etc., in effect at the time of such subsequent application.

In cases where a student is obliged to withdraw after the final date of withdrawal published in the Calendar because of ill health or other sufficient reasons, their cases will be considered on an individual basis by the Director of the School.

### Required Withdrawal

Senate has approved by-laws granting the School of Dental Hygiene the authority to require a student to withdraw on the basis of professional unsuitability; such right may be exercised at any time throughout the academic year.

This right to require a student to withdraw prevails notwithstanding any other provisions in the academic regulations of the particular faculty or school regarding eligibility to proceed or repeat.

Full policy information please see General Academic Regulations- Attendance and Withdrawal (p. 123).

### E-Mail Accounts

All students are expected to have an e-mail account with the University of Manitoba and check it regularly. The School of Dental Hygiene does not support communications with its students through external e-mail addresses. All students MUST check their UM email account regularly.

### Registration exceptions

**Direct Entry students should contact the School of Dental Hygiene for information on registration.**

Upon receipt of initial (in year two; and annually thereafter) Criminal Record (including Vulnerable Sector Screening), Adult Abuse Registry Check and Child Abuse Registry Checks, the School of Dental Hygiene completes registration for all students in their courses (Years 2 and 3). Diploma students who have a failing grade/s registered against them and/or have other outstanding academic matters (i.e. deferred or supplemental examinations, modified program, etc.) in regards to the previous academic session will not be registered in the next ensuing academic session until all outstanding matters have been cleared. Students who fall into this category should contact the student advisor for further information. A student advisor is available in D113 Dental Building or by calling (204) 789-3484.

## Bachelor of Science in Dental Hygiene, Degree Completion Program

### Academic Progress

A minimum Degree Grade Point Average of 2.0 must be maintained in the Bachelor of Science in Dental Hygiene for clear standing. A grade of C is considered a passing grade for all courses applied towards degree requirements. Students who do not maintain a minimum GPA of 2.0 may be required to withdraw from the program.

### Licensure

Students in the Bachelor of Science in Dental Hygiene program must maintain professional licensure during their registration at the School of Dental Hygiene. Students should also note that licensure with the College of Dental Hygienists' of Manitoba may be required for registration within certain core courses (example: teaching practicum) of the program. Students are responsible for all fees associated with the maintenance of current licensure as well as application for licensure within Manitoba as may be required.

### Criminal Record/Adult Abuse Registry/Child Abuse Registry

An adult criminal record, an adult abuse registry and a child abuse registry self-declaration will be required of all applicants at the time of application. A formal Adult Criminal Record Check (including vulnerable sector screening), a formal Adult Abuse Registry Check and a formal Child Abuse Registry Check are required at the time of registration, and annually thereafter keeping in accordance with existing policies of other health, education and social service programs at the University of Manitoba.

### Writing Skills

Once in the program, students who do not exhibit ability to communicate in writing may be required to seek remediation in writing skills.

### Transfer of Credit

The School may consider University credits earned **outside** of dental hygiene diploma programs or earned as part of an **incomplete** degree for transfer credit. If a student earned credit for a required course in the baccalaureate program as part of a diploma in dental hygiene or

as part of another degree, an alternative course must be submitted for consideration.

### Residence Requirements

Baccalaureate Degree-Completion Program students are required to complete at least 30 credit hours of University of Manitoba courses of the total 120 credits for the degree, with the minimum grade of "C" in each course.

### Clinic Attire

Students in the B.Sc.Dental Hygiene program must maintain appropriate clinic attire when participating in clinical activities. Students will be required to purchase clinic uniforms as specified at the time of registration.

### Program Length/Registration

Students in the Bachelor of Science in Dental Hygiene, Degree Completion Program should note that after initial registration, the length of time to complete the B.Sc.D.H. program is variable dependent upon whether courses are taken full-time or part-time. Part-time students would be expected to complete the program within two to three (2-3) years. Students should be aware that the B.Sc.D.H. program tuition fee does not include tuition fees assessed against registration in courses administered outside of the Dental Hygiene Program (non HYGN courses). Further information on fees may be obtained from the University of Manitoba's web-site (<https://umanitoba.ca/>).

### Voluntary Withdrawal

Students intending to withdraw from a portion or all of their courses must report immediately in person or in writing to the Director's Office. Please note that all program tuition fees for the Bachelor of Science in Dental Hygiene program are non-refundable. Please refer to the General Academic Regulations (p. 123) for further information on voluntary withdrawal.

Students who withdraw from the School of Dental Hygiene without notice will be considered to have terminated their connection with the school. If a subsequent application for registration is approved, they will be required to conform to the rules and regulations, fee schedules, sequence of courses, etc., in effect at the time of such subsequent application.

In cases where a student is obliged to withdraw after the final date of withdrawal published in the Calendar because of ill health or other sufficient reasons, their cases will be considered by the Director of the School.

### E-Mail Accounts

All students are expected to have an e-mail account with the University of Manitoba and check it regularly. The School of Dental Hygiene does not support communications with its students through external e-mail addresses.

### Registration Exceptions

Bachelor of Science Students who will be taking courses outside of the School of Dental Hygiene will be required to follow registration regulations/restrictions governed by the faculty in which those courses reside. Normal course repeat rules and restrictions will apply. Students in the B.Sc. program will also be responsible to ensure that they have verified their initial access time for registration; consulted with an advisor and/or obtained required program approval for outside courses as necessary; checked for timetable updates for all external courses; registered and assessed their fees after registration in all courses. A

student advisor is available in D113 Dental Building or by calling (204) 789-3484.

## Dental Hygiene, B.Sc.D.Hyg.

### Overview/Entrance Requirements

#### Degree Completion Program

Accredited dental hygiene programs in Canada and the U.S. have been traditionally offered as either stand-alone two year programs with direct entry from high school, or as two-year programs requiring a pre-professional year of studies prior to admission into the professional program. In order to provide access to a broad range of potential degree completion students, two options have been developed.

#### Option A

This option is for those graduates of accredited 3 year dental hygiene programs, or equivalent, or those who have completed a proscribed pre-professional year prior to entry into their dental hygiene program.

Dental hygienists from the University of Manitoba who graduated between 1993 and 2007 must complete 21 credit hours

Dental hygienists from the University of Manitoba who graduated after 2007 must complete 19 credit hours

Graduates of other (non-University of Manitoba) dental hygiene programs who completed a pre-professional year prior to entry into their dental hygiene program, may be granted up to 15 credit hours from the pre-professional year and 75 credit hours from the 2-year dental hygiene program towards their degree. These graduates will be required to complete 30 hours of University of Manitoba credits in order to complete the degree and satisfy the residency requirement.

#### Option B

Dental hygienists who are graduates of accredited two year programs without the pre-professional year, must complete the 21 credit hours as described below plus 24 credit hours of free-choice electives. This requirement applies to graduates from the University of Manitoba (prior to 1993) as well as other accredited two-year dental hygiene programs in North America with no pre-professional year. As in Option A, the residency requirement of 30 credit hours for those non-University of Manitoba graduates will be upheld.

#### University of Manitoba Graduates

Students with diplomas in dental hygiene from the University of Manitoba will complete 19 credit hours if they graduated after 2007 and 21 credit hours if they graduated between 1993 and 2007. Dental hygienists who graduated from the University before 1993 will complete 24 credit hours of electives in addition to 21 dental hygiene baccalaureate credit hours (total 45).

Year of Graduation (U of M)	Pre-Professional Year	Total Dental Hygiene Program Credit Hours Granted	Option	Credit Hours for BScDH Completion	Total BScDH Credit Hours
After 2007	Yes	1 + 2 years or 3 years (30 + 71 = 101 Credit Hours)	Option A	1 year (19 Credit Hours)	120 credits hours
Between 1993 and 2007	Yes	1 + 2 Years (30 + 69 = 99 Credit Hours)	Option A	1 year (21 credit hours)	120 credits hours
Before 1993	No	2 Years 75 Credit Hours	Option B	2 years (45 credit hours)	120 credits hours

#### Graduates of Other Accredited North American Dental Hygiene Programs

Pre-Professional Year	Total Dental Hygiene Program Credit Hours Granted	Option	Credit Hours for BScDH Completion	Total BScDH Credit Hours
Yes	Pre-Prof. Year (accept 15 credit hours) + 2 years DH (75 Credit Hours) = 90 Cr. Hrs.	Option A	1 year (30 credit hours) <sup>1</sup>	120 credits hours
No	2 Years 75 Credit Hours	Option B	2 years (45 credit hours) <sup>1</sup>	120 credits hours

<sup>1</sup> Residency Requirement.

## Degree Requirements

### Degree Completion Curriculum

#### Dental Hygiene Core (Minimum 12)

Course	Title	Hours
<b>Mandatory Course</b>		
HYGN 2380	Pain Management	2
<b>Elective Courses</b>		
HYGN 4412	Dental Hygiene Practice Management and Leadership	3
HYGN 4460	Community Health Independent Study	3
HYGN 4470	Community Health Independent Study II	3
HYGN 4492	Current Issues in Dental Hygiene	3
HYGN 4520	Advanced Independent Study I	3
HYGN 4530	Teaching Practicum	3
HYGN 4540	Advanced Teaching Practicum	3
HYGN 4550	Advanced Independent Study II	3

**Potential Electives - Not Part of the Core Program**

(up to 21 Cr. Hrs)

Course	Title	Hours
HYGN 4500	Advanced Oral Pathology	3
HYGN 4510	Microbiology and Immunology	3
HYGN 4472	Course no longer offered	3

**Courses Approved as Potential Electives Outside of the School of Dental Hygiene**

Course	Title	Hours
NURS 1260	Course no longer offered	3
PHIL 1290	Critical Thinking	3
SOC 2490	Sociology of Health and Illness	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
PHIL 2740	Ethics and Biomedicine	3

**Dental Hygiene, Dip.D.Hyg.****Degree Requirements****Program and Graduation Requirements**

Students admitted prior to 2020 should refer to the version of the University of Manitoba Undergraduate Calendar in effect on the date of their admission for clarification of program/graduation requirements.

Further information may also be obtained from the School of Dental Hygiene.

Course	Title	Hours
<b>Year 1</b>		
Direct Entry/Prerequisite Requirement:		
ENGL XXXX	Any 3 credit ENGL course at the 1000 level or higher	3
PSYC 1200	Introduction to Psychology	6
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
STAT 1000	Basic Statistical Analysis 1	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
Select 6 credit hours of Electives (Sociology is strongly recommended) <sup>2</sup>		6
<b>Hours</b>		<b>33</b>

**Year 2**

First Clinical Year (Year 1 Advanced Entry):		
HYGN 1232	Oral and Dental Anatomy	3
HYGN 1234	Preclinical Dental Hygiene	2
HYGN 1236	Dental Hygiene Theory and Practice 1	4
HYGN 1238	Dental Hygiene Clinical Practice I	3
HYGN 1242	Dental Hygiene Theory and Practice II	4
HYGN 1262	Dental Radiology	3
HYGN 1270	Biology of the Head and Neck	3
HYGN 1280	Microbiology and Infectious Diseases	3

HYGN 1292	Dental Hygiene Preclinical Restorative Techniques	2
HYGN 1320	Dental Materials	2
HYGN 1340	Communications	2
HYGN 1352	Community Health I	3
HYGN 1360	Periodontology I	2

**Hours 36****Year 3**

Second Clinical Year:

HYGN 2100	Dental Hygiene Portfolio <sup>3</sup>	2
HYGN 2280	Pharmacology	2
HYGN 2300	Pathology	3
HYGN 2312	Dental Hygiene Clinical Practice II	4
HYGN 2314	Dental Hygiene Theory and Practice III	4
HYGN 2316	Dental Hygiene Clinical Practice III	4
HYGN 2318	Dental Hygiene Theory and Practice IV	5
HYGN 2340	Periodontology II	2
HYGN 2350	Biology of Oral Tissues	2
HYGN 2362	Community Health II	3
HYGN 2370	Nutrition in Dentistry	2
HYGN 2380	Pain Management	2

**Hours 35****Total Hours 104**

<sup>1</sup> The former CHEM 1300 and the former CHEM 1310 (or their equivalents) in combination can be used in lieu of the requirements for CHEM 1100 and CHEM 1110 and CHEM 1120. Students who have completed only CHEM 1300 (or an equivalent) must complete CHEM 1110 and CHEM 1120 to fulfill the introductory Chemistry requirements.

Chemistry course options are:

CHEM 1100, CHEM 1110, and CHEM 1120

CHEM 1300, CHEM 1110, and CHEM 1120

CHEM 1300 and CHEM 1310 - To account for the extra credit hours for the Chemistry Lab, students who took CHEM 1300 and CHEM 1310 need to take an additional 3 credit hours of electives.

<sup>2</sup> Those students admitted with 6 credit hours of acceptable Chemistry courses will be required to complete 6 credit hours of electives. Students admitted with 9 credit hours of acceptable Chemistry courses will be required to complete 3 credit hours of electives.

<sup>3</sup> Registration in HYGN 2100 will also occur with the first clinical year of the Dental Hygiene program. However, no grade will be assigned and it will not be factored into GPA calculations.

# College of Nursing

## General Office

**Dean:** Netha Dyck

**Associate Dean(s):** Undergraduate: Nicole Harder; Graduate: Donna Martin; Research: Susan McClement

**Campus Address/General Office:** Helen Glass Centre for Nursing

**Telephone:** (204) 474 7452

**Fax:** (204) 474 7682

**Email Address:** nursing@umanitoba.ca (<https://catalog.umanitoba.ca/undergraduate-studies/health-sciences/nursing/nursing@umanitoba.ca>)

**Website:** <http://umanitoba.ca/nursing> (<http://umanitoba.ca/nursing/>)

### Professional Designation

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Baccalaureate Program for Registered Nurses (BPRN)+ (p. 660)	2	45	
Midwifery, B.Mid. (p. 662)	4	130	
Nursing, B.N. (p. 662)	4	127	

+ Intake has been suspended

## Faculty Academic Regulations

### Admission Requirements

#### Bachelor of Nursing Program

The following is a summary of the admission requirements for each program in the College of Nursing. All admission requirements, application deadline dates and forms, are included in the Applicant Information Bulletin that is available from the Admissions Office website (<http://umanitoba.ca/admissions/>).

Applicants have the option of applying to study at the Fort Garry campus in Winnipeg or at Thompson or The Pas as part of the University of Manitoba Bachelor of Nursing Program Collaborative University College of the North Cohort.

Non-Nursing courses must be assessed as exact equivalents in order to meet the specific course requirements for admission. Only courses completed within 10 years prior to the date of admission to the College of Nursing will be considered for transfer credit.

Nursing courses will be considered for evaluation and credit only if completed within 5 years prior to application/admission.

See "Advanced Standing/Transfer Credit (p. 647)".

Students who fail the same Nursing course twice, prior to applying to the College of Nursing, are ineligible for admission to the College of Nursing.

#### Course Requirements for Admission

All applicants must complete a minimum of 30 credit hours in the following identified courses (or their equivalent) with a minimum grade of "C" in each course. All of the following pre-requisite courses used to meet the admission requirements for the Bachelor of Nursing program must be transferrable for credit into the Bachelor of Nursing program. Non-nursing courses must be completed within 10 years and Nursing courses must be

### Professional Designation - Bachelor of Nursing

A graduate of the Bachelor of Nursing Program will be eligible to apply for registration with the College of Registered Nurses of Manitoba and to write the registration exam. Information can be obtained from the College of Registered Nurses of Manitoba CRNM website (<https://www.crnmb.ca/>).

### Professional Designation - Bachelor of Midwifery

A graduate of the Bachelor of Midwifery Program will be eligible to apply for registration with the College of Midwives of Manitoba and to write the Canadian Midwifery Registration Exam. Information can be obtained from the Canadian Midwifery Regulators Council (CMRC) website (<https://cmrc-ccosf.ca/registration-exam/>).

## Programs

completed within 5 years of admission to the College of Nursing in order to be eligible for admission and advanced standing (transfer credit).

Course	Title	Hours
<b>Required Courses</b>		
BIOL 1410	Anatomy of the Human Body	3
Select one of the following:		3
BIOL 1412	Physiology of the Human Body	
BIOL 2410 & BIOL 2420	Human Physiology 1 and Human Physiology 2 <sup>1</sup>	
MBIO 1220 or MBIO 3010	Essentials of Microbiology or Mechanisms of Microbial Disease	3
<b>Science Electives</b>		
Select 9 credit hours		9
<b>Electives</b>		
Select 12 credit hours		12
<b>Total Hours</b>		<b>30</b>

#### Electives

Any combination of the following courses/subjects for a total of 12 credits may be taken.

Course	Title	Hours
Social Sciences		
Humanities		
NURS 1500	Preparing for Professional Nursing Education	3
NURS/KIN 2610	Health and Physical Aspects of Aging	3
FMLY 2650 or REC 2650 or SWRK 2650	The Social Aspects of Aging	3

<sup>1</sup> For students admitted with BIOL 2410 and BIOL 2420, the additional 3 credit hours can be used toward the requirement for 9 credit hours of Science Electives for the requirement for 12 credit hours of Electives.

**Applicants require a minimum of "C" in Math and Written English course requirements prior to admission.**

**All applicants to nursing must meet the University Written English and University Math requirements at a 1000 level or higher, a grade of "C" and completed within the last ten years.**

The AGPA will be calculated on the most recent 45 credit hours (including repeated courses) of university level course work. If an applicant has less than 45 credit hours, the AGPA will reflect all credit hours completed (i.e. a minimum of 30 credit hours to a maximum of 45 credit hours). The AGPA is limited to course work taken within the 10 years prior to admission.

The minimum Adjusted GPA for admission to the College of Nursing is 2.5.

An AGPA higher than the minimum is recommended as admission may be competitive.

For more information see College of Nursing Applicant Information Bulletin (<https://umanitoba.ca/explore/programs-of-study/nursing-bn/#how-to-apply>).

#### **Applicants with Previous Bachelor of Nursing Degree**

Applicants who have previously completed a Bachelor of Nursing or equivalent program in Canada or the United States are not eligible for admission to the Bachelor of Nursing program in the College of Nursing at the University of Manitoba. In exceptional circumstances, students may be considered on a case-by-case basis.

#### **Applicants from Diploma and Degree Nursing Programs Category**

Applicants who have attended but have not completed a nursing diploma or degree program, the completion of which would result in the graduate's eligibility to write the NCLEX in order to qualify for registration to practice as a Registered Nurse, must meet admission requirements including the competitive AGPA in the year of application, apply for admission by the application deadline, and provide supplementary information, including the name of the Dean, Director, Head, or Coordinator of the Nursing Program in which the student was previously registered, and who will be contacted by the College of Nursing.

The Admissions and Advanced Standing Committee reserves the right to deny admission to the University of Manitoba Nursing program based on any of the supplementary information. Applicants who would be eligible to register in third or fourth year courses will be considered for admission only if space is available.

Appeals of decision are limited to the question of procedural regularity only. The merits of the decision are not subject to review.

#### **Canadian Indigenous Category**

The Canadian Indigenous Category will consider applicants who are Indigenous People of Canada only, including individuals of First Nations, Metis, and Inuit heritage. Applicants in this category must meet the minimum entrance requirements including a minimum AGPA of 2.5. Applicants must apply by the application deadline and also complete a supplementary application form that is available with the online

application. The Supplementary Application and information are due no later than May 1.

Appeals of decisions are limited to the question of procedural regularity only. The merits of the decision are not subject to review.

#### **Provisional Admission**

##### **Non-Academic Admission Requirements**

All successful applicants are admitted provisionally pending compliance with the non-academic admission requirements of the College of Nursing. Failure to meet the requirements by July 15 for Fall admission or November 15 for Winter admission may result in the offer of admission being revoked. Contact the College of Nursing (<https://www.umanitoba.ca/nursing/student-experience/resources-undergraduate-students/#incoming-students>) to find further information about the Non-Academic Admission Requirements.

Applicants are advised to carefully check the recommended start dates in the above document before beginning the process of complying with these admission requirements. Any costs associated with the non-academic admission requirements are the responsibility of the applicant.

##### **Advanced Standing/Transfer Credit**

Advanced standing will be considered for non-nursing courses completed at any university, including the University of Manitoba, if completed within 10 years of admission to the Bachelor of Nursing program.

Nursing courses from any university, including the University of Manitoba, will be considered for advanced standing/transfer credit only if they have been completed within five years prior to admission to the College of Nursing.

See "Courses Completed at Recognized Universities other than the University of Manitoba" (p. 646) and course requirements for admission.

##### **Advanced Standing: Licensed Practical Nurse (LPN)**

Applicants who graduated from the Licensed Practical Nursing (LPN) Program from Assiniboine Community College or the Diploma in the Practical Nursing Program at University College of the North within five years of admission to the College of Nursing may be eligible for transfer credit. Applicants must meet admission requirements.

##### **Criminal Record Check**

Following their provisional admission to the program, applicants must provide a Criminal Record Check, including Vulnerable Sector Check, by July 15 or November 15. Apply for the Criminal Record Check after April 1 and allow 4-8 weeks for processing.

A criminal conviction will not necessarily result in denial of admission to the College of Nursing. Criminal offences will be reviewed by a sub-committee of the Nursing Advance Standing and Admissions Committee for the implications of the conviction in view of the professional mandate to protect the public. Failure to disclose any criminal record will invalidate an applicant's application and shall result in automatic expulsion from the College of Nursing if the applicant has been admitted.

The College of Registered Nurses of Manitoba (CRNM) also requires that all graduates of an approved nursing education program who wish to practice nursing in this province disclose information about any conviction for an offence under the Criminal Code (Canada). The review process by the College of Nursing is independent of the review process conducted by the CRNM.



**Child Abuse Registry Check**

Following provisional admission to the program, applicants must provide a Child Abuse Registry Check by July 15 for Fall admission or November 15 for Winter admission. Apply for the Child Abuse Registry Check after April 1 and allow 4-8 weeks for processing.

Note: Any applicant on the Child Abuse Registry will be denied admission.

**Adult Abuse Registry Check**

Following provisional admission to the program, applicants must provide an Adult Abuse Registry check by July 15 for Fall admission or November 15 for Winter admission. Apply for the Adult Abuse Registry Check after April 1 and allow 4-8 weeks for processing.

**Immunizations**

Immunizations and tests will be provided at the College of Nursing. Students who are offered admission will be sent an Immune Status Consent Form & Student Information Form for completion due July 15 for Fall intake and November 15 for Winter intake. Previous immunization and testing records will be reviewed and students will be informed what additional items, if any, are required. Detailed information about the immunization requirements can be found on the website (<https://www.umanitoba.ca/nursing/student-experience/resources-undergraduate-students/#incoming-students>).

**CPR Certification**

CPR certification at the Health Care Provider (HCP) Level is a requirement for admission to the College of Nursing. Certification must be valid until the end of the academic year (i.e. April); therefore, should not be obtained before April 1st by applicants for either Fall or Winter admission.

**Respirator Mask Fit Testing**

Students in the Bachelor of Nursing Program may be required to complete mask fit testing as part of their clinical placement(s). Mask fit testing will occur on an as-needed basis only, should the student be placed on a unit or in a setting where an N95 mask is required for patient care, and as determined by the clinical course leader and Director of Clinical Education.

**Baccalaureate Program for Registered Nurses (BPRN)**

**Effective in Fall 2019, admission intake to the BPRN has been suspended.**

All admission requirements for applicants who are already Registered Nurses are described in detail in an applicant information bulletin that includes application deadline dates and application forms. This material is available from the Admissions Office website (<http://www.umanitoba.ca/student/admissions/>).

**Admission Requirements**

1. Graduation from an approved diploma of nursing education program;
2. Current active practicing membership in a Canadian provincial or territorial association/college of registered nurses; and
3. A minimum of 1125 hours of nursing experience will normally be required for selection.

Applicants will be provisionally admitted pending submission, by the published deadline, of the non-academic requirements: Criminal Record Search Certificate including Vulnerable Sector Search, Child Abuse Registry Check, Adult Abuse Registry Check, Immunization, CPR Certification, Respirator Mask-Fit Testing, and PHIA training.

**Failures in Nursing Courses**

Students who fail the same Nursing course twice, prior to applying to the College of Nursing, are ineligible for admission to the College of Nursing.

**Proof of Professional Registration**

Active practicing membership must be maintained throughout the program in the Canadian jurisdiction under which the student is a practicing RN. Verification will be obtained annually from the College of Registered Nurses of Manitoba by the College for returning Manitoba students.

Students from outside of Manitoba must submit proof of registration annually from the registering body to the College of Nursing.

After admission and at any time prior to completing the program, students with any changes to their active practicing status with the College of Registered Nurses of Manitoba or other Canadian jurisdiction in which they hold membership, (e.g., conditions placed on a registration or ineligibility for active practicing status), are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Such changes will be reviewed on a case by case basis. Failure to report a change in status may result in disciplinary action.

**Transfer of Credit**

University credits earned outside of nursing diploma programs or earned as part of an incomplete degree may be considered for transfer of credit. If a required course in the baccalaureate program was earned as part of a nursing diploma program or as part of another degree, an alternative course must be substituted. Transfer of credit will be considered for university level nursing courses completed within the five years prior to admission. Credit for previous nursing courses is not given if there is a lapse of five years or more from the last date of attendance in the program or if taken more than five years prior to admission. Credit for non-nursing courses taken at other universities over 10 years prior to admission will not be granted.

Graduates of the Red River College Diploma Nursing Accelerated Program (DNAP) (est. 2000) will receive 12 credit hours of advanced standing in the Baccalaureate Program for Registered Nurses (BPRN) for the following courses, provided a minimum grade of C+ was achieved in each course for transfer: NURS 3210, NURS 4220, and 6 credit hours of non-nursing electives. The Nursing courses must have been completed within five years, and the non-Nursing courses completed within 10 years, prior to admission to the College of Nursing. All remaining courses for the BPRN must be completed at the University of Manitoba in order to meet the residency requirement for the BPRN, unless the electives were completed at the University of Manitoba.

**Transfer of Credit for Advanced Certificate Programs**

No credit will be given for these certificates in the BPRN.

**Bachelor of Midwifery Program**

Applicants must meet the general admission requirements of the University of Manitoba, as well as the admission requirements of each program in the College of Nursing. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office website (<http://umanitoba.ca/admissions/>).

Registration in the Bachelor of Midwifery Program will be restricted to Canadian citizens and permanent residents. Preference will be given to Manitoba residents.

### Course Requirements for Admission

All applicants must complete a minimum of 30 credit hours in the following identified courses (or their equivalent) with a minimum grade of "C" in each course before entering the Bachelor of Midwifery Program. All required courses must be at a 1000 level, or higher.

Course	Title	Hours
BIOL 1410	Anatomy of the Human Body <sup>1,2</sup>	3
Select one of the following:		3-6
BIOL 1412	Physiology of the Human Body <sup>1,3</sup>	
	or BIOL 2410 Human Physiology 1 & BIOL 2420 and Human Physiology 2	
MBIO 1220	Essentials of Microbiology <sup>1</sup>	3
	or MBIO 3010 Mechanisms of Microbial Disease	
STAT 1000	Basic Statistical Analysis <sup>1,4</sup>	3
	or STAT 1150 Introduction to Statistics and Computing	
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1,5</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
INDG 1200	Indigenous Peoples in Canada <sup>1</sup>	6
	or INDG 1220 Indigenous Peoples in Canada, Part 1 & INDG 1240 and Indigenous Peoples in Canada, Part 2	
Science Electives <sup>1,4</sup>		3
Social Sciences or Humanities Electives <sup>1</sup>		3
Written English and Mathematics Requirements <sup>1,6</sup>		
<b>Total Hours</b>		<b>30-33</b>

- <sup>1</sup> All courses can be completed in University 1, or an equivalent program, if students do not wish to extend their program of study.
- <sup>2</sup> Equivalent courses offered through the Université de Saint-Boniface may be used to satisfy program requirements.
- <sup>3</sup> If students complete BIOL 2410 and BIOL 2420, the additional 3 credit hours could be used toward the requirement for 3 credit hours of Science Electives.
- <sup>4</sup> Science Prerequisites. Students must meet the current Science prerequisites before registration for Science courses. See the Academic Calendar for the current prerequisites. It is recommended the above prerequisites have been completed within the last five years.
- <sup>5</sup> Prerequisites for CHEM 1100: [one of Chemistry 40S (50%), CSKL 0100 (P), or the former CHEM 0900 (P)] and [one of Applied Mathematics 40S (50%), Pre-calculus Mathematics 40S (50%), the former Mathematics 40S (300) (50%), or a grade of "C" or better in MSKL 0100].
- <sup>6</sup> Students must meet the University of Manitoba Written English and Mathematics Requirements (p. 118) with a University level course completed within the last 10 years, must be at the 1000 level (or higher) and with a minimum grade of C in each. It is strongly recommended that these courses be completed within the elective credits indicated above.

Students must complete the University Written English requirement and the University Mathematics requirement to be eligible for admission. According to University policy, students who have a completed undergraduate degree are exempt from the Written English and Math requirements. Please refer to the General Academic Regulations (p. 118)

**Effective Fall 2022:** Addition of CASPer™ situational judgement testing to the eligibility requirements.

Selection criteria: 70% AGPA, 30% CASPer®

CASPer® (the Computer-based Assessment for Sampling Personal characteristics) is an eligibility requirement for all applicants. The Bachelor of Midwifery program requires the English CASPer® test.

Note: CASPer® shall not be used in the selection of registrants from the Canadian Indigenous applicant pool. However, all Indigenous students will be required to take the CASPer® test, but only those who want to be considered in the general applicant pool will the test score be used as part of the admissions calculation.

For more information about CASPer® please visit CASPer.com (<https://takecasper.com/>).

Any inquires on the test should be directed to support@takecasper.com.

An adjusted Grade Point Average (AGPA) of at least 2.5 is required.

The AGPA will be calculated as follows: (0.3 x the core course average) **plus** (0.7 x the average of the most recent 45 credit hours).

The core course average will be calculated on the most recent attempts of the following courses:

Course	Title	Hours
BIOL 1410	Anatomy of the Human Body	3
Select one of the following:		3-6
BIOL 1412	Physiology of the Human Body	
	or BIOL 2410 Human Physiology 1 & BIOL 2420 and Human Physiology 2	
MBIO 1220	Essentials of Microbiology	3
	or MBIO 3010 Mechanisms of Microbial Disease	
INDG 1200	Indigenous Peoples in Canada	6
	or INDG 1220 Indigenous Peoples in Canada, Part 1 & INDG 1240 and Indigenous Peoples in Canada, Part 2	

The AGPA will be calculated on the most recent 45 credit hours (including repeated courses) of university level course work. If an applicant has less than 45 credit hours, the AGPA will reflect all credit hours completed (i.e. a minimum of 30 credit hours to a maximum of 45 credit hours). The AGPA is limited to course work taken within the 10 years prior to admission.

An AGPA higher than the minimum is recommended as admission may be competitive.

### Courses Completed at Recognized Universities Other Than the U of M

Non-Midwifery and non-Nursing courses must be assessed as exact equivalents in order to meet the specific course requirements for admission. Only courses completed within 10 years prior to the date of admission to the program will be considered for transfer credit.

Midwifery and nursing courses will be considered for evaluation and credit only if completed within 5 years prior to admission.

### Failures in Required Courses

Students who fail the same required midwifery or nursing course twice, prior to applying to the Bachelor of Midwifery Program, are ineligible for admission to the program.

### Applicants from Diploma and Degree Midwifery Programs Category

Applicants who have attended but have not completed a midwifery program, the completion of which would result in the graduate's eligibility to write the Canadian Midwifery Registration Examination (or equivalent) in order to qualify for registration to practice as a Registered Midwife, must meet admission requirements including the competitive AGPA in the year of application, apply for admission by the application deadline, and provide supplementary information, including the name of the Dean, Director, Head, or Coordinator of the Midwifery Program in which the student was previously registered. This individual will be contacted for further information.

The Advanced Standing and Admissions Committee reserves the right to deny admission to the Bachelor of Midwifery Program based on any of the supplementary information. Applicants who would be eligible to register in third or fourth year courses will be considered for admission only if space is available.

Appeals of decision are limited to the question of procedural regularity only. The merits of the decision are not subject to review.

### Canadian Indigenous Category

The Canadian Indigenous Category will consider applicants who are Indigenous People of Canada only, including individuals of First Nations, Metis, and Inuit heritage. Applicants in this category must meet the minimum entrance requirements including a minimum AGPA of 2.5. Applicants must apply by the application deadline and also complete a supplementary application form that is available with the online application. The Supplementary Application and information are due no later than May 1.

Appeals of decisions are limited to the question of procedural regularity only. The merits of the decision are not subject to review.

### Provisional Admission - Non-Academic Admission Requirements

All successful applicants are admitted provisionally pending compliance with the non-academic admission requirements of the Bachelor of Midwifery Program. Failure to meet the requirements by July 15 will result in the offer of admission being revoked. Please refer to the following document for further information about the Non-Academic Admission Requirements (<https://www.umanitoba.ca/nursing/student-experience/resources-undergraduate-students/#incoming-students>).

### Advanced Standing/Transfer Credit

Advanced standing will be considered for non-midwifery and non-nursing courses completed at any university, including the University of Manitoba and University College of the North, if completed within 10 years of admission to the Bachelor of Midwifery program.

Midwifery and nursing courses from any university, including the University of Manitoba and University College of the North, will be considered for advanced standing/transfer credit only if they have been completed within five years prior to admission to the Bachelor of Midwifery Program.

See also section on "Courses Completed at Recognized Universities other than the University of Manitoba."

### Criminal Record Search Certificate

Following their provisional admission to the Bachelor of Midwifery Program, applicants must provide a Criminal Record Search Certificate, including Vulnerable Sector Search, by July 15. As it can take up to 120 days to obtain these documents, it is recommended that applicants apply

for the Criminal Record Search certificate and Vulnerable Sector Search between April 1 and April 15 in the year of application.

A criminal conviction will not necessarily result in denial of admission to the Bachelor of Midwifery Program. Criminal offences will be reviewed by a sub-committee of the Advance Standing and Admissions Committee for the implications of the conviction in view of the professional mandate to protect the public. Failure to disclose any criminal record will invalidate an applicant's application and shall result in automatic expulsion from the Bachelor of Midwifery Program if the applicant has been admitted.

The College of Midwives of Manitoba may also require that all graduates of an approved midwifery education program who wish to practice midwifery in this province disclose information about any conviction for an offence under the Criminal Code (Canada). The review process by the Bachelor of Midwifery Program is independent of the review process conducted by the CMM.

### Child Abuse Registry Check

Following provisional admission to the Bachelor of Midwifery Program, applicants must provide a Child Abuse Registry check by July 15 for fall admission. Apply for the Child Abuse Registry check after April 1 and allow 4-8 weeks for processing.

Note any applicant on the Child Abuse Registry will be denied admission.

### Adult Abuse Registry Check

Following provisional admission to the Bachelor of Midwifery Program, applicants must provide an Adult Abuse Registry check by July 15 for fall admission. Apply for the Adult Abuse Registry check between after April 1 and allow 4-8 weeks for processing.

### Immunization

Immunizations and tests will be provided at the College of Nursing. Students who are offered admission will be sent an Immune Status Consent Form & Student Information Form for completion due July 15 for Fall intake. Previous immunization and testing records will be reviewed and students will be informed what additional items, if any, are required. Detailed information about the immunization requirements can be found on the website (<https://www.umanitoba.ca/nursing/student-experience/resources-undergraduate-students/#incoming-students>).

### CPR Certification

CPR certification at the Health Care Provider Level is a requirement for admission to the Bachelor of Midwifery Program. Certification must be valid until the end of the academic year (i.e., April); therefore, should not be obtained before April 1st of Year 2 of the Bachelor of Midwifery Program.

### Respirator Mask Fit Testing

Students in the Bachelor of Midwifery Program may be required to complete mask fit testing as part of their clinical placement(s). Mask fit testing will occur on an as-needed basis only, should the student be placed on a unit or in a setting where an N95 mask is required for patient care, and as determined by the clinical course leader and Director of Midwifery.

## Academic Regulations

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

The provisions of the General Academic Regulations (p. 118), and the University Policies and Procedures (p. 37), apply to all students.

In addition, the College of Nursing has regulations and requirements, published below, that apply specifically to its students.

Following the regulations for all students, please see the regulations that are specific to each program.

### Regulations for the Bachelor of Nursing Program

Students are obligated to be familiar with all regulations governing their continued progress in the program.

#### Security of Academic Records

The University's policies regarding the security of student academic records are found in the University Policy and Procedures. (p. 47)

#### Registration Status in the Program

Students admitted to the Program must complete a minimum of 7 credit hours of course work in the College of Nursing in the Fall, Winter, or Summer term of their admission year.

Students at the Fort Garry campus in Winnipeg are expected to maintain contact with the program by registering in at least one nursing course during each consecutive Fall, Winter, or Summer term while they are enrolled in the Program.

Students who wish to interrupt their studies must apply in writing to the Associate Dean, Undergraduate Programs, for a Leave of Absence.

Once admitted to the College of Nursing, students must complete the final seven (7) terms of the Bachelor of Nursing Program within six (6) years. Extensions for program completion for students in good standing may be considered on a case by case basis by the Associate Dean, Undergraduate Programs.

#### Leave of Absence

Students wishing to interrupt their studies must submit a written request for a Leave of Absence, normally by June 1 for Fall Term, October 1 for Winter Term, or February 1 for Summer Term to the Associate Dean, Undergraduate Programs, College of Nursing. Later requests may be considered in exceptional circumstances. A Leave of Absence may normally be granted for a maximum period of one year. Requests for an extension to the Leave of Absence or for a subsequent Leave of Absence must be made in writing and will be subject to approval by the Associate Dean, Undergraduate Programs.

In order to return to the College of Nursing, students must submit a written request for reinstatement to the Associate Dean, Undergraduate Programs, no later than June 1 for Fall Term, October 1 for Winter Term, or February 1 for Summer Term. Requests for reinstatement will not normally be considered after June 1, October 1, or February 1 respectively. Students who do not apply for reinstatement by June 1, October 1, or February 1 will normally be considered as having left the Nursing program, and will be withdrawn from the College of Nursing.

Decisions made in response to requests for leaves of absence or reinstatement can be appealed to the College of Nursing Student Appeals Committee.

Leave of Absence status does not extend the program time limit outlined in the College of Nursing regulations. To maintain Leave of Absence status, and not be discontinued from the College of Nursing, students may not attend any other faculty or institution during the period in which the Leave of Absence is in effect. Students on a Leave of Absence will be subject to the same criminal record, Child Abuse Registry, and Adult Abuse Registry policies as students taking courses. At the time of requesting a return to studies, students may be required to provide a

current self-declaration of a criminal record or a Criminal Record Check, Child Abuse Registry, and Adult Abuse Registry check.

Students who attend another faculty or institution while on leave, or who have been withdrawn from the College of Nursing because they were not granted a Leave of Absence and did not take at least one Nursing course in Fall, Winter, or Summer Term, must re-apply through Admissions should they wish to return.

#### Residence Requirements

See the General Academic Regulations (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/#Residence-Written-English>).

#### Transfer to Alternate Delivery Site within the Bachelor of Nursing Program

Students in the Program may apply for transfer to an alternate delivery site within the Program. The following minimum requirements must be met prior to consideration of transfer:

1. there is an open position, as well as clinical placement availability, in the courses to which the student wishes to transfer; and
2. the student is in good standing in the Program.

Should the above requirements be met, requests for transfer will only be considered based on compassionate grounds, such as extraordinary personal or family circumstances that would be alleviated by transfer. Such grounds may include illness of a close family member, or personal illness of significant magnitude requiring a move either to obtain treatment or to be near to a close family member. Requests for transfer based solely on financial hardship will not be considered.

Letters of request to transfer must be received by the Associate Dean, Undergraduate Programs, College of Nursing. The letter of request must outline the reason(s) for requesting the transfer.

Any costs associated with transfer are the responsibility of the student.

Requests for transfer should normally be submitted by:

- June 1<sup>st</sup> for requests for transfer for Fall term;
- October 1<sup>st</sup> for requests for transfer for Winter term; and
- February 1<sup>st</sup> for requests for transfer for Summer term.

<sup>1</sup> Amended June 1, 2022

#### Coursework and Evaluation

##### "0900" Level Courses

Credit will not be given for "0900" courses.

##### University Mathematics and Written English Requirement

Students must satisfy the Written English requirement and Mathematics requirement prior to admission.

##### Prerequisite Deficiency

Students who enroll in courses provisionally pending satisfactory completion of pre- or co-requisites must, if unsuccessful, withdraw or amend their registration accordingly. The College of Nursing reserves the right to not send reminders of the requirement to withdraw.

##### Challenge for Credit

Students wishing to challenge a course for credit should contact a student advisor.

**Supplemental Examinations or Tests**

The College of Nursing does not permit supplemental examinations or tests.

**Academic Progression**

Students are required to obtain a minimum of “C” grade in every letter grade course, a “Pass” in every Pass/Fail course, and a Degree GPA of 2.5 to graduate. A final grade of “D” or “F” in a letter grade course or “Fail” in a Pass/Fail course taken to complete the degree requirement is considered a failure.

Academic assessments will be based on student performance in letter grade courses. The Term Grade Point Average (TGPA) will be calculated at the conclusion of each academic term in which the student has completed a minimum of 6 credit hours. Students who do not complete the minimum credit hours in one term will be assessed as “too few credit hours to assess.” These students will be assessed over two terms or more at the end of the term in which they reach the threshold of 6 credit hours.

The final term of the program (NURS 4580) will be excluded from assessment providing the student meets graduation requirements. Students are required to have a minimum Degree GPA of 2.5 to be eligible for graduation. Please refer to the website ([http://umanitoba.ca/faculties/nursing/undergrad/assessment\\_policy.html](http://umanitoba.ca/faculties/nursing/undergrad/assessment_policy.html)) for details and procedures.

**Good Academic Standing**

A student with a TGPA of 2.5 or higher will be assessed “Faculty Minimum Met.”

**Academic Warning**

The first time a student’s TGPA drops below 2.5, OR the student receives a final grade of “Fail” in a Clinical or Skills course a first time, the student will be placed on Academic Warning.

**Academic Probation**

A formal remediation plan will be mandatory when: The Student’s TGPA is below 2.5 the second time OR, the student received a grade of “Fail” in a Clinical or Skills course and the student has previously had a TGPA below 2.5 in one previous term, OR the student’s TGPA drops below 2.5 and the student has a “Fail” in a Clinical or Skills course a previous term.

**Academic Suspension**

A student will be placed on Suspension if: The student’s TGPA drops below 2.5 a third time OR, the student receives a grade of “Fail” in a Clinical or Skills course and has previously had a TGPA below 2.5 in 2 previous terms, OR the student’s TGPA drops below 2.5 for a second time and the student has a “Fail” in a Clinical or Skills course an additional previous term. The third time that a student’s TGPA drops below 2.5, the student will be placed on Suspension.

Students who are suspended shall be ineligible to take any courses at the University of Manitoba or on a letter of permission for a minimum of eight and a maximum of 15 calendar months.

A student may apply for reinstatement on academic probation after the term of suspension has been completed.

**Required to Withdraw**

Students who have been permitted to return from Suspension and whose TGPA drops below 2.5 or receives a Grade of Fail in a Clinical or Skills course a fourth time will be Required to Withdraw. Students who are

Required to Withdraw are ineligible for re-admission to the College of Nursing.

**Dean’s Honour List**

The Dean’s Honour list will be determined after each term of study. Students who achieve a minimum Term GPA of 3.75, and who are registered for a minimum of 12 credit hours will be placed on the Dean’s Honour List. Students who complete a course on a Letter of Permission may request to have these courses included in the assessment for Dean’s Honour List. Students with a grade of D, F, or “Fail” in that term will not be eligible for Dean’s Honour List.

**Degree with Distinction**

Students who achieve a Degree GPA of 3.8 and above based on the last 68 credit hours of course work, including Pass/Fail courses, will be eligible for a Degree with Distinction. Students with a grade of D, F, or “Fail” in the last 68 credit hours will not be eligible.

**Voluntary Withdrawal**

Students are allowed only one voluntary withdrawal per Nursing course in the College of Nursing.

Students who voluntarily withdraw from a Nursing course a subsequent time will have their withdrawal reversed and will be expected to complete the course. Students planning to withdraw from any course are advised to speak with a student advisor regarding the implications of this decision. Any financial implications will be the responsibility of the student.

**Attendance**

Regular attendance at class is expected of all students in all courses. Attendance in on-line courses will be interpreted as regular and consistent participation in the course.

Attendance in the clinical practice/laboratory portions of Nursing courses is mandatory to enable the student to satisfy the evaluative criteria of the theoretical and practical components of courses. Students absent from class or practice due to illness may be required to present a certificate of illness. This certificate must be signed by a recognized health care provider. Absence for compassionate reasons is considered on an individual basis. Where absence is involved, make-up time may be required.

A course leader may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by faculty regulations.

**Debarment Policy**

A student may be debarred from class, clinical practice, laboratories, and examinations by action of the Associate Dean, Undergraduate Programs for persistent non-attendance, unsafe clinical practice, and/or failure to produce assignments to the satisfaction of the instructor. Once the debarment process has been initiated, the student will not be able to voluntarily withdraw from the course that is presently under investigation. Students so debarred will have failed that course.

**Failures in Nursing Courses**

Students will be permitted to repeat a nursing course only once following a failure. Withdrawal from the program will be required following a second failure in the same nursing course or any two clinical courses. Students who fail a Nursing course twice and are required to withdraw from the College of Nursing are ineligible for re-admission to the College of Nursing.

### Clinical Absence

Bachelor of Nursing Program students returning following one year or more absence from clinical courses must complete a mandatory demonstration of psychomotor skills competency in the skills lab. Competency must be demonstrated prior to clinical attendance. Students should consult with a student advisor for instructions. Testing must be completed prior to July 1 (Fall Term), December 1 (Winter Term), or April 1 (Summer Term).

### Failures in Clinical (Pass/Fail) Courses

Students who fail a clinical course will be required to accept a supportive learning contract prior to being given permission to register in another clinical course.

### Failures in Clinical Course Rotations

Students who fail a rotation of a clinical course in which there are multiple rotations will be debarred from the course immediately following that rotation and will receive a final grade of "Fail". These students will not be permitted to voluntarily withdraw from the course following receipt of the failed grade.

### Unsafe Clinical Practice Policy

The debarment policy will be invoked when the student demonstrated unsafe clinical practice. Unsafe clinical practice involves actions or behaviours which result in adverse effects or the risk of adverse effects to the health and well-being (psychological or physical) of the client, family, staff, faculty, or other students. Unsafe clinical practice is an occurrence, or a pattern of behaviour involving unacceptable risk.

### Clinical Practice

Students enrolled in nursing courses with clinical practice components may not register for any other course during those designated clinical days. Nursing clinical practice may be scheduled during the morning, afternoon or evening. Weekends are also used for some sections in clinical courses.

All students must be registered in all clinical courses for both terms by the specified deadline. Failure to register by this date may prevent accommodation in a clinical course.

Transportation costs to clinical practice settings are the responsibility of the student.

Every effort will be made to accommodate eligible students who register for clinical courses during the initial registration period. However, spaces in clinical courses are dependent upon the availability of clinical sites, which are determined by health care agencies and the availability of clinical teachers. Therefore, the College cannot guarantee that all students who registered for the course can be accommodated.

### Clinical Agency Requirements

The College of Nursing has contractual arrangements with the agencies in which students are placed for clinical practice. The contracts set out specific expectations regarding the preparation of students prior to their placement in any clinical site and their fitness to practice.

The College of Nursing assists the student to complete the following requirements and further information about how these requirements are met will be provided during Year 2 orientation or during NURS 0500.

#### 1. **The Personal Health Information Act (PHIA) Training**

PHIA cards are required for clinical practice and will be checked at clinical sites

#### 2. **Electronic Patient Record Training**

The following requirements are the responsibility of the student and must be completed independently, according to deadlines established by the College of Nursing. For newly admitted students, instructions about how to fulfill these requirements is set out in Admission Requirements.

#### 3. **Immunizations**

Once admitted to the College of Nursing, students are required to maintain an up-to-date immunization status. Deadlines for completion of required vaccines will be established for individual students as needed. Students should keep a copy of their immunization records and retrieve their immunization records from their files upon graduation.

#### *Penalty for Non-Compliance with Immunization Policy*

Returning students who do not comply with the deadlines for completion of their immunizations, will be placed on hold status, which blocks the student from the registration system. Students on hold will be permitted to register after all documentation has been received, but may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program. Hold status also prevents receipt of refunds or histories/transcripts from the Registrar's Office, attending clinical practice, and graduation.

#### 4. **Mandatory Annual Influenza Vaccination**

All undergraduate students in the College of Nursing are required to obtain an annual influenza vaccination and submit documentation confirming the vaccination by the published deadline.

Students who do not submit documentation of influenza vaccination by the published deadline may not participate in clinical practice courses.

#### 5. **Criminal Record Check**

Some clinical practice sites require that students complete a current or additional Criminal Record Check prior to the first clinical practice day.

Prior to starting Year 4 Term 2 of the Bachelor of Nursing Program, all students must complete a current Criminal Record Check (deadline of July 15 for Fall Term, November 15 for Winter Term, and March 15 for Summer Term).

Students charged with or convicted of a criminal offence are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Failure to report a criminal offence may result in dismissal from the program. Criminal offences will be reviewed by the College of Nursing Professional Unsuitability Committee for the implications of the conviction in view of the professional mandate to protect the public.

#### 6. **Child Abuse Registry**

Some clinical practice sites require that students complete a current or additional Child Abuse Registry check prior to the first clinical practice day.

Prior to starting Year 4 Term 2 of the Bachelor of Nursing Program, all students must complete a current Child Abuse Registry check (deadline of July 15 for Fall Term, November 15 for Winter Term, and March 15 for Summer Term).

Students listed on the Child Abuse Registry are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. A listing on the Child Abuse Registry or failure to report the listing will result in dismissal from the program.

#### 7. Adult Abuse Registry

Some clinical practice sites require that students complete a current or additional Adult Abuse Registry check prior to the first clinical practice day.

Prior to starting Year 4 Term 2 of the Bachelor of Nursing Program, all students must complete a current Adult Abuse Registry check (deadline of July 15 for Fall Term, November 15 for Winter Term, and March 15 for Summer Term).

Students listed on the Adult Abuse Registry are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing.

#### 8. Cardiopulmonary Resuscitation Certification (CPR)

All students are required to obtain certification in CPR at the Health Care Provider Level (Basic Life Support or BLS). Certification is to be done no earlier than April 1st and must be submitted by June 1st. Returning students, including those certified at the Instructor level, must recertify each year to ensure that their certification is valid for the entire year. Proof of re-certification must be submitted by June 1st annually to the Student Services Assistant or designate according to a deadline established by the College of Nursing.

##### *Penalty for Non-Compliance with CPR Policy*

Returning students who do not comply with the deadlines for submission of the CPR re-certification, will be placed on hold status, which blocks the student from the registration system. Students on hold will be permitted to register after all documentation has been received, but may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program. Hold status also prevents receipt of refunds or histories/transcripts from the Registrar's Office, attending clinical practice and graduation.

#### 9. Respirator Mask Fit Testing

Students in the Bachelor of Nursing Program may be required to complete mask fit testing as part of their clinical placement(s). Mask fit testing will occur on an as-needed basis only, should the student be placed on a unit or in a setting where an N95 mask is required for patient care, and as determined by the clinical course leader and Director of Clinical Education.

##### **Attire for Clinical Practice**

All students are required to wear uniforms, name tags and crests during clinical courses, unless given specific instructions not to do so by the agency in which they are placed for clinical practice.

##### **Professional Unsuitability By-Law**

The Senate of the University has approved a by-law granting authority to the College to require a student to withdraw for reasons of professional unsuitability. A student may be required to withdraw from the College when, at any time, the College Council, through the Professional Unsuitability By-Law, believes the student to be unsuited for the profession of nursing, on general considerations of scholarship, professional fitness or professional conduct.

Copies of this by-law may be obtained from the website. (<https://umanitoba.ca/faculties/nursing/media/Professional-Unsuitability-By-Law.pdf>)

##### **Disciplinary Appeal**

Until the final disposition of a disciplinary appeal, students in the Bachelor of Nursing Program will not be permitted to attend clinical practice or the nursing skills laboratory. At the discretion of the Associate Dean, Undergraduate Programs, College of Nursing, students may be granted permission to attend the lecture component only of a nursing course(s) while awaiting a final disposition of an appeal currently in progress.

The changes identified above are contingent on the President's approval of the increase to the Admission Target.

##### **Regulations for the Baccalaureate Program for Registered Nurses (BPRN)**

Students are obligated to be familiar with all regulations governing their continued progress in the program.

##### **Security of Academic Records**

The University's policies regarding the security of student academic records are found in "University Policies and Procedures (p. 37)" (p. 37).

##### **Registration Status in the Program**

Students admitted to the BPRN must complete a minimum of 3 credit hours of course work in the Fall or Winter term following admission. Admission will be revoked for students who do not complete at least 3 credit hours in their first or second term of study following admission.

Students are expected to maintain contact with the program by registering in at least one nursing course during each consecutive Fall and Winter term while they are enrolled in the Program.

Students who wish to interrupt their studies must apply in writing to the Associate Dean, Undergraduate Programs, for a Leave of Absence. Refer to section on Leave of Absence for further information.

##### **Program Planning**

Students are expected to meet with a Nursing Student Advisor prior to May 15 to plan their program for the upcoming year. Students who do not meet with the Nursing Student Advisor will be placed on hold status, which blocks the student from the registration system and prevents receipt of refunds or histories/transcripts from the Registrar's Office, and graduation.

##### **Leave of Absence**

BPRN students wishing to interrupt their studies must have completed a minimum of 3 credit hours of course work in the College of Nursing in the Fall or Winter term of their admission year. Students must submit a written Leave of Absence request to the Associate Dean, Undergraduate Programs, College of Nursing. Leave of Absence status does not extend the program time limit outlined in the College of Nursing regulations. To maintain a Leave of Absence status at the University of Manitoba, students may not attend any other post-secondary institution during the period in which the Leave of Absence is in effect. See Transfer of Credit (p. 648).

##### **Maximum Years for Completion**

BPRN students have five (5) years to complete the program.

##### **Reinstatement**

Students who have withdrawn from the College of Nursing (interrupted their studies without requesting a Leave of Absence) must submit a

written request for reinstatement to the Associate Dean, Undergraduate Programs. The student advisor will inform the student of the appropriate procedure and advanced standing, if any, that the student may receive.

Note:

1. the student who does not attend another faculty or institution and requests, within five years of voluntary withdrawal, to re-enter the College of Nursing will be advised to forward such a request to the Associate Dean, Undergraduate Programs;
2. the student who requests to return to the College of Nursing more than five years after withdrawal must re-apply;
3. the student who has attended another faculty or an institution following withdrawal from Nursing must re-apply.

See Advanced Standing/Transfer of Credit (p. 647). **Note that the BPRN must be completed within five years, including time on a Leave of Absence.**

### Residence Requirements

Students are required to complete, with the minimum grade of "C" in each course, at least 32 credit hours of University of Manitoba courses. Of these courses, a minimum of 20 credit hours must be from among those offered by the College of Nursing.

### Course Work and Evaluation

#### Supplemental Examinations or Tests

The College of Nursing does not permit supplemental examinations or tests.

#### "0900" Level Courses

Credit will not be given for "0900" courses.

#### Prerequisite Deficiency

Students who enrol in courses provisionally pending satisfactory completion of pre- or co-requisites must, if unsuccessful, withdraw or amend their registration accordingly. The College of Nursing reserves the right to not send reminders of the requirement to withdraw.

#### Challenge for Credit

Students wishing to challenge a course for credit should contact a student advisor.

### Proof of Professional Registration

Verification of registration of returning students will be obtained by the College of Nursing annually from the College of Registered Nurses of Manitoba (CRNM). Students not registered with the College of Registered Nurses of Manitoba and continuing in the program must submit proof annually of active practicing status in the Canadian jurisdiction in which they hold membership.

After admission and at any time prior to completing the program, students with any changes to their active practicing status with the CRNM, or other Canadian jurisdiction in which they hold membership (e.g., conditions placed on a registration or ineligibility for active practicing status), are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Such changes will be reviewed on a case by case basis. Failure to report a change in status may result in disciplinary action.

### Academic Progression

Students will be required to obtain a minimum of "C" grade (2.0) in every course, and a minimum Program GPA of 2.5 in order to graduate. A final

grade of "D" in any course taken to complete the degree requirement is considered a failure and is not accepted by the College.

Students must have a minimum Degree GPA of 2.5 to proceed in the program. For further information, refer to: Academic Probation - Baccalaureate Program for Registered Nurses.

### Dean's Honour List

Students who achieve a minimum Term GPA of 3.5, including courses taken on a Letter of Permission, and who are registered for a minimum of 12 credit hours, will be placed on the Dean's Honour list. The Dean's Honour list will be determined after each term of study.

### Degree with Distinction

Students who obtain a Degree GPA of 3.8 and above in their program of studies will be eligible for a Degree with Distinction.

### Academic Probation

Students will be assessed after the Winter term upon completion of a minimum of 18 credit hours. Students failing to achieve the minimum Degree GPA of 2.5 will be placed on probationary status.

Probationary students will be assessed at the end of the Winter term after completion of a minimum of 15 credit hours. Students failing to achieve the minimum Degree GPA of 2.5 will be placed on academic suspension.

### Academic Suspension

A probationary student who does not achieve the minimum academic standing is required to withdraw from the College of Nursing with the status "academic suspension." While suspended indefinitely, after one year's suspension the student may apply for reinstatement on academic probation.

To request reinstatement following academic suspension, the student should submit a written request before May 1 to the Chair, Student Appeals Committee, College of Nursing.

### Voluntary Withdrawal

Students are allowed only one voluntary withdrawal per nursing course in the College of Nursing.

Students who voluntarily withdraw from a nursing course a subsequent time will have their withdrawal reversed and will be expected to complete the course. Students planning to withdraw from any course are advised to speak with a student advisor regarding the implications of this decision. Any financial implications will be the responsibility of the student.

### Attendance

Regular attendance at class is expected of all students in all courses. Attendance in on-line courses will be interpreted as regular and consistent participation in the course. Attendance in the clinical practice/laboratory portions of nursing courses is mandatory to enable the student to satisfy the evaluative criteria of the theoretical and practical components of courses. Students absent from class or practice due to illness may be required to present a certificate of illness. This certificate must be signed by a recognized health care provider. Absence for compassionate reasons is considered on an individual basis. Where absence is involved, make-up time may be required.

A course leader may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by college regulations.



### Debarment Policy

A student may be debarred from class, clinical practice, laboratories, and examinations by action of the Associate Dean, Undergraduate Programs for persistent non-attendance, unsafe clinical practice, and/or failure to produce assignments to the satisfaction of the instructor. Once the debarment process has been initiated, the student will not be able to voluntarily withdraw from the course that is presently under investigation. Students so debarred will have failed that course.

### Failures in Nursing Courses

Students will be permitted to repeat a nursing course only once following a failure. Withdrawal from the program will be required following a second failure in the same nursing course. Students who fail the same Nursing course twice and are required to withdraw from the College of Nursing are ineligible for re-admission to the College of Nursing.

### Professional Unsuitability By-Law

The Senate of the University has approved a by-law granting authority to the College to require a student to withdraw for reasons of professional unsuitability. A student may be required to withdraw from the College when, at any time, the College Council, through the Professional Unsuitability By-Law, believes the student to be unsuited for the profession of nursing, on general considerations of scholarship, professional fitness or professional conduct.

Copies of this by-law may be obtained from the College of Nursing website. (<https://umanitoba.ca/faculties/nursing/media/Professional-Unsuitability-By-Law.pdf>)

### Clinical Agency Requirements Immunizations

Immunizations are a requirement mandated by the Regional Health Authorities.

New students enrolling in the BPRN must provide proof of current immunization by July 15. Once admitted to the College of Nursing, students are required to maintain an up-to-date immunization status. See Penalty for Non-Compliance (p. 656) of Immunization and CPR section. Students should keep a copy of their immunization records and retrieve their immunization records from their files upon graduation.

### Cardiopulmonary Resuscitation Certification (CPR)

All students must be certified at the Health Care Provider (HCP) Level. Newly admitted students must submit proof of certification to the Student Services Assistant or designate by July 15. Thereafter, registered nurses are to maintain current certification at the required level.

#### *Penalty for Non-Compliance of Immunization and CPR*

Students who do not comply with the deadlines for proof of current CPR and/or immunizations will be placed on hold status, which blocks the student from the registration system. Students on hold status will be permitted to register after all documentation has been received. Hold status also prevents receipt of refunds or histories/transcripts from the Registrar's Office, attending clinical practice and graduation. Students who register after the initial registration period may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program.

### Criminal Record Check/Child Abuse Registry Check/Adult Abuse Registry Check

Students are required to hold active registration with the CRNM which further requires a yearly self-declaration of any criminal charges or convictions. In addition, at any time prior to completing the BPRN (regardless of admission date), students charged with, or convicted of, a

criminal offence or listed on the Child Abuse Registry or the Adult Abuse Registry are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Failure to report a criminal offence may result in dismissal from the program. Criminal offences will be reviewed by the College of Nursing for the implications of the conviction in view of the professional mandate to protect the public. A listing on the Child Abuse Registry or failure to report the listing will result in dismissal. In addition, please note that some clinical practice sites require that students complete a current or additional Criminal Record Check and/or a Child or Adult Abuse Registry check.

### Name Tags

Students are required to wear a University of Manitoba, College of Nursing name tag during clinical/project courses when meeting with patients or clients.

### Regulations for the Bachelor of Midwifery Program

Students are obligated to be familiar with all regulations governing their continued progress in the program.

### Security of Academic Records

The University's policies regarding the security of student academic records are found in the University Policy and Procedures. (p. 47)

### Registration Status in the Program

Students admitted to the Bachelor of Midwifery Program are required to register for a 100% course load in each term of the program. Students who fail to complete course work in the year of admission must reapply.

Students must complete the BMP within 6 years from the time of commencement in the Program. Leaves of absence from the Program will not extend the program completion date for the student. Exceptions to this regulation may be considered on a case by case basis.

### Student Registration with the College of Midwives of Manitoba

Each midwifery student must be registered with the College of Midwives of Manitoba at the end of Term 2, Year 2, in order to be eligible to register in MDFY 2090 in Term 3, Year 2 of the Program. Thereafter, students must register with the College of Midwives of Manitoba annually.

Penalty for Non-Compliance with the Student Registration with the College of Midwives of Manitoba Policy: Students who do not register with the College of Midwives of Manitoba as set out in the policy will be placed on hold.

### Leave of Absence

Students wishing to interrupt their studies must submit a written request for a leave of absence, normally by June 1, to the Associate Dean, Undergraduate Programs, College of Nursing. Later requests may be considered in exceptional circumstances. A leave of absence may normally be granted for a maximum period of one year. Leaves may be granted for maternity, illness, or for compassionate/personal reasons. Poor academic standing is not a valid reason for a leave to be granted. Requests for an extension to the leave of absence or for a subsequent leave of absence must be made in writing and will be subject to approval by the Associate Dean, Undergraduate Programs.

In order to return to the Bachelor of Midwifery Program, students must submit a written request for reinstatement to the Associate Dean, Undergraduate Programs, no later than May 1 of the year of return. Requests for reinstatement will not normally be considered after May 1. Students who do not apply for reinstatement by May 1 will normally be considered as having left the Program, and will be withdrawn from the Program.

Decisions made in response to requests for leaves of absence or reinstatement can be appealed to the College of Nursing Admissions Committee.

Leave of absence status does not extend the program time limit outlined in the Bachelor of Midwifery Program regulations. To maintain leave of absence status, and not be discontinued from the Program, students may not attend any other faculty or institution during the period in which the leave of absence is in effect. Students on a leave of absence will be subject to the same criminal record, child abuse registry, and adult abuse registry policies as students taking courses. At the time of requesting a return to studies, students will be required to provide a current self-declaration of a criminal record, child abuse registry, and adult abuse registry listing.

Students who attend another faculty or institution while on leave, or who have been withdrawn from the Bachelor of Midwifery Program because they were not granted a leave of absence and did not take at least one Midwifery course in Fall or Winter term, must re-apply to the Bachelor of Midwifery Program should they wish to return.

### Residence Requirements

To qualify for graduation from the Bachelor of Midwifery Program, students must complete a minimum of 2 years of study at the University of Manitoba.

### Coursework and Evaluation "0900" Level Courses

Credit will not be given for "0900" courses.

### University of Manitoba Mathematics and Written English Requirement

All students must meet the Written English and Mathematics requirements prior to admission. Students should refer to the General Academic Regulations (p. 118).

### Prerequisite Deficiency

Students who enroll in courses provisionally pending satisfactory completion of pre- or co-requisites must, if unsuccessful, must withdraw or amend their registration accordingly. The Bachelor of Midwifery Program reserves the right to not send reminders of the requirement to withdraw.

### Challenge for Credit

Students wishing to challenge a course for credit should contact a Student Advisor.

### Supplemental Examinations or Tests

The Bachelor of Midwifery Program does not permit supplemental examinations, tests, or assignments.

### Academic Progression

Students are required to obtain a minimum of "C" grade (2.0) in every course, and a Degree GPA of 2.5 in order to graduate. A final grade of "D" in a standard grade course or "Fail" in a Pass/Fail course taken to complete the degree requirement is considered a failure.

Students shall be evaluated at the conclusion of each academic term in which they receive a final grade in a minimum of 6 credit hours of course work. Students who do not complete the minimum credit hours in one term will be assessed on the combined course work over two terms or more when they reach the threshold of 6 credit hours.

The final term of the Bachelor of Midwifery Program will be excluded from assessment providing the student meets graduation requirements.

Students are required to have a minimum Program GPA of 2.5 to be eligible for graduation.

### Good Academic Standing

A student with a TGPA of 2.5 or higher, and no failed courses, will be assessed "Faculty Minimum Met"

### Academic Warning

A student will receive an Academic Warning if:

- the student's TGPA drops below 2.5 a first time, OR
- the student receives a grade of "Fail" a first time

### Academic Probation

A student will be placed on Academic Probation if:

- The student's TGPA drops below 2.5 a second time, OR
- The student received a grade of "Fail" and the student has previously had a TGPA below 2.50 in one previous term, OR
- The student's TGPA drops below 2.50 and the student has a "Fail" in a previous term

A formal remediation plan will be mandatory for students on academic probation

### Academic Suspension

A student will be placed on Suspension if:

- The student's TGPA drops below 2.5 a third time, OR
- The student receives a grade of "Fail" and the student has previously had a TGPA below 2.50 in two previous terms, OR
- The student's TGPA drops below 2.50 for a second time and the student has a "Fail" in an additional previous term

Students who are suspended shall be ineligible to take any courses at the UM; or on a letter of permission for a minimum of eight, and a maximum of 16, calendar months.

A student may apply for reinstatement on academic probation after the term if suspension has been completed.

### Required to Withdraw

Students who have been permitted to return from Suspension and whose TGPA drops below 2.5, or receives a grade of "Fail" will be Required to Withdraw. Students who are Required to Withdraw are ineligible for re-admission to the Bachelor of Midwifery Program.

### Dean's Honour List

The Dean's Honour list will be determined after each term of study. Students who achieve a minimum Term GPA of 3.75, and who are registered for a minimum of 12 credit hours will be placed on the Dean's Honour List. Students who complete a course on a Letter of Permission may request to have these courses included in the assessment for Dean's Honour List. Students with a grade of D, F, or "Fail" in that term will not be eligible for Dean's Honour List.

### Degree with Distinction

Students who achieve a Degree GPA of 3.8 and above based on the last 68 credit hours of course work, including Pass/Fail courses, will be eligible for a Degree with Distinction. Students with a grade of D, F, or "Fail" in the last 68 credit hours will not be eligible.

### Voluntary Withdrawal

Students are permitted only one voluntary withdrawal per required course in the Bachelor of Midwifery Program. Students who voluntarily

withdraw from the same course a second time will have their withdrawal reversed and will be expected to complete the course. Students planning to withdraw from any course are advised to speak with a student advisor regarding the implications of this decision. Any financial implications will be the responsibility of the student.

### Attendance

Attendance at all courses in the BMP is expected of all students. This includes online courses, where attendance will be interpreted as regular and consistent participation in the course. Students absent from class or practice due to illness or a family medical emergency must notify their course leaders and the Program Director as soon as possible.

At the discretion of the Director, Bachelor of Midwifery Program, documentation confirming the reason for the absence may be requested. In the case of an illness, the student may be required to present a certificate of illness signed by a health care provider. Absence for compassionate reasons will be considered on an individual basis by the Director, Bachelor of Midwifery Program.

Students who miss classes for any reason are responsible for taking the initiative to ensure that they have achieved the learning outcomes set out for that class. Where absence involves clinical/clerkship courses, make-up time may be required if it can be arranged.

### Debarment Policy

A student may be debarred from any course or examination in the BMP by action of the Associate Dean, Undergraduate Programs for persistent non-attendance which does not meet the exceptions set out in the attendance policy. Once the debarment process has been initiated, the student will not be able to voluntarily withdraw from the course that is under investigation. Students so debarred will have failed that course.

### Failures in Required Courses

Students in the Bachelor of Midwifery Program will be required to withdraw from the Program following a second failure in the same course (theory or clinical/clerkship) or one failure in any two clinical/clerkship courses. Students who are required to withdraw under this regulation are ineligible for re-admission to the Program.

### Clinical Absence

Refer to section on attendance.

### Failures in Clinical/Clerkship Courses

Students who fail a clinical/clerkship course will be required to accept a supportive learning contract prior to being given permission to register in another clinical/clerkship course.

### Unsafe Clinical Practice Policy

Unsafe clinical practice is defined as an occurrence, or a pattern of behaviour in the clinical setting that creates unacceptable risk to others. It involves actions or behaviours which result in adverse effects or the risk of adverse effects to the psychological or physical health and well-being of the client, family, staff, faculty, or other students.

A student will be debarred from a clinical/clerkship by action of the Associate Dean, Undergraduate Programs if their conduct in clinical practice is assessed as being consistent with the definition of unsafe clinical practice set out in the policy. Once the debarment process has been initiated, the student will not be able to voluntarily withdraw from the course that is under investigation. Students so debarred will have failed that course.

### Clinical Practice

Students enrolled in midwifery clinical/clerkship and tutorial courses may not register for any non-required or elective courses during that term. Students will be required to be available 24 hours per day, including weekends, for clinical/clerkship courses.

Students in the Bachelor of Midwifery Program must accept clinical placements in any location in Manitoba arranged for them by the Program. All costs associated with clinical placements, including, but not limited to transportation, parking, accommodation, and meal costs are the responsibility of the student.

All students must be registered in all clinical courses for both terms by the specified deadline. Failure to register by this date may prevent accommodation in a clinical course. Current deadlines are published on the College of Nursing website.

### Clinical Agency Requirements

The Bachelor of Midwifery Program has contractual arrangements with the agencies in which students are placed for clinical practice. The contracts set out specific expectations regarding the preparation of students prior to their placement in any clinical site and their fitness to practice.

#### 1. Personal Health Information Act (PHIA) TraininG

Students are required to complete a workshop to qualify for the PHIA card prior to their first day in clinical practice. Students must have their PHIA card with them at all times while in clinical practice.

Students who fail to produce their PHIA card while in clinical practice will be required to leave the practice setting until such time as they can produce the card.

#### 2. Non-Violent Crisis Intervention Workshop (NVCI)

Students are required to complete the NVCI workshop prior to their first day of clinical practice.

Students who fail to complete the NVCI workshop will not be able to attend clinical practice.

#### 3. Electronic Patient Record (EPR) Training

Students are required to complete EPR training prior to the first day of clinical practice.

Student who fail to complete the EPR training will not be able to attend clinical practice.

#### 4. Immunizations

Once admitted to the Bachelor of Midwifery Program, students are required to maintain an up-to-date immunization status. Deadlines for completion of required vaccines will be established for individual students as needed. Students should keep a copy of their immunization records and retrieve their immunization records from their files upon graduation.

#### Penalty for Non-Compliance with Immunization Policy

Returning students who do not comply with the deadlines for completion of their immunizations will be placed on hold status, which blocks the student from the registration system. Students on hold will be permitted to register in mid-August after all documentation has been received. Students who register in mid-August may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program. Hold status also prevents receipt of refunds.

or histories/transcripts from the Registrar's Office, attending clinical practice, and graduation.

#### 5. **Mandatory Annual Influenza Vaccination**

All Bachelor of Midwifery Program students are required to obtain an annual influenza vaccination and submit documentation confirming the vaccination by the published deadline.

Students who do not submit documentation of flu vaccination by the published deadline may not participate in clinical practice courses in Winter Term.

#### 6. **Criminal Record Search Certificate**

Some clinical practice sites require that students complete a current or additional Criminal Record Search Certificate prior to the first clinical practice day.

Students charged with or convicted of a criminal offence are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Failure to report a criminal offence may result in dismissal from the program. Criminal offences will be reviewed by the Bachelor of Midwifery Program Professional Unsuitability Committee for the implications of the conviction in view of the professional mandate to protect the public.

#### 7. **Child Abuse Registry**

Students charged with or convicted of child abuse are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Failure to report this information may result in dismissal from the Program. Child abuse charges will be reviewed by the Bachelor of Midwifery Program Professional Unsuitability Committee for the implications in view of the professional mandate to protect the public.

A listing on the Child Abuse Registry or failure to report the listing will result in dismissal from the program

#### 8. **Adult Abuse Registry**

Students charged with or convicted of adult abuse are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Failure to report this information may result in dismissal from the program. The adult abuse charge or conviction will be reviewed by the Bachelor of Midwifery Program Professional Unsuitability Committee for the implications in view of the professional mandate to protect the public

#### 9. **Cardiopulmonary Resuscitation Certification (CPR)**

All students are required to obtain certification in CPR at the Health Care Provider Level. Returning students, including those certified at the Instructor level, must recertify in April/May each year to ensure that their certification is valid for the entire academic year. Proof of re-certification must be submitted annually by June 1 to the Student Services Assistant or designate.

#### **Penalty for Non-Compliance with CPR Policy**

Returning students who do not comply with the deadlines for submission of the CPR re-certification will be placed on hold status, which blocks the student from the registration system. Students on hold will be permitted to register in mid-August after all documentation has been received. Students who register in mid-August may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program. Hold status also prevents receipt of refunds

or histories/transcripts from the Registrar's Office, attending clinical practice and graduation.

#### 10. **Neonatal Resuscitation Certificate (NRP)**

All students are required to obtain certification in neonatal resuscitation annually. Proof of re-certification must be submitted annually by June 1 to the Student Services Assistant or designate.

#### **Penalty for Non-Compliance with the Neonatal Resuscitation Policy**

Returning students who do not comply with the deadline will be placed on hold status, which blocks the student from the registration system. Students on hold will be permitted to register in mid-August after all documentation has been received. Students who register in mid-August may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program. Hold status also prevents receipt of refunds or histories/transcripts from the Registrar's Office, attending clinical practice, and graduation.

#### 11. **Respirator Mask Fit Testing**

Mask-fit test cards are required for clinical practice and will be checked at clinical sites

Students who fail to produce their mask fit card while in clinical practice will be required to leave the practice site until such time as they can produce the card

#### 12. **Emergency Skills Certification**

All students are required to obtain certification in Emergency Skills prior to registration in MDFY 4100: Clerkship and Tutorial in Term 2, Year 4 of the Program. Proof of this certification must be submitted by June 1 to the Student Services Assistant or designate.

#### **Penalty for Non-Compliance with the Emergency Skills Certification Policy**

Returning students who do not comply with the deadline will be placed on hold status, which blocks the student from the registration system. Students on hold will be permitted to register in mid-August after all documentation has been received. Students who register in mid-August may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program. Hold status also prevents receipt of refunds or histories/transcripts from the Registrar's Office, attending clinical practice, and graduation.

#### **Attire for Clinical Practice**

All students are required to wear professional attire and name tags during clinical courses unless given specific instructions not to do so by the agency in which they are placed for clinical practice.

Students may be required to leave their clinical placement at the discretion of their preceptor(s) if they do not adhere to the policy.

#### **Professional Unsuitability By-Law**

The Senate of the University of Manitoba has approved a by-law granting authority to the College to require a student to withdraw for reasons of professional unsuitability. A student may be required to withdraw from the Bachelor of Midwifery Program when, at any time, the College Council, through the Professional Unsuitability By-Law, believes the student to be unsuited for the profession of midwifery, on general conditions of scholarship, professional fitness or professional conduct.

Copies of this by-law may be obtained on the College of Nursing website (<https://umanitoba.ca/faculties/nursing/media/Professional-Unsuitability-By-Law.pdf>).

### Continuance in Clinical Practice Pending the Results of a Disciplinary Appeal

At the discretion of the Associate Dean, Undergraduate Programs, College of Nursing, students may be denied permission to attend clinical/ clerkship courses in which they are registered until the final disposition of a disciplinary appeal is determined.

### Courses Available to Students in Other Faculties

Students registered in faculties other than Nursing may take the following Nursing courses without College permission:

Course	Title	Hours
NURS 2100	Introduction to Family Caregiving Across the Lifespan	3
NURS 2200	Selected Topics in Aging and Health	3
NURS 3330	Women and Health	3
NURS 3400	Men's Health: Concerns, Issues and Myths	3
NURS 4520	Professional Foundations 5: Interprofessional and Collaborative Practice	3

#### Note:

These courses are not intended for first year students.

Inter-Faculty Option in Aging (Bachelor of Nursing only)

Inter-Faculty Option in Aging courses are offered by the following Colleges and Faculties: Agricultural and Food Science; Arts; Kinesiology and Recreation Management; Medicine; Nursing; and Social Work. To complete the Inter-College Option in Aging, students will complete a total of 18 credit hours including each of the following:

Course	Title	Hours
FMLY 2650 or REC 2650	The Social Aspects of Aging	3
or SWRK 2650	The Social Aspects of Aging	
NURS 2610 or KIN 2610	Health and Physical Aspects of Aging	3
	Health and Physical Aspects of Aging	
	12 credit hours of Electives <sup>1,2,3</sup>	12
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> At least three credit hours of professional/discipline-specific applied work on aging within the student's faculty of registration;

<sup>2</sup> An additional nine credit hours in aging electives from the participating faculties. Students can take nine credit hours from their own faculty but are encouraged to select offerings from other faculties. List of eligible elective courses are available from the student advisors.

<sup>3</sup> The Option in Aging elective is NURS 2200

Upon completion of these requirements, the "Option in Aging" comment will be recorded on the student's transcript. Information on the Inter-Faculty Option in Aging is available from a student advisor.

## Baccalaureate Program for Registered Nurses (BPRN)+

### Overview/Entrance Requirements

Effective in Fall 2019, admission intake has been suspended.

The College of Nursing BPRN was developed to recognize and value the knowledge and experience of practicing Registered Nurses. The learner-centred, process curriculum is designed to further the capacity of Registered Nurse practice in an ever-changing and increasingly complex health care system.

The curriculum consists of a minimum of 36 credit hours in Nursing, and 9 credit hours from Arts, Science or a professional faculty (for a total of 45 credit hours).

Students may elect full-time or part-time study. A variety of community settings are utilized for clinical experience. Courses may be offered in late afternoons or evenings, during Summer session and through distance education (correspondence) or internet-based study.

Students graduating with the minimum of 45 credit hours of coursework will be considered on an individual basis for admission to the graduate program in Nursing (Master of Nursing). For further information, contact the College of Nursing, 204-474-7452.

### Special Student Status in Nursing

Students who are not admitted to the BPRN, may be eligible to apply to the College of Nursing as a special student. Once admitted, students may register in University of Manitoba courses. Following are the guidelines for special student status:

- Special Students are allowed to register for a maximum of 15 credit hours.
- Special Students must obtain a minimum of "C" grade in a course in order to transfer credit into the BPRN.
- A nursing course completed as a special student may be accepted subsequently for credit in the BPRN up to five years from the date of completion.

Prior to registering for a nursing course, all special students must obtain written permission from a College of Nursing student advisor and present a photocopy of their current Active Practising Membership with the College of Registered Nurses of Manitoba or other jurisdiction.

Completion of courses as a special student does not guarantee admission into the BPRN. All students must complete the application forms and submit required information by the application deadline for the term in which students are applying, unless otherwise indicated at the time of application.

The College of Nursing will allow Registered Nurses admitted to another faculty at the University of Manitoba or another university to register for a maximum of 15 credit hours of nursing courses prior to being admitted to the College of Nursing. Written permission must be obtained from a student advisor and does not guarantee space in the course.

### Degree Requirements

Note: Nursing electives may not be offered every year.

Course	Title	Hours
<b>Core Courses</b>		
NURS 3430	Seminar in Professional Nursing Foundations <sup>1</sup>	2
STAT 1000	Basic Statistical Analysis 1	3
NURS 3550	Professional Foundations 3: Evidence Informed Practice in the Health Sciences	4
NURS 3220	Community Health Nursing I <sup>2,3</sup>	4
NURS 3520	Professional Foundations 2: Health Education	2
NURS 4210	Independent Study in Nursing	4
NURS 3560	Professional Foundations 4: Law and Ethics in Nursing Practice	3
NURS 4550	Professional Foundations 6: Leadership and Change Management	4
<b>Electives</b>		
Select 10 credit hours in Nursing Electives <sup>4</sup>		10
Select 9 credit hours in Non-Nursing Electives <sup>5</sup>		9
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> NURS 3430 should be taken in the first 12 credit hours of the program. Students who have credit for the previous NURS 3190 may substitute this course for NURS 3430.

<sup>2</sup> Graduates of the DNA program at Red River College are required to substitute a 4 credit hour Nursing clinical course for NURS 3220.

<sup>3</sup> NURS 3360 and NURS 4300 are no longer offered. Students who have previously completed either course within 5 years prior to admission to the College of Nursing may use NURS 3360 in place of NURS 3220 and/or NURS 4300 as a nursing elective.

<sup>4</sup> Nursing electives may be used to customize a student's program. Electives may be used to expand on a number of different areas of nursing or may be used to focus on a particular area of nursing practice.

<sup>5</sup> Of the 9 credit hours of non-Nursing electives, no more than 6 credit hours may be at the 1000 (introductory) level. See section 5.4 for suggestions re: Non-Nursing Electives for the BPRN. Students may not take courses for credit for which it is assumed that the content was covered in the diploma nursing program (i.e., Anatomy, Physiology, Microbiology, Pharmacology, Psychology, Sociology, etc.).

## Nursing Electives

10 credit hours of acceptable Nursing electives are to be chosen from the following list – at least one course chosen must be a 4 credit hour course.

Course	Title	Hours
NURS 2110	Health Assessment of Individuals	3
NURS 2200	Selected Topics in Aging and Health	3
NURS 3200	Nursing of Individuals and Families with Long-Term Illness and Disability	4
NURS 3230	Perspectives on Mental Health Nursing	4
NURS 3330	Women and Health	3
NURS 2510	Client and Context 1: Human Growth & Development	2
NURS 3350	Counselling Skills for Nurses	3
NURS 3390	Nursing in Rural Environments	4
NURS 3400	Men's Health: Concerns, Issues and Myths	3
NURS 4160	Community Health Nursing II	4

NURS 3510	Client and Context 3: Supportive and Palliative Care	3
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In addition, the following courses from the Inter-Faculty Option in Aging are acceptable as Nursing electives:

NURS/KIN 2610	Health and Physical Aspects of Aging	3
SWRK/REC 2650	The Social Aspects of Aging (or IDES 2650 or HMEC 2650)	3

## Clinical Courses and NURS 3200 and NURS 4210 for the BPRN

Review section 3.1 Regulations for All Students which contains information regarding the Personal Health Information Act (PHIA), immunization and CPR regulations, and other information specific to clinical practice.

A clinical project course (normally designated by the fact that it is a 4 credit hour project based course) involves a heavier workload and time commitment than a 3 credit hour course. For most of these courses, clinical placements/assignments will be arranged between the course leader and student at or prior to the start of a term.

NURS 3200, students must contact the course leader at least **three months prior to the start of classes** to state their intention to register for this course and to discuss preference of clinical sites. Placement sites will be arranged as requested by the student on a first-come, first-served basis according to the availability of the agency. Registration in this course is restricted to students who have contacted the course leader.

NURS 4210 The Independent Study in Nursing is designed to provide the learner with an opportunity to synthesize previous learning while working with a high degree of independence. Under the guidance of a faculty advisor, students explore a topic of their choosing and design learning objectives consistent with the purpose of the course. Students are required to contact the course leader at least 8 weeks prior to the start of the course to select a topic and faculty advisor. The choice of topic, the proposed plan for completion of the Independent Study, and the faculty advisor must all be approved by the College of Nursing.

Information sessions are scheduled, normally in April for the Fall session and in October for the Winter session, to familiarize students with the course. Students should check the College's web page, BPRN section, for announcements about dates and times.

If a practice setting is required as part of the student's learning objectives, the student is responsible for negotiating access to the setting and addressing agency and faculty requirements. Be advised that there may be organizations which require contractual arrangements with the student and/or the University of Manitoba prior to permitting the student to enter the practice setting. These arrangements are subject to approval by the College and require pre-planning.

**Note: the prerequisite for this course is 35 credit hours of completed study in the program.**

## Courses Which May be Used as Non-Nursing Electives in the BPRN

Courses may be selected from any faculty or school of the University, subject to faculty/department regulations and subject to the student's meeting any prerequisite requirements. Please refer to Courses Available to Students in Other Faculties (p. 646). Some suggestions follow:

- Faculty of Arts courses - e.g. anthropology, native studies, psychology, sociology, religion
- Asper School of Business (Management) - e.g. courses in business administration, management, organizational behaviour
- Faculty of Kinesiology and Recreation Management
- Faculty of Science - e.g. biology, chemistry, computer science, microbiology, zoology
- Faculty of Social Work - e.g. courses in social welfare policy, communication skills

## Midwifery, B.Mid. Degree Requirements

The program must be done full time.

The courses from any given term must be completed before proceeding to the next term.

Course	Title	Hours
<b>Year 1</b>		
BIOL 1410	Anatomy of the Human Body <sup>1,2</sup>	3
BIOL 1412 or BIOL 2410 <i>and</i> BIOL 2420	Physiology of the Human Body <sup>1,3</sup> or Human Physiology 1 <i>and</i> Human Physiology 2	3
MBIO 1220 or MBIO 3010	Essentials of Microbiology <sup>1</sup> or Mechanisms of Microbial Disease	3
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 <sup>1,4</sup> or Introduction to Statistics and Computing	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>1,5</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>1</sup>	3
INDG 1200 or INDG 1220 <i>and</i> INDG 1240	Indigenous Peoples in Canada <sup>1</sup> or Indigenous Peoples in Canada, Part 1 <i>and</i> Indigenous Peoples in Canada, Part 2	6
Select 3 credit hours in Social Sciences or Humanities <sup>1</sup>		3
Select 3 credit hours of Science elective <sup>1,4</sup>		3
Written English and Math requirements <sup>1,6</sup>		
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
MDFY 2010	Preparation for Professional Midwifery Education and Practice	3
NURS 2522	Client & Context 2: Human Diversity	3
NURS 3550	Professional Foundations 3: Evidence Informed Practice in the Health Sciences	4
MDFY 2440	Human Reproductive Physiology	3
MDFY 2020	Bioscience for Midwives	3
MDFY 2030	Pharmacology for Midwives	3
MDFY 2040	Normal Childbearing Skills	6
MDFY 2090	Normal Childbearing Clinical Practice and Tutorial	12
<b>Hours</b>		<b>37</b>

### Year 3

MDFY 3010	Advanced Clinical Skills I	3
MDFY 3020	Midwifery Clinical Practice and Interprofessional Roles	3
MDFY 3030	Interprofessional Practice I	6
MDFY 3032	Interprofessional Practice II	6
MDFY 3050	Newborn Feeding: Methods and Contemporary Issues	3
MDFY 3060	Professional Issues in Midwifery	3
MDFY 3090	Complex Care I Clinical Practice and Tutorial	12
<b>Hours</b>		<b>36</b>

### Year 4

MDFY 4010	Advanced Clinical Skills II	3
MDFY 4090	Complex Care II Clinical Practice and Tutorial	12
MDFY 4100	Clerkship and Tutorial	12
<b>Hours</b>		<b>27</b>
<b>Total Hours</b>		<b>130</b>

- <sup>1</sup> All courses can be completed in University 1, or an equivalent program, if students do not wish to extend their program of study.
- <sup>2</sup> Equivalent courses offered through the Université de Saint-Boniface may be used to satisfy program requirements.
- <sup>3</sup> If students complete BIOL 2410 and BIOL 2420, the additional 3 credit hours could be used toward the requirement for 3 credit hours of Science Electives.
- <sup>4</sup> Science Prerequisites. Students must meet the current Science prerequisites before registration for Science courses. See the Academic Calendar for the current course prerequisites. It is recommended the above prerequisites have been completed within the last five years.
- <sup>5</sup> Prerequisites for CHEM 1100: [one of Chemistry 40S (50%), CSKL 0100 (P), or the former CHEM 0900 (P)] and [one of Applied Mathematics 40S (50%), Pre-calculus Mathematics 40S (50%), the former Mathematics 40S (300) (50%), or a grade of "C" or better in MSKL 0100].
- <sup>6</sup> Students must meet the University of Manitoba Written English and Mathematics Requirements (p. 118) with a University level course completed within the last 10 years, must be at the 1000 level (or higher) and with a minimum grade of C in each. It is strongly recommended that these courses be completed within the elective credits indicated above.

## Nursing, B.N. Degree Requirements

Non-nursing courses must be completed within 10 years; and nursing courses must be completed within 5 years of admission to the program in order to be eligible for admission and advanced standing (transfer credit).

This program can be done by full-time and part-time study.

**All courses from any given year are to be completed before proceeding to the next year.**

Course	Title	Hours	Year 4	Term 1	Term 2	Term 3
<b>Year 1</b>			<b>Year 4</b>			
<b>University 1 (pre-nursing)</b>			<b>Term 1</b>			
BIOL 1410	Anatomy of the Human Body	3	NURS 4500	Health and Illness 6: Gender and Reproductive Health		3
BIOL 1412	Physiology of the Human Body <sup>1</sup>	3	NURS 4510	Client and Context 4: Family Health		3
or BIOL 2410 <i>and</i> BIOL 2420	or Human Physiology 1 <i>and</i> Human Physiology 2		NURS 4520	Professional Foundations 5: Interprofessional and Collaborative Practice		3
MBIO 1220	Essentials of Microbiology	3	NURS 4530	Nursing Practice 5		4
or MBIO 3010	or Mechanisms of Microbial Disease			<b>Hours</b>		<b>13</b>
Select 9 credit hours in Science Electives <sup>2</sup>		9	<b>Term 2</b>			
Select 12 credit hours in Electives <sup>2,3</sup>		12	NURS 4540	Health and Illness 7: Community and Population Health		5
	<b>Hours</b>	<b>30</b>	NURS 4550	Professional Foundations 6: Leadership and Change Management		4
<b>Year 2</b>			NURS 4560	Professional Foundations 7: Preparation for Nursing Practice 7 <sup>4</sup>		1
<b>Term 1</b>			NURS 4570	Nursing Practice 6		4
NURS 2500	Health and Illness 1: Pathophysiology/Pharmacology/Assessment	6		<b>Hours</b>		<b>14</b>
NURS 2510	Client and Context 1: Human Growth & Development	2	<b>Term 3</b>			
NURS 2518	Health & Illness 2: The Older Client	3	NURS 4580	Nursing Practice 7 <sup>5</sup>		9
NURS 2530	Nursing Skills 1	1		<b>Hours</b>		<b>9</b>
NURS 2520	Professional Foundations 1: Development of Professional Identity	2	<b>Total Hours</b>			
NURS 2540	Nursing Practice 1	2				<b>127</b>
	<b>Hours</b>	<b>16</b>				
<b>Term 2</b>						
NURS 2514	Health and Illness 3: Pathophysiology/Pharmacology/Assessment	6				
NURS 2522	Client & Context 2: Human Diversity	3				
NURS 2532	Nursing Skills 2	1				
NURS 2542	Nursing Practice 2	3				
HNSC 2170	Nutrition for Health Professionals	2				
	<b>Hours</b>	<b>15</b>				
<b>Year 3</b>						
<b>Term 1</b>						
NURS 3510	Client and Context 3: Supportive and Palliative Care	3				
NURS 3512	Health and Illness 4: Acute and Chronic Illness	5				
NURS 3520	Professional Foundations 2: Health Education	2				
NURS 3530	Nursing Skills 3	1				
NURS 3540	Nursing Practice 3	4				
	<b>Hours</b>	<b>15</b>				
<b>Term 2</b>						
NURS 3514	Health and Illness 5: Mental Health and Illness	3				
NURS 3532	Nursing Skills 4	1				
NURS 3542	Nursing Practice 4	4				
NURS 3550	Professional Foundations 3: Evidence Informed Practice in the Health Sciences	4				
NURS 3560	Professional Foundations 4: Law and Ethics in Nursing Practice	3				
	<b>Hours</b>	<b>15</b>				

<sup>1</sup> For students admitted with [BIOL 2410](#) and [BIOL 2420](#), the additional 3 credit hours can be used toward the requirement for 9 credit hours of Science Electives for the requirement for 12 credit hours of Electives.

<sup>2</sup> Students must meet the University of Manitoba Written English and Mathematics requirements with a university-level course completed within the last 10 years, at the 1000 level (or higher), and with a minimum grade of C in each. It is strongly recommended that these courses be completed within the elective credits indicated above.

<sup>3</sup> Any combination of the following courses/subjects for a total of 12 credit hours:

- Social Sciences or Humanities (6-12 cr)
- NURS 2610 or KIN 2610
- FMLY 2650 (or the former HMEC 2650)/REC 2650/SWRK 2650
- NURS 1500

<sup>4</sup> [NURS 4560](#) Preparation for Nursing Practice 7 must be completed in the term just prior to taking [NURS 4580](#). Therefore, students who fail or withdraw from any of the following courses: [NURS 4540](#); [NURS 4550](#); or [NURS 4580](#) must also repeat [NURS 4560](#), even if it was successfully completed, in order that they are taking the course in the term just before [NURS 4580](#).



<sup>5</sup> NURS 4580

All other courses in the curriculum must be successfully completed and the grade posted prior to starting NURS 4580.

Any costs incurred in completing this course are the responsibility of the student. A student's chosen area for completion of practicum experience must be approved by the College of Nursing. The location of the practicum must meet the approval of the University of Manitoba. The location of the practicum is subject to change in the event approval is not received. There may be organizations which require contractual arrangements with the student and/or University of Manitoba prior to permitting the student to enter into the practicum experience. There is no guarantee the University of Manitoba will enter into such contractual arrangements to permit the student to carry out practice at a particular agency or site. In such cases, the student should be prepared to choose an alternate agency or site.

**Reminder: It is the responsibility of the student to ensure that degree requirements are met. It is the responsibility of students to ensure all program requirements have been met before working as a graduate nurse and/or writing the NCLEX to become a Registered Nurse. In order to be eligible to work as a graduate nurse and/or write the NCLEX, students must meet all program requirements and requirements of the College of Registered Nurses of Manitoba.**

# College of Pharmacy

## General Office

**Dean:** Dr. Lalitha Raman-Wilms

**Associate Dean(s):** Dr. Lavern Vercaigne (Academic); Dr. Hope Anderson (Research)

**Campus Address/General Office:** Apotex Centre, 750 McDermot Avenue

**Telephone:** 204 474 9306

**Fax:** 204 789 3744

**Email Address:** pharmacy@umanitoba.ca

**Website:** <http://umanitoba.ca/faculties/pharmacy> (<http://umanitoba.ca/faculties/pharmacy/>)

**Academic Staff:** Please refer to the College website for an Academic Staff listing: [http://umanitoba.ca/faculties/pharmacy/staff/academic\\_staff.html](http://umanitoba.ca/faculties/pharmacy/staff/academic_staff.html)

Pharmacists are specialists in drug therapy and provision of pharmaceutical care. This not only involves the traditional function of preparing and dispensing medications but also includes designing and monitoring drug therapy plans to optimize patient care. The College of Pharmacy has been educating pharmacists for over one hundred years. It has dynamic faculty members characterized by their teaching expertise, research programs and practice partnerships in the health sciences. Members of the College are internationally recognized through their participation in research and various committees and agencies. Their research is funded through a variety of sources including CIHR, NSERC, Research Manitoba, various other government agencies, and the pharmaceutical industry.

The undergraduate pharmacy program is meant to prepare students for entry-level practice in the profession of pharmacy by providing them with a solid foundation in the basic, pharmaceutical and clinical sciences which is applied to the provision of patient care. In addition, the program is designed to provide students with a broad experience in patient care through experiential placements in health orientated settings, hospital and community pharmacies. The experience is further enhanced with an open elective program in the final year of studies.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Pharmacy, B.Sc. (p. 672)	5*	166	
Pharmacy, Pharm.D. (p. 672)	6**	204	

Note: Students who were accepted for the fall 2018 intake are being transitioned into the PharmD program. Their total credit hours at graduation will be 203.

\*This includes one year (30 credit hours) of prerequisite courses

\*\*This includes two years (60 credit hours) of prerequisite courses

## Faculty Academic Regulations

### Admission Requirements

#### Bachelor of Science in Pharmacy

Admissions to the B.Sc. Pharmacy program have been suspended. Please review the admission section for the PharmD program..

#### Doctor of Pharmacy (PharmD)

The following is a summary of the admission requirements. All admission requirements are listed in the Applicant Information Bulletin (<https://>

## Professional Designation

### The College of Pharmacists of Manitoba

Students who are accepted for admission to the College of Pharmacy shall file an application for registration as a student of the College of Pharmacists of Manitoba, prior to the start of classes in September of the year they are admitted. Information will be included in the admission package sent to each student, and can also be obtained from:

The College of Pharmacists of Manitoba  
200 Tache Ave.  
Winnipeg, Manitoba R2H 1A7  
Telephone, (204) 233-1411

Failure to complete this requirement will result in students being unable to participate in the Experiential Program.

Full information on the requirements for licensure in the Province of Manitoba is available from the Registrar of The College of Pharmacists of Manitoba. (<https://cphm.ca/professional-registration/register-as-a-pharmacist/>)

If students have a change in their academic status, the College of Pharmacists will be notified by the College of Pharmacy.

### Pharmacy Examining Board of Canada

All applicants for licensure must pass the qualifying examinations of the Pharmacy Examining Board of Canada. Although PEBC has no language proficiency requirements, Provincial Regulatory Authorities do require these tests and language proficiency does affect candidates' performance in the Qualifying Examination (Part I and Part II). Effective written and verbal communication skills, at levels satisfactory for a health professional, are essential for practice and for success in taking the PEBC examinations.

## Programs

[umanitoba.ca/explore/programs-of-study/pharmacy-pharmd/#how-to-apply](http://umanitoba.ca/explore/programs-of-study/pharmacy-pharmd/#how-to-apply)) that is available on the university's website.

Minimum 48 credit hours of pre-requisite courses including:

Course	Title	Hours
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics (or CHEM 1300) <sup>1</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (or CHEM 1310) <sup>1</sup>	3
CHEM 1120	Introduction to Chemistry Techniques	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry (or CHEM 2210)	3
CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy (or CHEM 2360)	3

BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	6
BIOL 2410 & BIOL 2420	Human Physiology 1 and Human Physiology 2	6
MBIO 1010	Microbiology I	3
MATH 1500	Introduction to Calculus (OR)	3
	or MATH 1230 Differential Calculus	
STAT 1000	Basic Statistical Analysis 1 (OR)	3
	or STAT 1150 Introduction to Statistics and Computing	
Select 12 credit hours of Humanities/Social Sciences courses <sup>2</sup>		12
<b>Total Hours</b>		<b>48</b>

<sup>1</sup> Applicants who complete CHEM 1300 and CHEM 1310 (6 credit hours) must complete an additional 3 credit hour course (any faculty) to meet the total of 48 credit hours.

<sup>2</sup> Applicants must complete a 3 credit hour course which meets the University's Written English (W) requirement. Can be part of the above requirements.

### Other Requirements

High school prerequisites: Biology 40S, Chemistry 40S and Pre-Calculus Math 40S

Minimum AGPA for consideration: 3.00.

The admission process requires the English CASPER<sup>®</sup> test.

Selection criteria: 75% AGPA, 25% CASPER<sup>®</sup>

Students should be aware that if admitted they must provide a current, official Adult Criminal Record Check, an Adult Abuse Registry Check and a Child Abuse Registry Check. (p. 668) All students enrolled in the College of Pharmacy must be immunized against specific diseases (p. 668).

## College Academic Regulations: Bachelor of Science in Pharmacy Program

The provisions of the General Academic Regulations (p. 118), and the University Policies and Procedures (p. 37), apply to all students. In addition, the College of Pharmacy has regulations and requirements, published below, that apply specifically to its students.

### Scholastic Progress

For course progression in the College of Pharmacy students must achieve a minimum combined fall and winter term GPA of 2.00, and attain the minimum passing grade of "C" in each course.

A student in any of the first three years of the pharmacy program who records no more than two grades of "D" during the academic year, and who achieves a minimum combined fall and winter term GPA of 2.00, may at the discretion of the dean be permitted to apply for a supplementary examination in those courses.

A student in the fourth year of the pharmacy program who records no more than one grade of "D" during the academic year, and who achieves a minimum combined fall and winter term GPA of 2.00, may at the discretion of the dean be permitted to apply for a supplementary examination in that course.

Application forms for supplementary examinations are available in the College of Pharmacy Dean's Office, and the examination is subject to

a prescribed fee. Supplementary exams will normally take place in the following mid-summer examination session each year.

A student who has failed to record a minimum grade of "C" in more than two courses within years one to three of the pharmacy program, or in more than one course in the fourth year of the pharmacy program, or who records a grade of "F" during the academic year at any stage during their program may not be granted supplementary examinations unless the dean by reason of special circumstances applicable to the student's case otherwise decides.

A candidate who has been allowed to sit for a supplementary examination may not be awarded a grade higher than "C" in that course. Grade calculations for any course following supplementary examination will be inclusive of on-course assessment. Grades achieved following supplementary examination will replace those grades originally recorded on the student's academic record.

A student who fails to achieve a passing grade of "C" in one course, following supplementary examination if that option is offered, and who achieves a minimum combined fall and winter term GPA of 2.00, will be required to repeat that course and may at the discretion of the dean be required to repeat all, or a number of courses in that year.

A student whose combined fall and winter term GPA falls below 2.00, or who fails to achieve a minimum passing grade of "C" in two courses, following supplementary examination if that option is offered, and whose combined fall and winter term GPA remains above 1.75, will be considered to have failed that year, and will be required to repeat all subjects in the following academic year.

The records of all students who fail a year, and the disposition of the cases, shall be reported to College Council for information, but not for debate. Students who have cause to disagree with the disposition may file an appeal against the decision.

A student who fails more than one year in the program, or who fails the same year twice, shall be required to withdraw from the Pharmacy program.

A student who fails to achieve a passing grade in more than two courses in the academic session, or whose combined fall and winter term GPA falls below 1.75, or who fails to achieve a passing grade in a repeated year, will be required to withdraw from the Pharmacy program.

### Appeals Concerning Scholastic Progress

Should a student wish to appeal against any decision concerning scholastic progress, the following procedure should be followed:

The problem should be discussed with the Associate Dean (Academic) of Pharmacy, who will supply information about the appeals procedure, academic regulations and related matters.

Students who still wish to proceed with an appeal should consult the office of Student Advocacy ([http://umanitoba.ca/student/resource/student\\_advocacy/](http://umanitoba.ca/student/resource/student_advocacy/)) for advice and assistance, and a letter of appeal must be sent to the dean within 21 days of receiving notification of the decision. The letter should state the nature of the decision being appealed and the alternative that is being requested.

The Dean will respond in writing to notify the appellant of the date and time the student should attend a meeting of the College Appeals Committee.

The Appeals Committee will comprise: the Dean of the College (or designate) as chair; one senior support staff member as secretary; three members of the full-time faculty appointed by the full-time faculty; a representative of the profession appointed by the College of Pharmacists of Manitoba. The chair and senior support staff member are non-voting members.

Appellants have the right to attend the hearing of their appeal and may have a representative to assist them at the appeal hearing. This representative may be the Student Advocate or a fellow student or other full-time member of the university community not receiving payment for appearing, or working for Legal Aid. In addition, if the student wishes, one member of his or her immediate family, and also if desired a lawyer, may be present, but as observers who do not participate. The decision of the Appeals Committee will be conveyed to the student as soon as possible after the hearing.

If the appellant is still dissatisfied they may wish to discuss the issue further with Student Advocacy ([http://umanitoba.ca/student/resource/student\\_advocacy/](http://umanitoba.ca/student/resource/student_advocacy/)). Student appellants should not expect a favourable decision when their appeal is based on grounds related to external factors such as employment, sports, or hobbies.

### Transfer of Credit Earned Elsewhere

The College of Pharmacy will transfer in external grades in a manner that is consistent with the University of Manitoba policy on the transference of external grades. The relevance of courses completed to the student's educational objective at the University of Manitoba and the quality of academic achievement as evidenced by the student's grades will be determining factors in assessing acceptability of credits earned elsewhere. No transfer of credit will be given for courses taken ten years or more prior to the application date. No transfer of credit will be permitted for courses where a "D" grade (or its percentage equivalent) has been awarded.

### Residence Requirements

A minimum of two years attendance at the university within the College is required for the Bachelor of Science in Pharmacy, except with the permission of the College.

### Attendance at Class

Regular attendance is required of all students in all courses. Students who are absent from class for a period of three days or more due to illness must present a certificate from a physician to the Dean's Office upon their return. An instructor may initiate procedures to debar a student from attending classes and from final examinations where unexcused absences exceed three continuous sessions. Students must obtain prior approval from the Dean for an absence exceeding one day for reasons other than illness.

### Voluntary Withdrawals

Any student seeking to withdraw from a portion of, or all of their courses must provide written notification to the Dean's Office of the reasons for this request. Re-entry to Pharmacy by students who voluntarily withdraw, will be dependent on the availability of space and external rotation facilities. Any student who has voluntarily withdrawn from a portion of, or all of their courses in Pharmacy on more than one occasion will not be permitted re-entry into the program. Withdrawals for medical or compassionate reasons will not contribute toward this maximum. Students who, for medical reasons, withdraw from the program may not re-register until they have established, through proper medical consultation, their fitness to resume studies.

### Deferred Final Examinations

Students may file an application for a deferred final examination with the Dean for reasons of illness or other disability, or for compassionate reasons, setting out the reasons for the deferral. The application must normally be filed within forty-eight (48) hours of the scheduled date of the missed examination or, in a case where more than one examination was missed, within forty-eight (48) hours of the scheduled date of the last examination missed. The application must be accompanied by a medical certificate or otherwise appropriate documentation certifying the reason for the deferral, the inability of the student to write the examination at the regular scheduled time and, where possible, indicating the period of incapacity. Based on the evidence provided, the Dean shall decide whether the application is approved. Students who, for medical reasons receive deferred examination privileges for all final examination series may not re-register until they have established, through proper medical consultation, their fitness to resume studies.

Students may request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:

1. participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event
2. religious obligations; or
3. a medical condition.

Students requesting a deferred examination due to a known condition as listed above must file an application normally twenty (20) working days prior to the day of the scheduled examination.

Any student requesting deferred examination(s) will be required to sign an undertaking that the student has not discussed, reviewed, had access to, or otherwise become aware of the contents of the deferred examination except as expressly authorized by the instructor or professor for the course in which the deferred examination is being undertaken.

### Incompletes

A student who is unable to complete the term work prescribed in a course may apply to the instructor prior to the end of lectures for consideration of a grade classification of 'Incomplete.' Should an 'incomplete' be granted the student will still be required to write the final examination, if one is scheduled for the course, and a temporary grade of 'IF' will be submitted. In addition to the grade, the recommendation for an 'incomplete' should indicate the reason(s) for consideration being given, a description of the outstanding work to be completed, and the date by which the work must be submitted. If a final grade is not reported by the above maximum extension deadlines, the letter 'I' will be dropped and the grade of 'F' will remain as awarded, unless where specific circumstances warrant, the Associate Dean (Academic) extends the date by which an Incomplete must be cleared. Instructors must formally request such an extension prior to the elapse of the maximum deadline date. In addition, the Registrar's Office (<https://umanitoba.ca/registrar/>) must be notified of the extension.

### Dean's Honour List

Eligible students who achieve a combined fall and winter sessional GPA of 4.00 or higher will be placed on the Dean's Honour List. Eligible students must have completed a minimum of 12.5 credit hours in each of the fall and winter terms. (Exception: Fourth year students must complete a minimum of 10 credit hours during the winter term). The Dean's Honour List designation is not applied until the end of the winter term.

### Academic Self-Declaration

All students accepted into the College of Pharmacy will be required to complete a Self-Declaration of Records Form which declares current or previous academic suspensions and disciplinary actions. The disclosure contained therein must be satisfactory to the College of Pharmacy.

### Experiential Training (Structured Practical Experiential Program [SPEP])

Approved Placement Sites are limited, and the University cannot warrant that it will be able to find sufficient suitable placement sites in convenient locations, in a timely manner or at all. Students are responsible for all costs associated with SPEP, including travel and living expenses where placements are outside Winnipeg.

Under The Workers Compensation Act (Manitoba), students of the University of Manitoba who are engaged in a field practicum as a required part of their program are generally covered for injuries sustained in the course of and arising out of the practice experience. However, where the practicum takes place outside of Manitoba, and the student is not a Manitoba resident, workers compensation coverage may not be extended, based on the provisions of The Workers Compensation Act. However, other insurance coverage may be available to registered students. Students are encouraged to contact the SPEP Coordinator at the earliest opportunity to determine if any such alternative arrangements are possible.

### Academic Honesty

Many courses in the College of Pharmacy require group projects and students should be aware that these are subject to the same rules regarding academic honesty as individual projects. Because of the unique nature of group work, all members of the group should exercise special care to insure that work completed does not violate academic integrity. Should a violation occur, group members will be held jointly accountable unless the violation can be attributed to a specified individual, or group of individuals.

In the College of Pharmacy all suspected cases of academic dishonesty will be passed to the Dean's Office for evaluation.

### Professional Unsuitability By-Law

The Senate has approved a by-law granting authority to the College to require a student to withdraw for reasons of professional unsuitability. Copies of this by-law may be obtained from the College of Pharmacy Dean's Office.

### Completion of the Bachelor Program

The maximum time allowable for completion of the Bachelor of Science, Pharmacy degree is seven years. Students must successfully complete all of the course work associated with a year in the program prior to being allowed to register for courses in the next year. In certain cases, the dean may grant exceptions to this requirement.

## College Academic Regulations: Doctor of Pharmacy (PharmD) Program

### Academic Self-Declaration

All students applying to the College of Pharmacy will be required to complete a Self-Declaration of Records Form which declares current or previous: academic suspensions, disciplinary action, professional misconduct, record of criminal conviction, record on the Child Abuse Registry and record on the Adult Abuse Registry. The disclosure contained therein must be satisfactory to the College of Pharmacy.

### Criminal Record Check, Child Abuse Check and Adult Abuse Check

Many health care agencies where Pharmacy students are placed in a health care setting, including community pharmacies, require a criminal record check, child abuse registry check and adult abuse registry check. As a result of the above requirements, and in keeping with the future requirements of the College of Pharmacists of Manitoba, all applicants offered a position in the College of Pharmacy are required to provide a self-declaration of a Criminal Record, Child Abuse Registry and Adult Abuse Registry listing following provisional admission, and subsequently provide a current, official Criminal Record Search, Child Abuse Registry Check and Adult Abuse Registry Check. All documents must be submitted to the College of Pharmacy Dean's Office by the first day of classes in August of the year they are admitted.

Any applicant's name appearing on the Adult or Child Abuse Registry will be denied admission. A criminal conviction will not necessarily result in denial of admission to the College of Pharmacy. Criminal offences will be reviewed by a sub-committee of the Pharmacy Admissions Committee for the implications of the conviction in view of the regulatory professional mandate to protect the public. Failure to disclose any adult criminal record or listing on the Child Abuse or Adult Abuse Registry will invalidate an application and shall result in the applicant being denied admission, or automatic expulsion from the College of Pharmacy if the applicant has been admitted.

In addition, all undergraduate professional students of the University of Manitoba, College of Pharmacy must be registered with the College of Pharmacists of Manitoba (CPhM). CPhM requires that all graduates of the College of Pharmacy who wish to obtain a license to practice pharmacy in this province, must disclose information about any conviction for an offence under the Criminal Code (Canada), the Controlled Drugs and Substances Act (Canada), or the Food and Drugs Act (Canada) in order to be considered for eligibility for registration with the College of Pharmacists of Manitoba.

The review process conducted by the College of Pharmacy is independent of the review process conducted by the College of Pharmacists of Manitoba.

### Immunization

Maintaining an up-to-date health record is an important responsibility of being a student, and serves to protect the health of vulnerable patients with whom students will be involved, as well as the health of students and their families. In general, immunizations and health screening tests are voluntary procedures; however, required immunizations and testing are also a condition of enrolment within The College of Pharmacy. All students enrolled in the College of Pharmacy must be immunized against the following diseases: diphtheria/tetanus/pertussis, polio, rubella, measles, mumps, chickenpox, Tuberculosis, hepatitis A and B and influenza. Students admitted to first year Pharmacy will be provided with an Immunization package at the time of acceptance into the program. Students have the option to provide their immune status and complete their immunizations with their own healthcare provider or participate in the Faculty of Health Sciences Immunization Program on campus. Students will be required to complete their required immunizations by the end of their first year.

Students will not be able to attend Introductory Pharmacy Practice Experiences or participate in any external outreach activities until all immunization requirements are up-to-date. Students are responsible for updating their immunizations as needed. Completion of the immunization schedule is required for course progression in Pharmacy.

### **CPR/ First Aid Requirements**

All students in the Pharmacy program are required to have valid Standard First Aid and CPR - Basic Life Support training. The Standard First Aid course is valid for 3 years and the CPR (HCP) course is valid for one year. It is the academic and financial responsibility of the student to ensure that current certification in both CPR (HCP) and Standard First Aid is maintained throughout the program and a copy of the current certificate is submitted to the Dean's Office.

### **Mask Fit Testing**

Introductory and Advanced Pharmacy Practice Experiences are subject to certain requirements intended to protect the health and well-being of learners, staff and patients. One such requirement is that learners provide documentation of current (i.e., within 2 years) N95 mask fit testing. Official proof of the mask-fit test must be submitted to the College of Pharmacy Dean's office by April 30th of the second year of the Pharmacy program.

Some learners may be unable to provide the Documentation due to religious reasons, as the N95 mask fit testing requires the absence of facial hair. In such situations, the College will work with the learner and the experiential site to accommodate the learner and make alternate arrangements that comply with human rights laws and policies, bona fide program requirements, and the health and safety requirements of the College and the experiential placement site.

The affected learner must advise the College and the experiential site of the need for alternate arrangements well in advance of the learner's experiential rotation. If adequate notice is not provided, the learner may be reassigned to an area of perceived lower risk (recognizing that zero risk of exposure in the area of reassignment cannot be guaranteed).

In the unlikely event of an outbreak of some infectious entity that requires use of N95 masks more broadly in a facility (such as a viral outbreak or epidemic), learners without the appropriate N95 mask fit (or accepted alternate arrangements) will not be allowed on site. In such a case, the requirements for fulfillment of the experiential program will be reviewed as required and may include delayed completion of the experiential rotation, or change in location.

### **Introductory/ Advanced Pharmacy Practice Experiences (IPPE/ APPE)**

Approved Introductory / Advanced Pharmacy Practice Experiences are limited and the University cannot guarantee that it will be able to find sufficient suitable placement sites in convenient locations for all students, in a timely manner. Students are expected to participate in rural practice experiences. Students are responsible for all costs associated with Pharmacy Practice Experiences, including travel and living expenses where placements are outside Winnipeg.

Under The Workers Compensation Act (Manitoba), students of the University of Manitoba who are engaged in a field practicum as a required part of their program are generally covered for injuries sustained in the course of and arising out of the practice experience. However, where the practicum takes place outside of Manitoba, and the student is not a Manitoba resident, workers compensation coverage may not be extended, based on the provisions of The Workers Compensation Act. However, other insurance coverage may be available to registered students. Students are encouraged to contact the Coordinator of the Pharmacy Practice Experience Program at the earliest opportunity to determine if any such alternative arrangements are possible.

### **Transfer of Credit Earned Elsewhere**

The College of Pharmacy will transfer in external grades in a manner that is consistent with the University of Manitoba policy on the transference of external grades. The relevance of courses completed to the student's educational objective at the University of Manitoba and the quality of academic achievement as evidenced by the student's grades will be determining factors in assessing acceptability of credits earned elsewhere. No transfer of credit will be given for courses taken ten years or more prior to the application date. No transfer of credit will be permitted for courses where a "D" grade (or its percentage equivalent) has been awarded.

### **Scholastic Progress**

The University of Manitoba Academic Calendar and Catalog applies to all students. In addition, the College of Pharmacy has regulations and requirements, published within the Academic Calendar in the College of Pharmacy section and yearly in the College of Pharmacy Student Handbook that apply specifically to its students.

For course progression in the College of Pharmacy students must achieve a minimum combined fall and winter term GPA of 2.00, and attain the minimum passing grade of "C" in each course, except where the course evaluation is in a "pass/fail" format, where "pass" is required, or as otherwise described in the course outline.

A student in Year 1-4 of the pharmacy program who records no more than one grade of "D" during the academic session, and who achieves a minimum combined fall and winter term GPA of 2.00, may at the discretion of the Dean of the College of Pharmacy be permitted to write a supplementary examination in that course.

Supplementary Exams will not be granted if a student records more than one grade of "D" during the academic session within any year or if a student records a grade of "F" during the academic session within any year. No more than two supplemental exams will be offered to any student throughout the Pharmacy program. Supplementary Exams are not available in most courses and are at the discretion of the Dean of the College of Pharmacy. Please refer to the current College of Pharmacy Student Handbook for specific details.

Application forms for supplementary examinations are available in the College of Pharmacy Dean's Office, and the examination is subject to a prescribed fee. Supplementary exams, if granted, will normally take place in mid-summer, following the academic session. Students may not be awarded a grade higher than "C" in a course for which a supplementary exam is written.

The grade achieved following supplementary examination will replace the grade originally recorded on the student's academic record.

A student who fails to achieve a passing grade of "C" in one course, following supplementary examination if that option is offered, and who achieves a minimum combined fall and winter term GPA of 2.00, will be considered to have failed that year, and will be required to repeat that course and may at the discretion of the Dean of the College of Pharmacy be required to repeat all, or a number of courses in the following academic year.

A student who fails to achieve a minimum passing grade of "C" in two courses, and whose combined fall and winter term GPA remains above 1.75, will be considered to have failed that year, and will be required to repeat those courses and may at the discretion of the Dean of the College

of Pharmacy be required to repeat all, or a number of courses in the following academic year.

The records of all students who fail a year, and the disposition of the cases, shall be reported to the Pharmacy College Council for information, but not for debate. Students who have cause to disagree with the disposition may file an appeal against the decision according to University of Manitoba Student policies and procedures.

A student who fails more than one year in the program, or who fails the same year twice, shall be required to withdraw from the Pharmacy program.

A student who fails to achieve a passing grade in more than two courses in the academic session, or whose combined fall and winter term GPA falls below 1.75, or who fails to achieve a passing grade in a repeated year, will be required to withdraw from the Pharmacy program.

### Appeals Concerning Scholastic Progress

Should a student wish to appeal against any decision concerning scholastic progress, the following procedures should be followed:

#### Appeals of Term Work

Term Work refers to anything for which marks or grades are assigned and which have been returned or made available to students prior to the close of the last day of classes. This may include such things as tests, essays, class presentations, class participation, assignments, laboratory and other reports, preceptor evaluations and any other component of a final grade completed and evaluated during the term. Any student who is dissatisfied with a grade on term work has the right to appeal that grade. Students should recognize, however, that term work grade appeals are only upheld when there are good reasons to support the student's request for an elevated grade.

Reasons for submitting a Term Work Grade Appeal may include; miscalculation of marks, misgrading of a paper/exam, application of an evaluation or grading system which was not included in the course outline, and unfair or inequitable processes in determining the final grade.

Procedure:

1. A student may formally appeal a grade received for term work provided that the matter has been discussed with the instructor in the first instance in an attempt to resolve the issue without the need for a formal appeal. If the grade discrepancy cannot be resolved, the student should make an appointment with the Associate Dean (Academic) who will provide information about the appeals procedure, academic regulations and related matters.
2. A formal appeal of the grade(s) for term work may be made on an "Application for Appealing a Grade Given for Term Work" form and is to be submitted to the Cashier's Office with the appropriate fee payment. The time limit for submission of this appeal is ten working days following communication of the grade to the student. Once paid, the form should be submitted to the academic unit offering the course. Subsequent processing of the appeal and communication of the disposition of the appeal is the responsibility of the Associate Dean (Academic) responsible for that academic unit. The result of the appeal will be forwarded in writing to the student and the instructor not later than fifteen working days after the formal appeal has been lodged.
3. Normally the re-evaluation of a grade shall be undertaken by the instructor(s) responsible for the particular course (section) in

consultation with at least one other instructor, in the same or related subject area.

4. The fee charged for each term work grade appeal will be refunded for any grade which is changed (increased) as a result of the appeal.
5. Should a student not be satisfied with the decision, he/she may wish to seek advice from The Office of Student Advocacy, University of Manitoba.

#### Appeals of Course Final Grades

The appeal of a final grade should be discussed with the Associate Dean (Academic) of Pharmacy, who will supply information about the appeals procedure, academic regulations and related matters.

Students who still wish to proceed with an appeal should consult the office of Student Advocacy for advice and assistance, and a letter of appeal must be sent to the Dean of the College of Pharmacy within 21 days of receiving notification of the decision. The letter should state the nature of the decision being appealed and the alternative that is being requested.

The Dean will respond in writing to notify the appellant of the date and time the student should attend a meeting of the College Appeals Committee.

The Appeals Committee will comprise: the Dean of the College of Pharmacy (or designate) as chair; one senior support staff member as secretary; three members of the full-time faculty; and a representative of the Pharmacy profession appointed by the College of Pharmacists of Manitoba. The senior support staff member is a non-voting member. The Chair shall only vote in the event of a tie.

Appellants have the right to attend the hearing of their appeal and may have a representative to assist them at the appeal hearing. This representative may be the Student Advocate or a fellow student or other full-time member of the university community not receiving payment for appearing or working for Legal Aid. In addition, if the student wishes, one member of his or her immediate family, and also if desired a lawyer, may be present, but as observers who do not participate and have no speaking privileges. The decision of the Appeals Committee will be conveyed to the student as soon as possible after the hearing.

If the appellant is still dissatisfied they may wish to discuss the issue further with the office of Student Advocacy. Student appellants should not expect a favorable decision when their appeal is based on grounds related to external factors such as employment, sports, or hobbies, etc.

#### Attendance at Class

Regular attendance is required and expected of all students in all courses. Students who are absent from class for a period of three days or more due to illness must present a certificate from a physician or other suitable documentation determined by the College of Pharmacy to the Dean's Office upon their return. An instructor may initiate procedures to debar a student from attending classes and from final examinations where unexcused absences exceed three continuous sessions. Students must obtain prior approval from the Associate Dean (Academic) for an absence exceeding two days for reasons other than illness.

#### Voluntary Withdrawals

Any student seeking to withdraw from a portion of, or all of their courses must provide written notification to the Dean's Office outlining the reasons for this request. Re-entry to the College of Pharmacy by students who voluntarily withdraw, will be dependent on the availability of space and external rotation facilities. Any student who has voluntarily withdrawn from a portion of, or all of their courses in Pharmacy on

more than one occasion will not be permitted re-entry into the program. Withdrawals for medical or compassionate reasons will not contribute toward this maximum. Students who, for medical reasons, withdraw from the program may not re-register until they have established, through proper medical consultation and documentation, their fitness to resume studies.

Reinstatement following a voluntary withdrawal will be subject to current and satisfactory:

1. Criminal Records, Child Abuse Registry and Adult Abuse Registry Search results;
2. College of Pharmacists (CPhM) Registration;
3. Immunization, Standard First Aid and CPR (HCP) certification;
4. Reinstatement may also be subject to the student signing an undertaking to either or both of the College of Pharmacy and CPhM of certain terms and conditions.

### Deferred Final Examinations

Students may request a deferred final examination from the Dean of the College of Pharmacy for reasons of illness or other disability, for bereavement or for compassionate reasons. The request should typically be communicated before the final exam is written, but must normally be filed within forty-eight (48) hours of the scheduled date of the missed examination or, in a case where more than one examination was missed, within forty-eight (48) hours of the scheduled date of the last examination missed. The application must be accompanied by a medical certificate or other appropriate documentation certifying the reason for the deferral, the inability of the student to write the examination at the regular scheduled time and, where possible, indicating the period of incapacity. Based on the evidence provided, the Dean shall decide whether the application is approved. Students who, for medical reasons receive deferred examination privileges for all final examinations may not reregister until they have established, through proper medical consultation, their fitness to resume studies.

Students may also request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:

1. participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event; or
2. religious observance.

Students requesting a deferred examination due to a known situation as listed above must file an application normally twenty (20) working days prior to the day of the scheduled examination.

Any student requesting deferred examination(s) will be required to sign an undertaking that the student has not discussed, reviewed, had access to, or otherwise become aware of the contents of the deferred examination except as expressly authorized by the instructor or professor for the course in which the deferred examination is being undertaken.

### Incomplete Courses

A student who is unable to complete the term work prescribed in a course may apply to the course instructor 5 working days prior to the end of lectures for consideration of a grade classification of 'incomplete', and a time extension to complete the work. Should an 'incomplete' be granted the student will still be required to write the final examination if one is scheduled for the course. Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the course instructor shall calculate the temporary grade using a zero value for incomplete work. Incomplete final grades

are entered with the grade code and the letter 'I'. In addition to the grade, the recommendation for an 'incomplete' should indicate the reason(s) for consideration being given, a description of the outstanding work to be completed, and the date by which the work must be submitted. If a final grade is not reported by the extension deadline, the letter "I" will be dropped, and the grade will remain as awarded. The student's opportunity to improve the grade will have lapsed, unless where specific circumstances warrant, the Associate Dean (Academic) extends the date by which an incomplete must be cleared.

### Leave of Absence

Any student seeking a leave of absence must submit a written request to The Dean of The College of Pharmacy normally by June 1st. The request for the leave of absence must clearly outline the reasons for the request and the Dean may require further supporting documentation to support the request. The duration of a leave of absence is typically one year and will count towards the maximum number of years to complete the pharmacy program. Students who wish to be reinstated after the leave must contact the Dean's office by May 1st for the upcoming academic year and request reinstatement. At the point of reinstatement for students on leave for an academic year, students must provide a current, official Criminal Record Search, Child Abuse Registry Check and Adult Abuse Registry Check.

Reinstatement following a leave of absence will be subject to current and satisfactory:

1. Criminal Records, Child Abuse Registry and Adult Abuse Registry Search results;
2. CPhM Registration;
3. Immunization, Standard First Aid and CPR (HCP) certification;
4. Reinstatement may also be subject to the student signing an undertaking to either or both of the College of Pharmacy and CPhM of certain terms and conditions.

### Dean's Honour List

Eligible students who achieve a combined fall and winter sessional GPA of 4.00 or higher will be placed on the Dean's Honour List. Eligible students must have completed a minimum of 13 credit hours in each of the fall and winter terms in years 1-3 of the program. Fourth year students' eligibility for the Dean's Honour List will be based on graded courses (i.e. vs pass / fail grading during Advanced Pharmacy Practice Experiences or the Electives program). The Dean's Honour List designation is not applied until the end of the winter term.

### Academic Honesty

Many courses in the College of Pharmacy require group projects and students should be aware that these are subject to the same rules regarding academic honesty as individual projects. Due to the unique nature of group work, all members of the group should exercise special care to insure that work completed does not violate academic integrity. Should a violation occur, group members will be held jointly accountable unless the violation can be attributed to a specified individual, or group of individuals. In the College of Pharmacy, all suspected cases of academic dishonesty will be passed to the Dean's Office for evaluation.

### Liability

The University's insurer, The Canadian Universities Reciprocal Insurance Exchange (CURIE), includes malpractice coverage for pharmacy students, in respect of activities related to their Pharmacy studies, whether conducted on or off campus. The limiting factor is that the students must



be doing the activity in furtherance of their education or training while a registered student of the University of Manitoba.

### Professional Unsuitability By-Law

The Senate has approved a by-law granting authority to the College of Pharmacy to require a student to withdraw for reasons of professional unsuitability.

### Residence Requirements

Students are required to complete all years of the Pharm.D. degree program with the College of Pharmacy, Faculty of Health Sciences, University of Manitoba. Under exceptional circumstances, residence requirements may be altered with permission from the Dean of Pharmacy.

### Completion of the PharmD Program

The maximum time allowable for completion of the Entry to Practice PharmD degree is seven years after admission into the College of Pharmacy. Students must successfully complete all of the course work associated with a year in the program prior to being allowed to register for courses in the next year. In exceptional cases, the Dean of the College of Pharmacy may grant exceptions to this requirement.

## Pharmacy, B.Sc.

### Overview/Entrance Requirements

#### Program and Graduation Requirements

##### Student Responsibility

Students are advised to carefully review the College of Pharmacy chapter of the Undergraduate Calendar to ensure compliance with degree program requirements.

It is the student's responsibility to know all relevant regulations, policies and practices.

Final completion of degree requirements is the responsibility of the student.

The University of Manitoba Registration System is not a degree audit system and the onus is on students to make sure they are selecting courses appropriate to their academic program.

##### Registration Assistance

If you have questions or problems with your registration you can contact the Aurora Student Help Line at (204) 474-9420, or call the College of Pharmacy Dean's Office at (204) 474-9306.

## Degree Requirements

### Course Information by Year: Bachelor of Science in Pharmacy

#### Year 4

Please refer to the Academic Schedule (p. 28) for all important dates (start and end dates for terms, exams, and SPEP blocks).

Course	Title	Hours
PHRM 4230	Pharmacy Practice Management	4
PHRM 4310	Clinical Pharmacy 3	4
PHRM 4450	Toxicology	3
PHRM 4470	Current Topics	3
PHRM 4700	Structural Practical Experiential Program 4	10

PHRM 4800	PHARM ELECTIVES	10
<b>Total Hours</b>		<b>34</b>

**Total Program Credit Hours is 136.**

Note: Students may not obtain any grade lower than a "C" in all required courses.

## Pharmacy, Pharm.D.

### Overview/Entrance Requirements

#### Program and Graduation Requirements

##### Student Responsibility

Students are advised to carefully review the College of Pharmacy chapter of the Undergraduate Calendar to ensure compliance with degree program requirements.

It is the student's responsibility to know all relevant regulations, policies and practices.

Final completion of degree requirements is the responsibility of the student.

The University of Manitoba Registration System is not a degree audit system and the onus is on students to make sure they are selecting courses appropriate to their academic program.

##### Registration Assistance

If you have questions or problems with your registration you can contact the Aurora Student Help Line at (204) 474-9420, or call the College of Pharmacy Dean's Office at (204) 474-9306.

## Degree Requirements

### Course Information by Year: Doctor of Pharmacy (PharmD)

Course	Title	Hours
<b>Year 1</b>		
ANAT 1030	Human Anatomy	3
PHAC 2100	Pharmacology	6
PHMD 1000	Introduction to Professional Practice	1
PHMD 1002	Applied Pharmacy Practice Lab 1	4
PHMD 1004	Introduction to Pharmacotherapy Literature	1
PHMD 1006	Pharmacy Informatics	1
PHMD 1008	Medicinal Chemistry	4
PHMD 1010	Applied Pathophysiology	4
PHMD 1012	Extemporaneous Pharmaceutical Compounding	3
PHMD 1014	Clinical Therapeutics 1	3
PHMD 1016	Pharmaceutics	3
PHMD 1040	Service Learning / IPE 1	1
<b>Hours</b>		<b>34</b>
<b>Year 2</b>		
BGEN 2010	Applied Nutrition for Pharmacy Practice	2
PHMD 2000	Drug Delivery	3
PHMD 2004	Critical Appraisal of Pharmacotherapy Literature 1	4

PHMD 2006	Applied Biopharmaceutics and Pharmacokinetics	3
PHMD 2008	Pharmacy Law	1
PHMD 2010	Principles of Biotechnology	2
PHMD 2012	Pharmacogenetics	2
PHMD 2016	Clinical Pharmacokinetics - Pharmacodynamics	3
PHMD 2020	Introductory Pharmacy Practice Experience - Community	4
PHMD 2022	Applied Pharmacy Practice Lab 2-1	2
PHMD 2024	Applied Pharmacy Practice Lab 2-2	2
PHMD 2026	Clinical Therapeutics 2-1	4
PHMD 2028	Clinical Therapeutics 2-2	4
PHMD 2030	Introductory Pharmacy Practice Experience - Hospital	4
PHMD 2040	Service Learning / IPE 2	1
<b>Hours</b>		<b>41</b>
<b>Year 3</b>		
PHMD 3002	Applied Pharmacy Practice Lab 3	4
PHMD 3004	Critical Appraisal of Pharmacotherapy Literature	2
PHMD 3006	Advanced Clinical Therapeutics	6
PHMD 3008	Concepts of Integrative Medicine	2
PHMD 3010	Pharmacy Management	4
PHMD 3012	Applied Professional Practice	3
PHMD 3014	Clinical Therapeutics 3	8
PHMD 3016	Toxicology of Medications and Drugs of Abuse	2
<b>Hours</b>		<b>31</b>
<b>Year 4</b>		
PHMD 4000	Pharmacy Research Project	6
PHMD 4020	Advanced Pharmacy Practice Experience-Community	8
PHMD 4030	Advanced Pharmacy Practice Experience-Hospital	8
PHMD 4040	Advanced Pharmacy Practice Experience-Primary Care	8
PHMD 4060	Advanced Pharmacy Practice Experience-Elective	8
<b>Hours</b>		<b>38</b>
<b>Total Hours</b>		<b>144</b>

# College of Rehabilitation Sciences

## General Office

**Dean:** Dr. Reg Urbanowski

**Head:** Denise Mackey, Department of Respiratory Therapy

**Campus Address/General Office:** R106-771 McDermot Ave., Bannatyne Campus

**Telephone:** 204 789 3897

**Fax:** 204 789 3927

**Email Address:** CORS.RTprogram@umanitoba.ca

**Website:** <https://umanitoba.ca/rehabilitation-sciences/respiratory-therapy> (<https://umanitoba.ca/rehabilitation-sciences/respiratory-therapy/>)

**Academic Staff:** Please refer to the College of Rehabilitation Sciences (CoRS) website at <https://umanitoba.ca/rehabilitation-sciences/faculty-staff#department-of-respiratory-therapy> (<https://umanitoba.ca/rehabilitation-sciences/faculty-staff/#department-of-respiratory-therapy>)

The College of Rehabilitation Sciences also offers Master of Occupational Therapy and Master of Physical Therapy programs. Refer to the U of M Graduate Studies Calendar for further info on these programs.

## Professional Designation

### Bachelor of Respiratory Therapy (B.R.T.)

Students admitted into the program of studies in respiratory therapy should note that while the University of Manitoba, College of

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Respiratory Therapy, B.R.T. (p. 675)	4	136	

Note: B.R.T. is 4 years (University 1 plus 3 years B.R.T.)

## Faculty Academic Regulations

### Admission Requirements

#### Intro Rehabilitation Sciences

The following is a summary of the admission requirements for Respiratory Therapy. Equivalent academic courses completed at the University of Manitoba or recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and the online application can be accessed through the Respiratory Therapy website (<https://www.umanitoba.ca/explore/programs-of-study/respiratory-therapy-brt/>). Info can also be obtained from the Admissions Office (<https://umanitoba.ca/student/admissions/programs/respiratory-therapy.html>), Enrolment Services, 424 University Centre. This information is also posted on the university's website.

#### Course Requirements: Respiratory Therapy

##### Regular Program

Course	Title	Hours
Select one of the following:		6
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1000 & BIOL 1010	Biology: Foundations of Life and Biology: Biological Diversity and Interaction	
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 Introduction to Statistics and Computing	3

Rehabilitation Sciences may admit students to its course of studies and confer the degree of Bachelors of Respiratory Therapy, the right to practice as a Registered Respiratory Therapist within Manitoba and throughout Canada is granted by the appropriate authority of the jurisdiction concerned through a process of licensure. Following graduation from an approved or accredited educational program and passing the credentialing examination as determined by the licensing body for that jurisdiction; a Respiratory Therapist may apply for a license in that Canadian jurisdiction.

To be eligible for employment in Manitoba, graduates must register with the regulatory body in Manitoba known as the Manitoba Association of Registered Respiratory Therapists (MARRT) and meet all requirements for licensure. Regulations are similar in most other provinces in that the students must pass an approved credentialing examination, be registered with the regulatory body in that jurisdiction, and meet all other licensing requirements.

For further information regarding the national credentialing examination and registration for licensure in Manitoba please refer to the website (<https://www.marrt.org>). Students are highly encouraged to become student members of both provincial and national professional associations.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Respiratory Therapy, B.R.T. (p. 675)	4	136	
SOC 1200	Course no longer offered	6	
or			
PSYC 1200	Introduction to Psychology	3	
Select one 3 credit hour course to satisfy the written English requirement		3	
Select 6 credit hours of electives to total 24 credit hours in University 1		6	
<b>Total Hours</b>		<b>24</b>	

#### Other Requirements: Respiratory Therapy

- Minimum GPA required for consideration: 3.0. Minimum GPA required in core courses: 3.0.
- Respiratory Therapy does not require specific high school courses. However, the following high school courses are required to register for the required courses:
  - Math 40S minimum 50% required (Pre-Calculus or Applied Math recommended)
  - If taking BIOL 1020, Biology 40S, and one of Chemistry 40S or Physics 40S minimum 50% required
  - Biology 40S, Chemistry 40S, English 40S, and Physics 30S and/or 40S recommended
- Selection Criteria: 67% Grades and 33% Interview.

#### Degree Completion Program

In addition to the regular degree program in Respiratory Therapy, the College offers a degree completion program. Generally, individuals who have attained a diploma in respiratory therapy from an accredited

program of studies in Canada, who are actively involved in the practice of the profession, and who demonstrate an interest in continuing their studies in this field, will be accepted. The degree completion program requires a minimum of 30 credit hours of study to be determined by the student in consultation with the department head and/or faculty advisor.

## College Academic Regulations

### General

**Limited Access** (see **University Policy and Procedures-Limited Access** section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) **will not affect registration for the 2022-2023 (including Summer Term 2023).**

The provisions of the General Academic Regulations (p. 118), and the University Policies and Procedures (p. 37), apply to all students. In addition, the College of Rehabilitation Sciences has regulations and requirements, published below, that apply specifically to its' students.

Policies with regard to admissions, selection, academic progression of the student, compulsory attendance, examination procedures, supplemental examination procedures, withdrawal dates and other academic requirements are in force and are on file in the general office of the College of Rehabilitation Sciences.

### Health Requirements

Students in Respiratory Therapy are required to provide a health history and immunization record. A student will not be permitted to attend fieldwork/clinical placements until all health, immunization, CPR and mask fit requirements are current.

### Immunizations

Standard Health Record Form Packages are sent to new students in Respiratory Therapy upon acceptance into the program. New students in Respiratory Therapy are required to return forms to their department by the dates published yearly in the Health Record Form Packages. Returning students are required annually to review and update immunizations as necessary.

### Cardiopulmonary Resuscitation Certification

All students (both new and returning) in the Department of Respiratory Therapy are required to obtain Heart and Stroke Foundation of Canada certification in cardiopulmonary resuscitation annually. Certification must be at the Basic Life Support (BLS) for Healthcare Providers. Students in year 1 and 2 of the program will be required to provide proof of certification at the first day of class. Students in year 3 of the program will be required to provide proof of certification before the first day of their clinical placement. For students in all years of the program, proof of certification must not have an issue date prior to the last week in June of the current year. This will ensure that the certification remains current until the end of the clinical education period for each year in the program.

### Mask Fit Certification

Clinical/fieldwork education sites require Respiratory Therapy students to maintain mask fit certification. Information on acquiring this certification is provided to new students with the Health Record Form Packages. All students are required to maintain mask fit certification throughout the program. Mask fit testing cannot be performed successfully over facial hair, as this interferes with sealing of the mask.

### Dean's Honour List

Students carrying a full course load, with a sessional Grade Point Average of 3.7 or higher and have not done resit or supplemental exams, are placed on the Dean's Honour List.

### Attendance

Regular attendance is expected of all students in all courses. Prior permission is required for any anticipated absences. Students absent from class due to illness may be required to present a certificate from a physician. Unexcused absence from an examination may result in a grade of zero for that examination. Make-up examinations may be allowed under special circumstances.

### Criminal Record and Vulnerable Persons Check, Adult Abuse Registry Check and Child Abuse Registry Check

All respiratory therapy students are required to obtain a formal Criminal Record and Vulnerable Persons Check, an Adult Abuse Registry Check, and a formal Child Abuse Registry Check **by the first day of classes of each year of the program.** These records must have been issued within the ninety (90) days previous to that date to ensure that they remain current until the end of the clinical education period for each year of the program. These documents are required for participation in all clinical/fieldwork education activities.

## Respiratory Therapy, B.R.T. Degree Requirements

### Academic Education

Course	Title	Hours
<b>Year 1</b>		
ANAT 1030	Human Anatomy	3
RESP 1400	Introduction to Professional Practice	3
RESP 1410	Health Systems and Respiratory Care	3
RESP 1420	Applied Physiology for Respiratory Therapy	6
RESP 1430	Respiratory Therapeutics 1	6
RESP 1440	Pharmacology	3
RESP 1450	Principles of Mechanical Ventilation	6
RESP 1460	Basic Fieldwork 1	4
<b>Hours</b>		<b>34</b>
<b>Year 2</b>		
REHB 2450	Research Methodology for Medical Rehabilitation	3
RESP 2200	Primary Care in Respiratory Therapy	3
RESP 2210	Pathophysiology	6
RESP 2220	Physical Examination and Health Assessment	3
RESP 2230	Respiratory Therapeutics 2	6
RESP 2240	Clinical Mechanical Ventilation	3
RESP 2250	Ventilator Instrumentation	3
RESP 2260	Cardiopulmonary Diagnostics	3
RESP 2380	Basic Fieldwork 2	4
RESP 2390	Clinical Integration and Simulation	6
<b>Hours</b>		<b>40</b>
<b>Year 3</b>		
RESP 3320	Clinical Education in Pediatric Respiratory Care	3
RESP 3350	Clinical Education in Pulmonary Diagnostics	3
RESP 3360	Clinical Education in Anesthesia	3
RESP 3370	Clinical Education in Community Care	4
RESP 3410	Clinical Education in Critical Care	8

RESP 3420	Clinical Education in Neonatal Care	5
RESP 3430	Clinical Education in General Therapeutics	6
RESP 3440	Current Topics in Respiratory Therapy	6
	<b>Hours</b>	<b>38</b>
	<b>Total Hours</b>	<b>112</b>

Students may not obtain any grade lower than "C" in all required courses.

### **Clinical/Fieldwork Education**

Sixteen hundred (1,600) full-time hours of clinical/fieldwork experience are required. Three hundred and twenty (320) hours of clinical education time is organized into blocks that occur during years one and two of the B.R.T. program. The remaining 1,280 hours of clinical placements may occur in another province and will occur in both urban and rural settings. Students may be required to pay for travel and accommodations for some clinical placements.

# Faculty of Kinesiology and Recreation Management

## General Office

**Dean:** Dr. Douglas Brown

**Associate Dean(s):** (Undergraduate Studies) Dr. Stephen Cornish

**Campus Address/General Office:** 102 Frank Kennedy Building

**Telephone:** (204) 474 9747

**Fax:** (204) 474 7634

**Email Address:** kinrec@umanitoba.ca

**Website:** [umanitoba.ca/kinrec/](http://umanitoba.ca/kinrec/) (<http://umanitoba.ca/kinrec/>)

**Academic Staff:** Please refer to the faculty website at [umanitoba.ca/faculties/kinrec/about/faculty.html](http://umanitoba.ca/faculties/kinrec/about/faculty.html) (<http://umanitoba.ca/faculties/kinrec/about/faculty.html>)

## Program Accreditation - CATA and CCUPEKA

The Faculty of Kinesiology and Recreation Management has two accredited programs. One (Bachelor of Kinesiology) is accredited by CCUPEKA (The Canadian Council of University Physical Education and Kinesiology Administrators) and one (Bachelor of Kinesiology - Athletic Therapy) is accredited by the Canadian Athletic Therapy Association.

## Available Minor

Minor in Recreation Studies (p. 684)

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Athletic Therapy, B.Kin. (p. 680)	4	120	
Kinesiology, B.Kin. (p. 682)	4	120	
Physical Education, B.P.E. (p. 683)	3	102	
Recreation Management and Community Development, B.R.M.C.D. (p. 683)	4	120	
Recreation Studies Minor (p. 684)		18	
Sport, Physical Activity and Recreation in the Community Certificate (SPARC) (p. 685)	1-4	237 Contact Hours	

## Faculty Academic Regulations

### Admission Requirements

#### Admission Information

The following is a summary of the admission requirements for the Faculty of Kinesiology and Recreation Management. All admission requirements, as well as application deadline dates and forms, are included in the Applicant Information Bulletin (<https://umanitoba.ca/explore/programs-of-study/kinesiology-bkin/>) that is available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the University of Manitoba website in January each year.

#### Direct Entry (from High School)

The Faculty of Kinesiology and Recreation Management accepts some of the annual admissions quota into the three degree programs (excludes Athletic Therapy) directly from High School.

In addition to the general U of M admission requirements for high school students, to be considered for direct entry into the Faculty of Kinesiology and Recreation Management you will require a minimum 85% average

## External Minors

Kinesiology and Recreation Management students may choose and declare an external minor offered by the Faculty of Arts, Clayton H. Riddell Faculty of Environment, Earth, and Resources, Faculty of Human Ecology, Faculty of Science, Faculty of Management, Marcel A. Desautels Faculty of Music, or School of Art. Completion of a declared minor is optional and may be achieved through the use of electives in a program. See the applicable faculty and department chapters for the requirements of each minor. Minors must be declared with an Academic Advisor at the Faculty General Office in order to be approved and appear on a student's transcript.

In order to declare the Management Minor from the I. H. Asper School of Business, Faculty of Kinesiology and Recreation Management students must achieve a 3.0 DGPA (or higher). If a student has successfully completed 18 credit hours of course work from the Faculty of Management, and a 2.0 GPA in the Management course work by the time of graduation, the Minor in Management may also be declared upon completion of the degree program.

## Programs

Minors (optional or required) are part of degree programs - for program length, refer to the Years to Completion.

over the following courses, with no less than 60% in each individual course.

#### Kinesiology/Physical Education Admission Requirements (Direct Entry Category 2)

- English 40S
- Applied Mathematics 40S or Pre-Calculus Mathematics 40S
- One of Biology 40S, Chemistry 40S, Physics 40S, or Computer Science 40S
- A fourth 40S course

#### Recreation Management and Community Development Admission Requirements (Direct Entry Category 3)

- English 40S
- Applied Mathematics 40S or Pre-Calculus Mathematics 40S
- A third 40S course
- A fourth 40S course

Please note that due to limited space students may require a higher average than stipulated. Any student applying for Direct Entry admission

to this faculty will automatically be considered for admission to University 1, should they not be granted Direct Entry admission.

### Regular Advanced Entry Admission

(from U1 or another academic program)

The Advanced Entry admission requirements for all degrees include a minimum of 24 credit hours of successfully completed coursework to include the following required courses listed below. In order to complete the degree in the shortest time possible it is recommended that students take the required Year 1 courses before applying to the Faculty. Entering students who have not completed all of the required Year 1 courses must complete them during their program. Academic course work completed from other recognized post-secondary institutions will be considered once evaluated for equivalency.

### Kinesiology/Kinesiology-Athletic Therapy/Physical Education Admission Requirements (Advanced Entry)

Course	Title	Hours
BIOL 1410	Anatomy of the Human Body (minimum grade of C)	3
BIOL 1412	Physiology of the Human Body (minimum grade of C)	3
KPER 1500	Foundations of Physical Education and Kinesiology (minimum grade of C)	3
Select 15 additional credit hours		15
<b>Total Hours</b>		<b>24</b>

### Recreation Management and Community Development Admission Requirements (Advanced Entry)

Course	Title	Hours
24 credit hours completed		24
<b>Total Hours</b>		<b>24</b>

Minimum GPA for admission consideration is 2.0 but admission is competitive.

Note: Effective Fall 2021 admissions intake, students applying for programs requiring BIOL 1412 may present BIOL 2410 and BIOL 2420 (with a minimum average grade C) in lieu of BIOL 1412.

The Faculty of Kinesiology and Recreation Management strives for a student body within its degree programs that is representative of the rich diversity of peoples within the province and to enrich the overall teaching and learning climate. Our Indigenous Achievement and other University of Manitoba priorities are realized through an Individual Consideration admissions category for applicants who identify as the following underrepresented group: Canada Indigenous/ Aboriginal Peoples, Racialized Minorities, Mature Students, ACCESS Program Students, Persons with Disabilities, and those with exceptional circumstances. Students applying under Individual Consideration must have successfully completed at least one year of study (min 24 credit hours) and a minimum AGPA of 2.0.

### Transfer and Second Degree Students

Students admitted to the Faculty of Kinesiology and Recreation Management following the completion of another recognized university degree or coursework may transfer in credit that is deemed equivalent toward the course requirements of a Kinesiology and Recreation Management undergraduate degree. Students are eligible to transfer a maximum of 50 credit hours to the Bachelor of Physical Education degree and a

maximum of 60 credit hours to the Bachelor of Kinesiology and Bachelor of Recreation Management and Community Development programs.

Students who hold a degree and have completed further courses at the University of Manitoba which are applicable to their second degree in the Faculty of Kinesiology and Recreation Management but which were not used for credit toward their first degree may receive additional transfer credit for that work.

Equivalent courses completed at other universities or post-secondary institutions will be considered for admission and transfer credit only if the courses have been taken within the last 10 years.

Students are encouraged to contact an Academic Advisor in the Faculty General Office for information on how to optimize their transfer credit. Course transfer equivalencies will not be processed until after an application and all necessary documents have been submitted.

### Visiting Students

Students who are enrolled and pursuing a degree at another institution may apply to be a visiting student in order to register for courses with the Faculty of Kinesiology and Recreation Management. A Letter of Permission from the home institution granting permission to register for courses from the University of Manitoba is required in order for access to be granted to those courses.

### Faculty Academic Regulations

All students are asked to note that some academic policies and regulations may be subject to change. Please refer to Governance website (<https://umanitoba.ca/governance/governing-documents/>) for updated information.

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

The provisions of the University Policies and Procedures (p. 37) and General Academic Regulations (p. 118) apply to all students. In addition, the Faculty of Kinesiology and Recreation Management has regulations and requirements, published below, that apply specifically to its students.

The Faculty of Kinesiology and Recreation Management strictly adheres to the University of Manitoba Student Discipline By-Law and will enforce these regulations. It is the responsibility of the student to know what constitutes academic dishonesty. Plagiarism or any other form of cheating is subject to academic penalty, which could be as serious as suspension or expulsion from the Faculty or university. Students are encouraged to avoid academic misconduct by learning more about the University of Manitoba regulations at Student Advocacy ([http://umanitoba.ca/student/resource/student\\_advocacy/index.html.html](http://umanitoba.ca/student/resource/student_advocacy/index.html.html)).

### Policy on Minimum Grade in Faculty Required Courses

A minimum grade of "C" is required to pass all faculty required courses within the degree program. Students are permitted to repeat a failed faculty required course and are strongly encouraged to meet with an academic advisor to discuss an academic progression plan.

### Scholastic Standards: Academic Assessment Scholastic Standards

Formal academic assessments are performed following each term for all Faculty of Kinesiology and Recreation Management students who have completed 3 or more credit hours. As a result of this assessment students will be determined to be minimum met, satisfactory, on

probation, suspension warning, or academic suspension for one year. All academic assessments will appear on the student's official transcript.

### Minimum Met

Students must achieve a minimum DGPA of 2.0 at each point of assessment in order to have met the minimum requirements of the Faculty of Kinesiology and Recreation Management. Students who do not achieve a minimum DGPA of 2.0 will be placed on probation.

### Probation

Once placed on probation, a student will be placed on hold and must meet with an academic advisor to review performance and to receive an override in order to register for another term. Students on probation who achieve a minimum term GPA of 2.0 will be assessed as satisfactory. Students who do not achieve a minimum term GPA of 2.0 will be placed on suspension warning.

### Satisfactory

The assessment of satisfactory is used once a student has been placed on probation but has subsequently achieved a minimum term GPA of 2.0. Students with satisfactory standing will be able to register without restrictions. Students who do not maintain a minimum term GPA of 2.0 will be placed on suspension warning.

### Suspension Warning

Once placed on suspension warning, a student must meet with an academic advisor before registering for another term. Students on suspension warning who achieve a minimum term GPA of 2.0 will be assessed as satisfactory. Students who do not achieve a minimum term GPA of 2.0 will be placed on academic suspension.

### Academic Suspension

A student placed on academic suspension in the Faculty of Kinesiology and Recreation Management is not permitted to register for a period of one calendar year. The notation "Academic Suspension for 1 Year" will be recorded on the student's transcript.

Once a student has served a one year suspension, they must contact an academic advisor (p. 679) in order to be reinstated for future registration.

### Dean's Honour List

Students enrolled in 12 credit hours or more who achieve a Term GPA of 3.50 or higher will be placed on the Dean's Honour List. The Dean's Honour List will be calculated after each term (i.e. Fall, Winter, and Summer).

The Dean's Honour List designation will appear on the student's transcript.

### University Gold Medal and Program Medals Gold Medal

The Faculty of Kinesiology and Recreation Management will award the University Gold Medal to the graduating student who:

1. has achieved the highest grade point average of all graduating students (minimum 3.75) on courses constituting the last two years of an eligible program (and including transfer courses in the applicable years); and,
2. has completed at least 80 percent of what is considered to be the normal full course-load in each of the last two years of the eligible program.

### Program Medals

There are two program medals awarded each year in the Faculty of Kinesiology and Recreation Management to the two students with the highest standing (according to the University Gold Medal criteria) in the programs in which the winner of the University Gold Medal in Kinesiology and Recreation Management is not registered (the three programs are Kinesiology, Physical Education, and Recreation Management and Community Development).

### Degree With Distinction

Awarded to students who graduate with a cumulative Degree GPA of 3.8 or higher. The notation of 'Degree with Distinction' will appear on the student's parchment and transcript.

### Attendance and Withdrawal

Students absent from class for three or more days due to illness are required to present a certificate from a physician. Unexcused absence of more than three hours of class time in a theory course or experiential learning course may result in the student being required to withdraw from the course or may result in an "F" grade being assigned.

### Leave of Absence

Students who have not registered for a full academic session will need to reactivate their status by contacting the Faculty General Office and must consult with an Academic Advisor. (p. 679) Students who have been absent from study for more than 5 years or have attended another institution since their last registration (not on a Letter of Permission) will have to re-apply for admission to the university.

### Time Limit for Completion of the Degree

Students admitted to the Bachelor of Kinesiology, Bachelor of Physical Education, or Bachelor of Recreation Management and Community Development degree programs must complete all requirements to graduate within ten years of admission to the program. Students with questions relating to the time limit regulation should consult the Undergraduate Program Administrator.

### Student Academic Appeals

Students who wish to appeal matters concerning their academic status should contact the Faculty of Kinesiology and Recreation Management Associate Dean (Undergraduate Studies). The Faculty has an academic appeals process for students who wish to appeal a policy or decision affecting their program of study.

## Registration Information for All Students

### Faculty Academic Advisors

If you require further information after reading the Undergraduate Calendar, contact the Kinesiology and Recreation Management academic advisors, 8:30 a.m. - 4:30 p.m. Monday - Friday.

**Academic Advisor:** Anjum Carriere

111 Frank Kennedy Centre

**Telephone:** (204) 474 9748

**Advising/Office Assistant:** Chelsey Prokesch

102 Frank Kennedy Centre

**Telephone:** (204) 474 9747

### Faculty Orientation Sessions

All new students admitted to the Faculty must attend an Orientation session in order to be unblocked from registration. Dates will be provided with the letter of acceptance (normally in early July before registration initial access) and on the Faculty website.



At this session students will receive important information regarding their program, registration, and an orientation manual. Upon acceptance into the Faculty, students will be sent an orientation email with instructions on how to access the orientation materials in UM Learn. Students should contact an Academic Advisor to discuss registration and other matters after reviewing the orientation materials and prior to registration initial access.

### Course Sequencing and Prerequisites

Planning the sequence of required courses is essential. Several Faculty courses in all degrees require successful completion of another course in order to register. Some courses may only be offered once per year. Please check current catalogue course descriptions and class schedules in your program to ensure that you achieve what is necessary for efficient course enrolment in future terms.

### Experiential Learning Courses (ELC)

Experiential learning courses (ELCs) provide three credit hours of integrated theory and practice, and include applied activities that are designed to translate theoretical components to hands-on-learning in the gymnasium, dance studio, fitness studio, playing field, outdoor environment or clinic. Students should refer to the course attendance policy (p. 679).

### Courses Requiring an Active Facility Use Pass

In some courses students will be required to activate the student facility use pass in order to gain access into and utilize various learning environments. Students should be prepared to have their pass active within the first week of class in the applicable term. Students report to the Recreation Services Customer Service Desk in Active Living Centre.

### Course Field Work Fees

The following courses will be assessed Field Work Fees upon registration. Fees are viewable in the Aurora Student Class Schedule under Detailed Class Information for each course listed:

- KIN 3320 Advanced Anatomy
- KPER 1500 Foundations of Physical Education and Kinesiology
- PHED 2710 Human Movement Principles
- PHED 2742 Group Fitness and Leadership
- PHED 3102 Indigenous Song and Dance
- PHED 3750 Lifestyle Activities
- PHED 4710 Outdoor Education
- REC 3090 Sustainable Nature-Based Tourism
- REC 3770 Indigenous Perspectives on Land-Based Education
- REC 4720 Wilderness Adventures

### Courses Available to Students in Other Faculties and Schools

Students from other faculties who wish to register for courses with registration restrictions may seek departmental permission by obtaining a form from the Faculty General Office (102 Frank Kennedy Centre) at the end of the initial registration access period of the applicable session. Please check Aurora Student under each course, as several KIN, KPER, PHED, and REC courses may not have any restrictions to students in other programs.

Students who have declared the Recreation Studies Minor may register for additional Recreation Studies courses with the help of their academic advisor in their faculty.

## Interfaculty Option on Aging

An Interfaculty Option in Aging is offered by the following faculties and colleges: Agricultural and Food Sciences, Arts, Kinesiology and Recreation Management, Medicine, Nursing and Social Work.

Students in the Faculty of Kinesiology and Recreation Management can elect to complete the Option in Aging which consists of 18 credit hours of aging-related coursework. All KRM Option in Aging students MUST complete the following two courses (6 credit hours):

Course	Title	Hours
KIN 2610	Health and Physical Aspects of Aging	3
or NURS 2610	Health and Physical Aspects of Aging	
REC 2650	The Social Aspects of Aging	3
or FMLY 2650	The Social Aspects of Aging	
or		
SWRK 2650	The Social Aspects of Aging	
Select one of the following:		3
REC 4250	Leisure and Aging	
KIN 3510	Physical Activity and Aging	
9 credit hours of Electives <sup>1</sup>		9
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Approved age related courses from Kinesiology and Recreation Management or other faculties. A current list of applicable courses is available at the Faculty General Office.

In order to declare the Option in Aging, students must meet with an Academic Advisor once they have successfully completed the two compulsory courses of KIN 2610/ NURS 2610 and REC 2650/ FMLY 2650/ SWRK 2650.

Upon graduation, a student who has met all the requirements will have the concentration added to their transcript indicating they have completed the Option in Aging.

## Athletic Therapy, B.Kin.

### Degree Requirements and Course Selection

It is the student's responsibility to have read the *Undergraduate Academic Calendar* carefully, and to know all relevant university and faculty regulations, policies and practices. Completion of degree requirements is the responsibility of the student. Returning students should contact their advisor if they have any questions concerning their curriculum.

The four degree programs have a base of shared core courses. Shared core courses are intended to ensure students recognize the interconnections across our Faculty and its related fields of practice, and to facilitate the professional education of students.

### Degree Requirements

(Students admitted Year 2 Advanced Entry in September 2018 or later)

To graduate with a four-year Bachelor of Kinesiology – Athletic Therapy degree, a student must have passed the 120 credit hours of the program outlined below and must have achieved a Degree Grade Point Average

(DGPA) of 2.00 with a minimum grade of "C" in all Faculty-required courses.

A maximum of 158 credit hours may be attempted in order to obtain the 120 credit hours required for graduation with the Bachelor of Kinesiology - Athletic Therapy.

Students are expected to progress through the Athletic Therapy program as outlined below. It is strongly recommended that courses be completed in the sequence and year indicated, otherwise an additional year may be required.

Valid CPR (Basic Life Support Provider) and Standard First Aid (Red Cross, St. John's Ambulance) certification is required prior to the start of classes in Year 2 through graduation (if lapsed, students must re-certify). Each year while in the program, Athletic Therapy students must also register as members with both the Manitoba Athletic Therapists Association (MATA) (<https://www.mata.mb.ca/>) and Canadian Athletic Therapists Association (CATA). (<https://athletictherapy.org/en/>)

## Athletic Therapy Practica (<https://athletictherapy.org/en/>)

(KIN 3912, KIN 3914 & KIN 4910)

Students in the Athletic Therapy Program will be required to complete several hours of clinical and field (sports team) experiences on campus and in the community during their degree. These experiences provide opportunities to apply the knowledge and skills students obtain via their educational curriculum, in a practical hands-on manner, and therefore enhance their preparation for the Canadian Athletic Therapy Association (CATA) examinations. Students must successfully complete the previous year's courses and be registered in all of the present year's courses in order to register in each practicum (KIN 3912, KIN 3914 & KIN 4910).

Course	Title	Hours
<b>Year 1</b>		
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
KPER 1200	Physical Activity, Health and Wellness	3
KPER 1500	Foundations of Physical Education and Kinesiology	3
PSYC 1200	Introduction to Psychology	6
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 or Introduction to Statistics and Computing	3
Select 6 credit hours of Faculty of Science Courses from List A		6
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
KIN 2200	Basic Trauma and Life Support	3
KIN 2750	Athletic Therapy Skills	3
KIN 3320	Advanced Human Anatomy	3
KPER 2120	Academic Skills in Kinesiology and Recreation Management	3
KPER 2170	History of Physical Activity and Leisure	3
KPER 2200	Planning Principles	3
KPER 2320	Human Anatomy	3
KPER 2330	Biomechanics	3

KPER 2350	Introduction to Research	3
KPER 2700	Motor Control and Learning	3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
KIN 3160	Pathology and Sport Medicine	3
KIN 3330	Functional Assessment and Restoration A	3
KIN 3332	Functional Assessment and Restoration B	3
KIN 3400	Therapeutic Modalities	3
KIN 3912	Athletic Therapy Practicum	4
KIN 3914	Clinical Block Placement	2
KPER 3100	Inclusive Physical Activity and Leisure	3
KPER 3460	Sociology of Physical Activity and Leisure	3
KPER 3470	Exercise Physiology	3
KPER 3512	Principles of Fitness Training	3
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
KPER 2540	Psychology of Sport and Physical Activity	3
KIN 3510	Physical Activity and Aging	3
KIN 4160	Advanced Pathology and Sport Medicine	3
KIN 4330	Advanced Biomechanics	3
KIN 4400	Therapeutic Exercise Rehabilitation	3
KIN 4910	Athletic Therapy Practicum	6
KPER 4020	Philosophy of Physical Activity and Leisure	3
KPER 4100	Current Issues	3
Select 3 credit hours of Electives		3
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

**Degree Exit Requirement:** Current Basic Life Support Provider CPR and Standard First Aid Certification

### List A: List of Faculty of Science Electives

Course	Title	Hours
ASTR 1810	Introduction to Astronomy: The Magnificent Universe	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1120	Introduction to Chemistry Techniques	3
COMP 1010	Introductory Computer Science 1 (or equivalent)	3
COMP 1020	Introductory Computer Science 2	3
MATH 1240	Elementary Discrete Mathematics (or equivalent)	3
MATH 1300	Vector Geometry and Linear Algebra (or equivalent)	3
MATH 1500	Introduction to Calculus (or equivalent)	3
MATH 1700	Calculus 2 (or equivalent)	3
MBIO 1010	Microbiology I	3
PHYS 1020	General Physics 1 (or equivalent)	3
PHYS 1030	General Physics 2 (or equivalent)	3
STAT 2000	Basic Statistical Analysis 2 (or equivalent)	3

## Kinesiology, B.Kin.

### Degree Requirements and Course Selection

It is the student's responsibility to have read the *Undergraduate Academic Calendar* carefully, and to know all relevant university and faculty regulations, policies and practices. Completion of degree requirements is the responsibility of the student. Returning students should contact their advisor if they have any questions concerning their curriculum.

The four degree programs have a base of shared core courses. Shared core courses are intended to ensure students recognize the interconnections across our Faculty and its related fields of practice, and to facilitate the professional education of students.

### Supervised Fieldwork Experience

(KPER 4630, KPER 4632 and KPER 4634)

The supervised fieldwork experience is a professionally supervised experience that provides the student with the opportunity to apply knowledge gained in academic courses, and gives exposure to a workplace environment in a related field.

Students in the BRMCD program are required to complete a 12 credit hour Supervised Fieldwork Experience in Year 4 of their degree program. BKin students may be eligible to register for a 6 or 12 credit hour course (part or full-time). Students are eligible once they complete 90 credit hours toward the degree and achieve a minimum Degree Grade Point Average of 2.5 or higher at the end of the third year of their degree. Student placements are usually scheduled for 13 weeks (working full-time) during the Fall Term (September through December). Information on the application process, deadlines and course details are available on the Faculty website (<https://umanitoba.ca/kinesiology-recreation-management/>) and at the Faculty General Office.

### Degree Requirements

(Students admitted Direct Entry in September 2017 or later)

To graduate with a four-year Bachelor of Kinesiology degree, a student must have passed the 120 credit hours of the program outlined below and must have achieved a Degree Grade Point Average (DGPA) of 2.00 with a minimum grade of "C" in all Faculty-required courses.

A maximum of 158 credit hours may be attempted in order to obtain the 120 credit hours required for graduation with the Bachelor of Kinesiology degree.

Course	Title	Hours
<b>Year 1</b>		
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
KPER 1200	Physical Activity, Health and Wellness	3
KPER 1500	Foundations of Physical Education and Kinesiology	3
PSYC 1200	Introduction to Psychology	6
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 or Introduction to Statistics and Computing	3
Select 6 credit hours of Faculty of Science Courses from List A		6

Select 3 credit hours of Electives		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
KPER 2120	Academic Skills in Kinesiology and Recreation Management	3
KPER 2170	History of Physical Activity and Leisure	3
KPER 2200	Planning Principles	3
KPER 2320	Human Anatomy	3
KPER 2330	Biomechanics	3
KPER 2350	Introduction to Research	3
KPER 2540	Psychology of Sport and Physical Activity	3
KPER 2700	Motor Control and Learning	3
Select 6 credit hours of Electives		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
KPER 3100	Inclusive Physical Activity and Leisure	3
KPER 3460	Sociology of Physical Activity and Leisure	3
KPER 3470	Exercise Physiology	3
KIN 3510	Physical Activity and Aging	3
KPER 3512	Principles of Fitness Training	3
Select 6 credit hours of Faculty Electives		6
Select 9 credit hours of Electives		9
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
KPER 4020	Philosophy of Physical Activity and Leisure	3
KPER 4100	Current Issues	3
Select 12 credit hours of Advanced Faculty Electives (KIN or KPER at the 3000 or 4000-level)		12
Select 3 credit hours of Faculty Elective		3
Select 9 credit hours of Electives		9
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

### List A: List of Faculty of Science Electives

Course	Title	Hours
ASTR 1810	Introduction to Astronomy: The Magnificent Universe	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
COMP 1010	Introductory Computer Science 1 (or equivalent)	3
CHEM 1120	Introduction to Chemistry Techniques	3
COMP 1020	Introductory Computer Science 2	3
MATH 1240	Elementary Discrete Mathematics (or equivalent)	3
MATH 1300	Vector Geometry and Linear Algebra (or equivalent)	3
MATH 1500	Introduction to Calculus (or equivalent)	3
MATH 1700	Calculus 2 (or equivalent)	3
MBIO 1010	Microbiology I	3
PHYS 1020	General Physics 1 (or equivalent)	3
PHYS 1030	General Physics 2 (or equivalent)	3
STAT 2000	Basic Statistical Analysis 2 (or equivalent)	3

## Physical Education, B.P.E.

### Degree Requirements and Course Selection

It is the student's responsibility to have read the *Undergraduate Academic Calendar* carefully, and to know all relevant university and faculty regulations, policies and practices. Completion of degree requirements is the responsibility of the student. Returning students should contact their advisor if they have any questions concerning their curriculum.

The four degree programs have a base of shared core courses. Shared core courses are intended to ensure students recognize the interconnections across our Faculty and its related fields of practice, and to facilitate the professional education of students.

### Degree Requirements

(Students admitted Year 1 Direct Entry in September 2017 or later)

To graduate with a three-year Bachelor of Physical Education degree, a student must have passed the 102 credit hours of the program outlined below and must have achieved a Degree Grade Point Average (DGPA) of 2.00 with a minimum grade of "C" in all Faculty-required courses.

A maximum of 132 credit hours may be attempted in order to obtain the 102 credit hours required for graduation with the Bachelor of Physical Education degree.

Course	Title	Hours
<b>Year 1</b>		
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
ENGL 1200	Representative Literary Works (or 1000-level equivalent)	6
KPER 1200	Physical Activity, Health and Wellness	3
KPER 1500	Foundations of Physical Education and Kinesiology	3
M Requirement	MATH or STAT Course	3
Select 9 credit hours of Electives/Teaching Minor		9
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
KPER 2120	Academic Skills in Kinesiology and Recreation Management	3
KPER 2170	History of Physical Activity and Leisure	3
KPER 2200	Planning Principles	3
KPER 2320	Human Anatomy	3
KPER 2330	Biomechanics	3
KPER 2540	Psychology of Sport and Physical Activity	3
KPER 2700	Motor Control and Learning	3
PHED 2442	Health Education	3
PHED 2710	Human Movement Principles	3
PHED 2742	Group Fitness and Leadership	3
Select 6 credit hours of Electives/Teaching Minor		6
<b>Hours</b>		<b>36</b>
<b>Year 3</b>		
KPER 3100	Inclusive Physical Activity and Leisure	3
KPER 3460	Sociology of Physical Activity and Leisure	3

KPER 3470	Exercise Physiology	3
KPER 3512	Principles of Fitness Training	3
KPER 3550	Growth and Motor Development	3
PHED 3122	Developmental Games and Activities	3
PHED 3362	Culturally Relevant Pedagogies	3
PHED 3722	Coaching Theory and Practice	3
PHED 3732	Dance and Rhythmic Activities	3
Select 9 credit hours of Electives/Teaching Minor		9
<b>Hours</b>		<b>36</b>
<b>Total Hours</b>		<b>102</b>

**Note:** Students who intend to apply for admission to the Faculty of Education after completing their BPE degree should review the information in the current Undergraduate Academic Calendar and consult with the Faculty of Education to ensure they are selecting an appropriate teachable minor and courses for their choice of the Early, Middle or Senior Years stream.

## Recreation Management and Community Development, B.R.M.C.D.

### Degree Requirements and Course Selection

It is the student's responsibility to have read the *Undergraduate Academic Calendar* carefully, and to know all relevant university and faculty regulations, policies and practices. Completion of degree requirements is the responsibility of the student. Returning students should contact their advisor if they have any questions concerning their curriculum.

The four degree programs have a base of shared core courses. Shared core courses are intended to ensure students recognize the interconnections across our Faculty and its related fields of practice, and to facilitate the professional education of students.

### Supervised Fieldwork Experience

(KPER 4630, KPER 4632 and KPER 4634)

The supervised fieldwork experience is a professionally supervised experience that provides the student with the opportunity to apply knowledge gained in academic courses, and gives exposure to a workplace environment in a related field.

Students in the BRMCD program are required to complete a 12 credit hour Supervised Fieldwork Experience in Year 4 of their degree program. BKin students may be eligible to register for a 6 or 12 credit hour course (part or full-time). Students are eligible once they complete 90 credit hours toward the degree and achieve a minimum Degree Grade Point Average of 2.5 or higher at the end of the third year of their degree. Student placements are usually scheduled for 13 weeks (working full-time) during the Fall Term (September through December). Information on the application process, deadlines and course details are available on the Faculty website (<https://umanitoba.ca/kinesiology-recreation-management/>) and at the Faculty General Office.

### Degree Requirements

To graduate with a four-year Bachelor of Recreation Management and Community Development degree, a student must have passed the 120 credit hours of the program outlined below and must have achieved

a Degree Grade Point Average (DGPA) of 2.00 with a minimum grade of “C” in all faculty-required courses. A maximum of 158 credit hours may be attempted in order to obtain the 120 credit hours required for graduation with the Bachelor of Recreation Management and Community Development degree.

Course	Title	Hours
<b>Year 1</b>		
KPER 1200	Physical Activity, Health and Wellness	3
KPER 1400	Concepts of Recreation and Leisure	3
PSYC 1200	Introduction to Psychology	6
SOC 1000	Introduction to Sociology	3
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 or Introduction to Statistics and Computing	3
Select 12 credit hours of Electives		12
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
KPER 2120	Academic Skills in Kinesiology and Recreation Management	3
KPER 2170	History of Physical Activity and Leisure	3
KPER 2200	Planning Principles	3
KPER 2350	Introduction to Research	3
REC 2400	Management and Marketing of Leisure Services	3
Select three of the following:		9
REC 2100	Introduction to Leisure Travel	
REC 2130	Introduction to Outdoor and Land-Based Recreation	
REC 2150	Introduction to Therapeutic Recreation	
REC 2170	Introduction to Sport Management	
REC 2650	The Social Aspects of Aging	
Select 6 credit hours of Electives		6
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
KPER 3100	Inclusive Physical Activity and Leisure	3
KPER 3460	Sociology of Physical Activity and Leisure	3
REC 3072	Community Development Principles	3
REC 3180	Social Psychology of Leisure	3
REC 3220	Program Planning and Evaluation	3
KPER 3630	Service and Experiential Learning	3
REC 3850	The Planning of Recreation Areas and Facilities	3
Advanced Faculty Elective (REC or KPER at the 3000/4000 level)		3
Select 6 credit hours of Electives		6
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
KPER 4020	Philosophy of Physical Activity and Leisure	3
KPER 4100	Current Issues	3
Select one of the following:		12
KPER 4630	Supervised Fieldwork Experience	
KPER 4632 & KPER 4634	Supervised Fieldwork Experience A and Supervised Fieldwork Experience B	
REC 4072	Advanced Community Development	3

Advanced Faculty Elective (REC or KPER at the 3000/4000 level)	3
Select 6 credit hours of Electives	6
<b>Hours</b>	<b>30</b>
<b>Total Hours</b>	<b>120</b>

**Degree Exit Requirement:** Current CPR Level C and Emergency or Standard First Aid Certification

## Recreation Studies Minor Minor Requirements

The Recreation Studies Minor consists of 18 hours of credit in the following courses offered by the Faculty of Kinesiology and Recreation Management. To qualify for and declare the Minor in Recreation Studies, students must achieve a grade of “C” or better in KPER 1400. A student must obtain department approval (when necessary) and declare the minor with their home faculty for access into advanced REC courses.

Course	Title	Hours
<b>Required Core</b>		
KPER 1400	Concepts of Recreation and Leisure	3
REC 2400	Management and Marketing of Leisure Services	3
<b>Electives</b>		
Select two of the following:		6
REC 2100	Introduction to Leisure Travel	
REC 2130	Introduction to Outdoor and Land-Based Recreation	
REC 2150	Introduction to Therapeutic Recreation	
REC 2170	Introduction to Sport Management	
REC 2650	The Social Aspects of Aging	
<b>Advanced Electives</b>		
Select two of the following:		6
REC 3090	Sustainable Nature-Based Tourism	
REC 3170	Sport and Development in Community	
REC 3400	Advanced Marketing of Leisure Services	
REC 3310	Cultural Tourism	
REC 3770	Indigenous Perspectives on Land-Based Education	
REC 4060	Person Centred Leisure Education	
REC 4120	Recreational Travel and Tourism	
REC 4250	Leisure and Aging	
REC 4350	Parks and Protected Areas Planning and Management: Field Studies (Summer Session Travel Study – Instructor Permission Required)	
REC 4400	The Administration of Special Events	
REC 4720	Wilderness Adventures	
REC 4770	Indigenous Recreation and Well-Being	
KPER 4000	Special Topics	
KPER 4110	The Olympics and the Global Sporting Event	
KPER 4320	Sport and the Body	
KPER 4340	Sport, Film and Society	
<b>Total Hours</b>		<b>18</b>

Note: Students may count REC 2100, REC 2130, REC 2150, REC 2170 and REC 2650 to fulfil the remaining electives requirements if they have not already counted these courses above. That is, students may elect to

take all 12 CH of required elective courses in lieu of taking 6 CH required elective courses and 6 CH of advanced electives.

## Sport, Physical Activity and Recreation in the Community Certificate (SPARC)

### Overview/Entrance Requirements

The Sport, Physical Activity and Recreation in the Community (SPARC) certificate program provides in-depth meaningful and relevant non-credit professional development (PD) programming along with university courses related to physical activity, sport, recreation, fitness, health and wellness, all delivered with Indigenous perspectives, worldviews and teachings and adapted for delivery in the community.

Effective Summer 2022: The SPARC certificate program consists of 237 contact hours with combined non-credit professional development instruction and for UM credit introductory experiential learning courses. Courses for the cohorts may be delivered at either an Urban or Northern/Rural location.

### Selection Process

Completed applications will be assessed in the order they are received. Applicants for the certificate program will be assessed on the following admissions criteria. Note that the selection process for northern/rural cohorts will be determined in consultation with the partner organization who is sponsoring the SPARC program.

### Application and Admission Criteria – Recent Graduates

1. A minimum average of 63-69.9% over three Grade 12 S or U credits
2. One credit of Grade 12 S or U English with a minimum grade of 60%
3. Must be a Canadian citizen or Permanent Resident

### Application and Admission Criteria – Mature Applicants (over 21 years of age)

1. Must be 21 years of age or older by September 30 for classes starting in September, January 31 for classes starting in January, May 1 for classes starting in May, and July 1 for classes starting in July.
2. Must have limited experience at college or university (fewer than 24 credit hours).
3. May or may not meet the regular academic requirements of the program.
4. Must be a Canadian citizen or Permanent Resident

Information on the next cohort intake and admission date, entrance requirements and descriptions of the student categories may available by contacting the Faculty of Kinesiology and Recreation Management General Office.

#### PHED 0110 Safety in the Community 5 cr

A blend of professional safety, health and wellness certifications, including but not limited to CPR/First Aid; Applied Suicide Intervention Skills training (ASIST); Hunting Safety; Water Safety; Aboriginal Sport Coaching Certificate. Evaluated Pass/Fail.

#### PHED 0120 Activity and Program Planning 8 cr

An introduction to equity-based program planning principles and strategies. Adult education and Indigenous education theories and models will address the complexity and challenges of planning for public well-being. In the course, students will learn to plan, develop, implement and evaluate community-driven physical activity, recreation and sport programs for marginalized populations, with a specific focus on Indigenous and racialized minority groups.

#### PHED 0130 Living Mino-Pimatisiwin 8 cr

An introduction to Indigenous-informed, culturally relevant approaches to health and wellness set within a sport, physical activity and recreational context. Elders, Knowledge Keepers and Cultural Teachers will share their perspectives (e.g., knowledge, skills and values) related to “living Mino- Pimatisiwin” – the good life, including a deeper understanding of Medicine Wheel teachings of wholism, interdependence, sharing and respect. Students will apply these teachings to their own university experience and will be guided by Elders and community teachers to reflect on how they can apply these teachings in their work as educators. Evaluation Pass/Fail.

## Degree Requirements

Effective Summer 2022: The SPARC Cohort consists of the following Professional Development and University Courses: the PD courses are required, and two of three university courses make up the core, with an elective chosen from a list of introductory and/or experiential learning courses.

Course	Title	Hours
Non-Credit Professional Development Courses - Required (120 hours)		
PHED 0110	Safety in the Community	5
PHED 0120	Activity and Program Planning	8
PHED 0130	Living Mino-Pimatisiwin	8
FKRM University Credit Courses (117 hours)		
PHED 3770	Indigenous Games and Activities	3
REC 3770	Indigenous Perspectives on Land-Based Education	3
FKRM Elective (see lists below):		
Experiential Learning Courses (ELC)		
PHED 2710	Human Movement Principles	3
PHED 2742	Group Fitness and Leadership	3
PHED 3122	Developmental Games and Activities	3
PHED 3722	Coaching Theory and Practice	3
PHED 3760	Diverse Populations Mentorship	3
REC 2130	Introduction to Outdoor and Land-Based Recreation	3
Theory (TH) and On-line (OL) Courses		
KPER 1200	Physical Activity, Health and Wellness	3
KPER 2200	Planning Principles	3
REC 4770	Indigenous Recreation and Well-Being	3

Note: Undergraduate course descriptions can be found here ([p.](#) ).

Students seeking the credential must pass all three non-credit PD courses and achieve a minimum Grade Point Average of 2.0 for the three KRM university courses to graduate with the SPARC Certificate. Students may repeat a course in order to achieve the minimum requirements for the certificate.

This program normally takes a minimum of 12 months to complete. Students will have up to 4 years from the initial start date (first term of enrolment) to complete the program. Note: Northern/rural cohorts may have a more condensed delivery format (e.g., 6 months), depending on resources and needs of the community.

# Faculty of Law

## General Office

**Dean:** Dr. Richard Jochelson.

**Associate Dean(s):** Jennifer L. Schulz (J.D. Program); Donn Short (Research and Graduate Studies)

**Campus Address/General Office:** 303 Robson Hall

**Telephone:** (204) 474 6130

**Fax:** (204) 474 7580

**Email Address:** lawinfo@umanitoba.ca

**Website:** www.umanitoba.ca/faculties/law (<http://law.robsonhall.ca/>)

**Academic Staff:** Please refer to the Faculty website at [umanitoba.ca/faculties/law](http://umanitoba.ca/faculties/law) (<https://law.robsonhall.com/faculty-staff/>)

**Law Admissions Inquiries website:** [lawadmissions@umanitoba.ca](http://lawadmissions@umanitoba.ca)

## Degree Programs Offered

The Master of Laws is a thesis-based program designed for completion in one year after the completion of a three year J.D. program. The program consists of participation in the Graduate Legal Theory Seminar, two additional courses and completion of a substantial thesis. Further details are available through the LL.M. website (<https://umanitoba.ca/explore/programs-of-study/master-laws-llm/>). Applicants should also consult the Faculty of Graduate Studies website (<https://umanitoba.ca/graduate-studies/>).

Equivalent academic courses completed at recognized universities elsewhere will be considered. For all admission requirements please refer to the first year information (<http://law.robsonhall.ca/jd/admission-to-first-year/>) on the website.

### Juris Doctor-J.D.

Robson Hall, Faculty of Law, offers a three year J.D. program that starts with the fundamental doctrinal courses that allow students to acquire a solid foundation in law. From the foundational courses, students can move into legal specialties of their choice, or choose to pursue a J.D. concentrating on Indigenous law, business law, human rights, or Access to Justice in French. Clinical legal education has been a part of the J.D. program since the early 1970s and students develop lawyering skills under faculty guidance, expanding their perspectives and ethical understanding of the role of practicing lawyers. Scholarship and research is built into the J.D. program so students have an opportunity to develop a critical understanding of law and its development.

## The Profession and the Faculty of Law

### The Study of Law

Legal education in Canada is divided into two phases: the academic study of law at one of the university law schools and practical training under the auspices of a provincial law society for those who wish to be admitted to practice and called to a Bar. As there is a reciprocal recognition of university law degrees between the common law provinces (all provinces except Quebec), the academic study can be taken in any one of these provinces.

A sound education in law provides a good foundation for a great variety of careers. In the past most law graduates have entered the private practice of law to concentrate on various types of legal work including: real estate transactions, commercial contracts, company law, family law, taxation. While the tendency to specialize in the practice of law is becoming more prevalent, most lawyers continue to be general

practitioners prepared to perform most types of legal work according to the needs of their clients.

Besides the private practice of law, law graduates can join the legal departments of corporations as in-house counsel, or various government agencies that maintain legal departments. Law graduates also find careers in non-profit organizations, business, law enforcement, social work, and journalism.

### Clinical Learning

The curriculum invites critical assessment of the role of law in society as well as the development of skills relevant to the practice of law. In addition to lectures and seminars, students are given an opportunity to develop, under supervision, some of the research, writing and oral advocacy skills which will prove useful in the practice of law. In first year, students are acquainted with the various paper and electronic resource materials available in a law library, and they follow a program designed to develop legal research and writing techniques. In second and third years, students participate in negotiation exercises, mock trials and appeals and moot court competitions. Students may choose from a range of clinical Courses, including clerkships with various levels of court internships and externships. Throughout their legal studies students have many opportunities to serve actual legal clients both by taking internship and externship courses and through Volunteering with organizations such as the University Community Law Centre, Pro Bono Students Canada and The Legal Help Centre. This clinical training is just one element of the program at Robson Hall that contributes to the excellent reputation of our graduates.

### Research and Publications

Research and scholarly writing are integral elements of the mission of the University and the law school. Professors research, write and consult with the larger legal community in their particular area of expertise and students have similar opportunities. Each year students must take a writing requirement which provides an opportunity to explore a particular area of law in depth. Students have the opportunity to work on a number of scholarly publications including: *Asper Review of International Business and Trade Law*, *Canadian Journal of Human Rights*, *Manitoba Law Journal*, *Robson Crim* and *Underneath the Golden Boy*.

### Faculty of Law Centres of Excellence

Robson Hall is home to two named research chairs. In 1999, the Faculty of Law established the Asper Chair of International Business and Trade Law. The Asper Chair sponsors a variety of research including bi-annual academic conferences in international business and trade law. An internship program allows up to four students a year to work with the Asper Chair and creates opportunities for students to advance their education, while gaining skills necessary to pursue careers in law or business with an international focus. Additionally, students involved in the Asper program have the opportunity to participate in international commercial dispute resolution competitions.

The Marcel Desautels Chair in Private Enterprise and the Law has a mandate to conduct research and provide education on issues of specific interest to the privately held or family owned businesses. The Desautel Centre's focus is on the needs of closely held businesses.

### Student Organizations

All Law students are members of the Manitoba Law Students' Association (MLSA), the student government. Student participation in faculty governance takes place through the representation of elected members of the MLSA. In addition to the Manitoba Law Students



Association there exists a diversity of student groups at Robson Hall. No matter what your interests, joining a student group can greatly enhance your law school experience by providing you with greater opportunities throughout the year to interact with the community and other students.

Please see the MLSA website (<https://robsonmlsa.ca/>) for a complete list.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Juris Doctor, J.D. (p. 688)	3 (plus 2 years or 60 credit hours University degree level courses)	92	

This includes two years (60 credit hours) of study in an undergraduate program.

## Faculty Academic Regulations

### Admission to the Faculty of Law

#### Course Requirements for Admission to J.D. Program

Robson Hall, Faculty of Law offers three First Year Admission categories:

- Index Score (Regular) Category (50% GPA and 50% LSAT score)
- Individual Consideration Category
- Canadian Indigenous Category

The minimum academic requirement to apply is two (2) full-years of university degree level courses (equivalent to 60 credit hours). Included in the 60 credit hours should be a course to fulfill the University's mathematics requirement. Completion of the JD program fulfills the University's Written English requirement. For additional information about the University's Mathematics and Written English requirements, see the General Academic Regulations (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/#Residence-Written-English>) of this calendar.

All applicants must write the Law School Admission Test (<https://www.lsac.org/lSAT/>) (LSAT).

Please visit the Robson Hall website (<http://law.robsonhall.com/student-resources/admissions/>).

### Academic Regulations

All students are asked to note that some academic policies and regulations are under review and are subject to change. Please refer to the Governance website (<https://umanitoba.ca/governance/governing-documents/>) for updated information.

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

The provisions of the General Academic Regulations (p. 118), and the University Policies and Procedures (p. 37) apply to all students. In addition, the Faculty of Law has regulations and requirements, published below, that apply specifically to its students.

#### Residence requirements for the Juris Doctor Degree

To obtain the Juris Doctor (J.D.) degree from the University of Manitoba, ordinarily a student must successfully complete two of the three years of the Juris Doctor (J.D.) program at the University of Manitoba. The remaining year may be completed at another law school as approved by the Admissions Committee or the Dean's office.

#### Licence to Practise Law

Graduates who wish to practise must apply to the Law Society of the province in which they wish to practice. Law societies generally require applicants to complete a bar admission course. The Law Society must be satisfied as to the good character and repute of its applicants, as well as their academic competence and qualifications. Inquiries with regard to the Province of Manitoba should be made to the Law Society of Manitoba (<https://lawsociety.mb.ca/>).

#### Regulations of the Faculty of Law

Regulations of the Faculty of Law, as amended from time to time governing attendance, evaluation, prizes, and progression may be consulted at the Faculty's website (<https://law.robsonhall.com/student-resources/financial-aid/>).

#### Miscellaneous Registration Matters

The Associate Dean's office shall, subject to appeal to the Academic Affairs Committee, consider and determine all applications from students admitted to the faculty for permission:

1. to take part of their law studies at another university under a letter of permission with conditions;
2. to defer their law studies for a period of one or more academic years after successfully completing first or second year, and to permit such students to re-register following such an absence with conditions;
3. to withdraw before completing the academic year for which they are registered and to permit, in the case of a student who withdraws from first year under exceptional circumstances, that student to re-register for a subsequent academic year as a supernumerary student, and in the case of a second or third year student, to permit such student to re-register for a subsequent academic year; in all cases with or without conditions;
4. to switch from the full-time program to the half-time program and vice versa.

### Registration

All students will need to register themselves through Aurora. Please check the Faculty of Law (<http://law.robsonhall.com/current-students1/registration/>) website for detailed information.

## Juris Doctor, J.D.

### Degree Requirements

Year 1: Each full-time student is required to take all of the following courses.

Additional requirements for students participating in the Access to Justice in French Concentration are described below under "Concentrations".<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
LAW 1102	Contracts	5
LAW 1140	Criminal Law and Procedure	5
LAW 1460	Constitutional Law	5
LAW 1480	Torts and Compensation Systems	5
LAW 1500	Property	5
LAW 1540	Legal Methods <sup>2</sup>	5
LAW 1530	Legal System	2
<b>Hours</b>		<b>32</b>
<b>Total Hours</b>		<b>32</b>

<sup>1</sup> Students participating in the Access to Justice in French Concentration must take LAW 1378 Passeport du droit en français 1 (1 cr) in Year One of their program, LAW 2378 Passeport du droit en français 2 (1 cr) in Year Two of their program, and LAW 3378 Passeport du droit en français 3 (1 cr) in Year Three of their program. Together these courses constitute an ongoing course over the six terms of the J.D. program (equivalent to 0.5 credit per term) in which students in all three years learn together. Each 1 credit is graded on a pass/fail basis at the end of each year. Students are expected to complete all three 1 credit Passeport du droit en français for a total of 3 credits in lieu of a 3 credit elective in Year Three.

<sup>2</sup> Students participating in the Access to Justice in French Concentration must instead take LAW 1542 Méthodes juridiques (5 cr), a bilingual course substantively equivalent to LAW 1540. Students who do not complete this course will not be eligible for the Concentration.

<sup>3</sup> Students participating in the Access to Justice in French Concentration will earn 33 credit hours in Year One because they are required to take LAW 1378 Passeport du droit en français 1 (1 cr). Students are expected to complete all three 1 credit Passeport du droit en français for a total of 3 credits in lieu of a 3 credit elective in Year Three.

Year 2: Each full time student in Second Year is required to take a total of 30 credit hours.

Additional requirements for students participating in the Access to Justice in French Concentration are described below under "Concentrations".<sup>1</sup>

Course	Title	Hours
<b>Year 2</b>		
LAW 2602	Evidence	3
LAW 2650	Introduction to Advocacy <sup>2</sup>	3
LAW 2680	Legal Negotiation <sup>3</sup>	3
LAW 2690	Corporations I	3
LAW 3530	Administrative Law	3
Select 15 credit hours of Electives from List A or List B <sup>4</sup>		15
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Students participating in the Access to Justice in French Concentration will earn 16 mandatory credits in Year Two because they are required to take LAW 2378 Passeport du droit en français 2 (1 cr). They will earn a total of 31 credits in Year Two.

<sup>2</sup> Students participating in the Access to Justice in French Concentration must instead take LAW 2652 Introduction à la plaidoirie (3 cr), a bilingual course substantively equivalent to LAW 2650.

<sup>3</sup> Students participating in the Access to Justice in French Concentration must instead take LAW 2682 Négociation juridique (3 cr), a bilingual course substantively equivalent to LAW 2680.

<sup>4</sup> Must include a minimum of one Writing Requirement Course (List A) taken in the Second and Third year.

Year 3: Each full time student in Third Year is required to take a total of 30 credit hours.

Additional requirements for students participating in the Access to Justice in French Concentration are described below under "Concentrations".<sup>1</sup>

Course	Title	Hours
<b>Year 3</b>		
LAW 3024	The Legal Profession and Professional Responsibility	3
Select 27 credit hours of Electives from List A, List B and/or List C <sup>2</sup>		
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Students participating in the Access to Justice in French Concentration will earn 4 mandatory credits in Year Three because they are required to take LAW 3378 Passeport du droit en français 3 (1 cr). They will earn a total of 28 credits in Year Three.

<sup>2</sup> Must include a minimum of one Writing Requirement Course (List A) taken in the Second and Third year.

## List A: Writing Requirement Courses

(Second or Third year)

Course	Title	Hours
LAW 3012	International Business Law	3
LAW 3014	International Trade Law	3
LAW 3018	Human Rights Law	3
LAW 3030	Research Paper B	3
LAW 3070	Gender and the Law	3
LAW 3090	Children, Youth and the Law	3
LAW 3120	Philanthropy and the Law	3
LAW 3170	Dispute Resolution	3
LAW 3230	Aboriginal Peoples and Land Claims	3
LAW 3310	Aboriginal Peoples and the Law	3
LAW 3370	The Legislative Process	3
LAW 3334	Global and Domestic Governance of Tainted Finance	3
LAW 3336	Law and Popular Culture	3
LAW 3338	Sentencing	3
LAW 3346	Access to Justice	3
LAW 3352	Sexual Expression, Conduct and Work in Canada	3
LAW 3362	Animals and the Law	3
LAW 3364	Law and Resistance	3
LAW 3376	Droits linguistiques	3
LAW 3380	Issues in Law and Bio Ethics	3

LAW 3394	Internet and E-Commerce Law	3
LAW 3410	Canadian Legal History	3
LAW 3620	Comparative Law	3
LAW 3674	Advanced Public Law	3
LAW 3740	Public International Law	3
LAW 3828	Preventing Wrongful Convictions	3
LAW 3940	Canadian Charter of Rights and Freedoms	3
LAW 3980	Current Legal Problems B	3

## List B: Elective Courses

(Second or Third Year)

Course	Title	Hours
LAW 2378	Passeport du droit en Français 2	1
LAW 2400	Wills and Succession	3
LAW 2490	Trusts	3
LAW 2640	Family Law	3
LAW 2642	Droit de la famille	3
LAW 2672	Civil Procedure	3
LAW 2700	Income Tax Law and Policy	3
LAW 3016	Corporations II	3
LAW 3026	Trademarks and Patents	3
LAW 3050	Commercial Law	3
LAW 3212	Immigration Law	3
LAW 3022	Insurance Law	3
LAW 3220	Competitions B	3
LAW 3330	Employment Law	3
LAW 3342	Agency and Partnership	3
LAW 3348	Bankruptcy and Insolvency	3
LAW 3354	Moot Researcher	3
LAW 3372	Français juridique - droit public	3
LAW 3374	Français juridique - droit privé	3
LAW 3378	Passeport du droit en Français 3	1
LAW 3392	Securities Law	3
LAW 3590	Charter Issues in Criminal Law	3
LAW 3600	Environmental Law	3
LAW 3770	Labour-Management Relations	3
LAW 3824	Scholarly Publications	3
LAW 3832	Legal Aid Clinic	3
LAW 3852	Private International Law	3
LAW 3880	Municipal and Planning Law	3
LAW 3980	Current Legal Problems B	3

## List C: Elective Courses

(Third Year Only)

Course	Title	Hours
LAW 3020	Clinical Administrative Law	3
LAW 3132	Clinical Family	3
LAW 3032	Court of King's Bench Clerkship	3
LAW 3034	Court of Appeal Clerkship	3
LAW 3302	Clinical Criminal Law	6
LAW 3340	Advanced Advocacy	3
LAW 3344	Internships	3

LAW 3532	Intensive Criminal Law	3
LAW 3862	Business Transactions: The Art of the Deal	6
LAW 3360	Advanced Legal Research	3
LAW 3450	Remedies	3
LAW 3510	Corporate Taxation	3
LAW 3520	Taxation of Trusts and Estates	3
LAW 3980	Current Legal Problems B	3
LAW 3990	Externship	12

Students admitted prior to September 2018, please refer to the Academic Calendar for the year you were admitted.

## Access to Justice in French Concentration

This section describes the requirements to complete the Access to Justice in French Concentration as part of the J.D. program. The Access to Justice in French Concentration provides J.D. students with the basic skills required to provide legal services to clients in both official languages with a view to increasing the access to justice of French-language communities in Manitoba and other majority English-speaking Canadian provinces and territories.

As part of the courses required to earn their J.D., the following courses are prescribed for students seeking to earn the Access to Justice in French Concentration - LAW 1542 Méthodes juridiques, LAW 2682 Négociation juridique, and LAW 2652 Introduction à la plaidoirie are bilingual equivalents of and taken instead of LAW 1540 Legal Methods, LAW 2680 Legal Negotiation, and LAW 2650 Introduction to Advocacy, respectively.

Students must take a total of 26 credits from among the possible 38 credits of Concentration courses below.

Course	Title	Hours
<b>Year 1</b>		
LAW 1378	Passeport du droit en Français 1	1
LAW 1542	Méthodes juridiques	5
		<b>Hours</b>
		<b>6</b>
<b>Year 2</b>		
LAW 2378	Passeport du droit en Français 2	1
LAW 2652	Introduction à la plaidoirie	3
LAW 2682	Négociation juridique	3
		<b>Hours</b>
		<b>7</b>
<b>Years 2-3</b>		
Group 1 - Legal Terminology		
Select one of the following:		3
LAW 3372	Français juridique - droit public	
LAW 3374	Français juridique - droit privé	
Group 2 - Electives		
Select three of the following:		9
LAW 2642	Droit de la famille	
LAW 3030	Research Paper B <sup>1</sup>	
LAW 3220	Competitions B (Laskin Moot) <sup>2</sup>	
LAW 3220	Competitions B (Bastarache Moot)	
LAW 3344	Internships	
LAW 3372	Français juridique - droit public <sup>3</sup>	
LAW 3374	Français juridique - droit privé <sup>3</sup>	

LAW 3376	Droits linguistiques	
	<b>Hours</b>	<b>12</b>
<b>Year 3</b>		
LAW 3378	Passeport du droit en Français 3	1
	<b>Hours</b>	<b>1</b>
	<b>Total Hours</b>	<b>26</b>

- <sup>1</sup> Students must write their research paper in French under the supervision of a bilingual faculty member.
- <sup>2</sup> This course counts towards the Concentration only for students mooted in French or otherwise completing a sufficient proportion of their research or written and oral advocacy work in French.
- <sup>3</sup> This course may not be taken as a Group 2 Elective if taken as a Group 1 Legal Terminology course.

# Faculty of Management/I.H. Asper School of Business

## General Office

**Dean:** Dr. Bruno Silvestre

**Associate Dean(s):** Dr. Lukas Neville (Strategic Partnerships and Administration); Dr. Subbu Sivaramakrishnan (Undergraduate and International Programs); Dr. Suzanne Gagnon (Professional Programs and Executive Education); Dr. Zhenyu Wu (Research and Graduate Programs)

**Campus Address/General Office:** 268 Drake Centre

**Telephone:** (204) 474 6388

**Fax:** (204) 474 7529

**Email Addresses:**

**Canadian Citizen/Permanent Resident Students:**

B\_Comm@UManitoba.ca

**International Students:** B\_Comm\_International@UManitoba.ca

**Website:** UManitoba.ca/Asper (<http://www.umanitoba.ca/asper/>)

**Academic Staff:** Please refer to the Faculty website (<https://www.umanitoba.ca/asper/faculty/>)

## Available Majors and Option

The following Majors may be used to complete the Bachelor of Commerce (Honours) program:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Leadership and Organizations
- Logistics and Supply Chain Management
- Management Information Systems
- Marketing
- Operational Research/Operations Management (not currently offered)

A detailed explanation of the requirements for each major may be found under the Programs tab.

Students wishing to participate in the co-op program will need to enroll in the Asper Co-operative Option of the Bachelor of Commerce (Honours) program. Complete details on the requirements for the Asper Co-operative Program can be found in the Co-operative Option (p. 700) tab.

## Accreditation

In 2019, the Asper School of Business received re-accreditation from AACSB International - The Association to Advance Collegiate Schools of Business.

In 2020, the Asper School of Business received accreditation from the SOA – Society of Actuaries.

These prestigious recognitions affirm the faculty's commitment to the continuous improvement of its courses and programs. The mission of the Asper School of Business is to provide management education in Manitoba by creating and disseminating leading edge knowledge and

developing skills relevant to current and future managers in organizations operating in a global environment.

## Program and Graduation Requirements

The Bachelor of Commerce (Honours) program comprises 120 credit hours of course work. The Asper Co-operative Program also comprises 120 credit hours of course work plus a minimum of three 4-month approved work terms. The degree encompasses the following components which will be detailed in the overview of each Major listed in the Programs tab: Track 1/Foundation courses, Program Core courses (common to all students), Major courses, Business Options and Non-Business Elective courses. An Elective is any course freely chosen by the student from courses taught in the degree programs of other Faculties and Schools, excluding the Asper School of Business (or equivalents).

Each student must declare at least one major and present a minimum Degree Grade Point Average of 2.00 for graduation.

Detailed information on the degree regulations are found in the Faculty Academic Regulations (p. 693), or in the Undergraduate Program Office (268 Drake) or on the undergraduate web site (<https://umanitoba.ca/asper/programs-of-study/>).

**Note:** Students admitted to the Asper School of Business prior to the current year should refer to the Undergraduate Calendar of their year of admission for a description of their program requirements.

## Course Key

All Core courses are taught by the Asper School of Business except the following core course options (pertains to the Alternative Management Studies and the Ethics core requirements):

Course	Title	Hours
<b>Agriculture and Food Sciences</b>		
AGRI 3030	Modern Topics in Agriculture 1 (topic no longer offered)	3
<b>Economics</b>		
ECON 2540	Political Economy 1: Production and Distribution	3
<b>Labour Studies</b>		
LABR 2300	Workers, Employers and the State	3
<b>Native Studies</b>		
INDG 3120	Exploring Indigenous Economic Perspectives	3
INDG 4220	Environment, Economy and Indigenous Peoples	3
INDG 4320	Indigenous Economic Leadership	3
<b>Political Studies</b>		
POLS 3250	International Political Economy	3
POLS 3270	Theories of the Capitalist World Order	3
<b>Philosophy</b>		
PHIL 2290	Ethics and Society	6
PHIL 2750	Ethics and the Environment	3
PHIL 2790	Moral Philosophy	6
PHIL 2830	Business Ethics	3
<b>Sociology</b>		
SOC 3838	Ecology and Society	3

## Programs

The Bachelor of Commerce (Honours) degree is a 4 year degree program comprised of 120 credit hours. It will take students who opt for the

regular Bachelor of Commerce (Honours) [without the Asper Co-op Program option] 4 years to completion. Students who opt for the Bachelor of Commerce (Honours) Co-op Program will take longer than 4 years to completion as this program option includes three 4-month work terms. Students in the Co-op Program typically take at least one extra term to graduate.

\* Degree completion time will vary with transfer credit. Transfer credit is assessed independently from the assessment of admission requirements and will vary depending on final assessment. The Asper Co-op Program option may or may not be an option depending on final transfer credit assessment and course completion prior to entry. The Entrance Requirements and Selection Criteria for the Asper Co-op Program (p. 700) will detail these requirements.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Accounting, B. Comm., Honours (p. 703)	4	120	Yes
Actuarial Mathematics, B.Comm., Honours (p. 709)	4	120	Yes
Entrepreneurship/Small Business, B. Comm., Honours (p. 715)	4	120	Yes
Finance B. Comm., Honours (p. 721)	4	120	Yes
Generalist, B. Comm., Honours (p. 727)	4	120	Yes
Human Resources Management/Industrial Relations, B. Comm., Honours (p. 733)	4	120	Yes
Indigenous Business Studies, B. Comm., Honours (p. 739)	4	120	Yes
International Business, B. Comm., Honours (p. 746)	4	120	Yes
Leadership and Organizations, B. Comm., Honours (p. 751)	4	120	Yes
Logistics and Supply Chain Management, B. Comm., Honours (p. 757)	4	120	Yes
Management / Assiniboine Community College Joint Program, B.Comm Honours (p. 776)	*	66	
Management / Red River College Polytech Joint Program, B.Comm Honours (p. 776)	*	66	
Management / University College of the North Joint Program, B.Comm Honours (p. 778)	*	66	
Management / École Technique et Professionnelle Joint Program, B.Comm Honours (p. 780)	*	66	
Management Information Systems, B. Comm., Honours (p. 763)	4	120	Yes
Marketing, B. Comm., Honours (p. 769)	4	120	Yes

## Faculty Academic Regulations

### Admission Requirements

The following is a summary of the admission requirements for the Bachelor of Commerce (Honours). Equivalent courses completed at other universities will be considered for admission and transfer credit only if the courses have been taken within the last 10 years. All admission requirements, as well as application deadline dates and forms, are included in the Applicant Information Bulletin ([https://umanitoba.ca/student/admissions/media/direct\\_entry\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/direct_entry_bulletin.pdf)) that is available

from the Admissions Office (<https://umanitoba.ca/admissions/>), 424 University Centre. This information is also posted on the University of Manitoba's website.

### Direct Entry from High School

To be eligible to apply high school students must have:

1. Manitoba high school graduation, with five full credits at the Grade 12 level, in courses designated S (Specialized), G (General), or U (Dual Credit –University), with

- A minimum 85% average over four courses: Pre-Calculus Math 40S, English 40S, and any two other 40S courses, and
- A minimum 70% in each of the four courses noted in point 2 above, and
- Applicants may require a higher average than stipulated in point 2 to be successful in the annual competition for admission.

See Applicant Bulletin ([https://umanitoba.ca/student/admissions/media/direct\\_entry\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/direct_entry_bulletin.pdf)) for complete details.

### Track 1 Transfer Students

The following is a summary of the admission requirements for the Bachelor of Commerce (Honours.) for Track 1 transfer students. Equivalent courses completed at other universities will be considered for admission and transfer credit only if the courses have been taken within the last 10 years. All admission requirements, as well as application deadline dates and forms, are included in the Applicant Information Bulletin ([https://umanitoba.ca/student/admissions/media/business\\_track\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/business_track_bulletin.pdf)) that is available from the Admissions Office, 424 University Centre. This information is also posted on the University of Manitoba's website.

#### Requirements (for Track 1 Transfer students) <sup>1</sup>

Course	Title	Hours
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
Select 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology <sup>2</sup>		6
Select one of the following:		3
MATH 1520	Introductory Calculus for Management and Social Sciences <sup>3</sup>	
MATH 1500	Introduction to Calculus <sup>3</sup>	
MATH 1230	Differential Calculus	
STAT 1000	Basic Statistical Analysis 1	3
or STAT 1150	Introduction to Statistics and Computing	
Select one 3 credit hour Written English ("W") course from a specific discipline <sup>4</sup>		3
Select 3 credit hours of Electives <sup>5</sup>		3
<b>Total Hours</b>		<b>24</b>

- Students must achieve a minimum grade of "C" on each course listed below
- Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.
- MATH 1510 will be accepted as an alternate for MATH 1500 or MATH 1520.
- ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline.
- Critical Thinking (Philosophy) PHIL 1290 is a preferred elective choice.

Minimum 24 credit hours completed by April 30. Although 24 credit hours is the minimum requirement for admission, a full year course load would require 30 credit hours; therefore, students only taking 24 credit hours for admission will need to pick up an extra 6 credit hours of course work once in the Asper School of Business.

An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business.

If students want to complete 30 credit hours in Year 1, students are recommended to take 6 credit hours from this suggested list of recommended courses:

Course	Title	Hours
GMGT 1010	Business and Society	3
Select one of the following:		3
GMGT 2060	Management and Organizational Theory	
GMGT 2070	Introduction to Organizational Behaviour	
MKT 2210	Fundamentals of Marketing	
<b>Total Hours</b>		<b>6</b>

Students must achieve a minimum grade of "C" on each course listed above. Admission in this category is competitive.

See Applicant Bulletin ([https://umanitoba.ca/student/admissions/media/business\\_track\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/business_track_bulletin.pdf)) for complete details.

### Track 2 Transfer Students

Applicants who are missing one or more of the Track 1/Foundation course requirements may apply under Track 2 provided they have met the following criteria: completed a minimum of 24 credit hours; achieved a minimum admission GPA of 3.1; and achieved a minimum grade of "C" on each course comprising the 24 credit hours. Track 2 applicants are encouraged to complete all outstanding Track 1/Foundation required courses during their first year after admission to the Asper School of Business.

Minimum 24 credit hours completed by April 30. Although 24 credit hours is the minimum requirement for admission, a full year course load would require 30 credit hours; therefore, students only taking 24 credit hours for admission will need to pick up an extra 6 credit hours of course work once in the Asper School of Business.

Students must achieve a minimum grade of "C" on each course listed above. Admission in this category is competitive.

**Note:** The prerequisite for MATH 1520 or MATH 1500 is a 60% in Grade 12 Pre-Calculus Mathematics 40S or equivalent or a grade of "C" in the MSKL 0100 course taught by Extended Education; the prerequisite for MATH 1230 is a 70% in Pre-calculus Mathematics 40S or the MSKL 0100 offered by Extended Education (B).

**Note:** The prerequisite for STAT 1150 is a 70% in Pre-calculus Mathematics 40S or the MSKL 0100 offered by Extended Education (B).

See Applicant Bulletin ([https://umanitoba.ca/student/admissions/media/business\\_track\\_bulletin.pdf](https://umanitoba.ca/student/admissions/media/business_track_bulletin.pdf)) for complete details.

#### Other Requirements

High school prerequisite: Grade 12 Pre-Calculus Mathematics 40S (or equivalent, with a minimum 60%). All students planning to enter the Bachelor of Commerce (Honours) program must obtain a minimum of 60% in Grade 12 Pre-Calculus Mathematics 40S (or equivalent) in order to complete all degree requirements.

The Written English and Mathematics requirements are satisfied by Track 1/Foundation courses.

Minimum AGPA (admissions grade point average) for consideration: 2.0 for Track 1 applicants; 3.1 for Track 2 applicants.

Admission to the Asper School of Business is limited to an annual quota and is competitive.

The Bachelor of Commerce (Honours) program does not have a Mature Student Category for admission.

All students seeking admission to the Bachelor of Commerce (Honours) program must first complete either the Direct Entry, Track 1 or Track 2 requirements.

The Bachelor of Commerce also have *Special Consideration* and *Canadian Indigenous Ancestry* categories of admission. See Applicant Bulletin (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) for complete details.

### Advance Standing: Transfer and Second Degree Students

Students who do not meet the eligibility requirements for admission after their first year of University can spend another year (or more) in another faculty, complete the eligibility requirements, and then apply (or re-apply) for admission. Students who complete additional course credits beyond the Track 1/Foundation or Track 2 requirements are eligible to receive applicable advance standing upon admission to the Asper School of Business.

The following regulations apply to students who must (or choose to) take more than one year to qualify for admission to the Asper School of Business.

#### All transfer and second degree students will be required to:

Meet the admission requirements of Track 1 or Track 2 in the year of application.

Complete all 120 credit hours required in the Bachelor of Commerce (Honours) program, including the 24 credit hours that comprise the specific Track 1/Foundation course requirements, the Core requirements, the course requirements for one Major, Business Options, and Elective courses. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. After admission to the Asper School, students in Track 2 must complete all outstanding courses listed in the Track 1/Foundation course requirements and achieve a minimum grade of "C" in each course.

Students who are admitted to the Asper School of Business who have completed more than the minimum 24 credit hours requirement of Track 1/Foundation course or Track 2 may be eligible to receive transfer credit for the additional work completed, provided the additional course work is creditable toward the degree requirements of the Bachelor of Commerce (Honours).

Students who are admitted to the Asper School of Business following the completion of another degree program are eligible to receive a maximum of 60 hours of transfer credit for applicable courses completed as part of their first degree. Students who, within their first degree, have more than 60 hours of transferable credits would be required to take substitute courses for credits in excess of the 60 hour limit on transfer.

Students who have a degree and in addition have completed further courses at the University of Manitoba which are applicable to the

B.Comm.(Hons.) program that were not used for credit toward their first degree may receive additional transfer credit for that work.

Equivalent courses completed at other universities will be considered for admission and transfer credit only if the courses have been taken within the last 10 years.

Students are encouraged to contact a Undergraduate Program Advisor in the Undergraduate Program Office for information on how to optimize their transfer credit and advance standing.

See Applicant Bulletin (<https://umanitoba.ca/explore/undergraduate-admissions/apply/#find-admission-requirements-and-begin-your-application>) for detailed information on admission requirements.

### Admission Requirements from Joint Programs with Manitoba Colleges

The Asper School of Business has established Joint Programs with Red River College (<https://umanitoba.ca/faculties/management/programs/undergraduate/joint-programs-with-manitoba-colleges.html#RRC>), Assiniboine Community College (<https://umanitoba.ca/faculties/management/programs/undergraduate/joint-programs-with-manitoba-colleges.html#RRC>), University College of the North (<https://umanitoba.ca/faculties/management/programs/undergraduate/joint-programs-with-manitoba-colleges.html#RRC>), and école technique et professionnelle (<https://umanitoba.ca/faculties/management/programs/undergraduate/joint-programs-with-manitoba-colleges.html#RRC>). Graduates of the Business Administration Diploma (University Stream) from these four colleges are eligible to apply directly to the Asper School of Business.

Successful applicants will receive either block transfer credit or direct transfer credit for their courses completed in the Business Administration Diploma and are required to complete specified courses at the University of Manitoba in order to receive the Bachelor of Commerce (Honours) degree. Requirements for these entry routes are found in the Programs tab listed above. Admission to each Joint Program is limited to an annual quota and is competitive.

See Applicant Bulletin (<https://umanitoba.ca/explore/undergraduate-admissions/apply/#find-admission-requirements-and-begin-your-application>) for detailed information on admission requirements.

### Academic Regulations

All students are asked to note that some academic policies and regulations are under review and are subject to change. Please check the Undergraduate Program Office for updated information.

The provisions of the General Academic Regulations (p. 118), and the University Policies and Procedures (p. 37), apply to all students. In addition, the Asper School of Business has regulations and requirements, published below, which apply specifically to its students and to non-business students taking business courses.

#### Calculation of the Cumulative GPA

The computation of the cumulative GPA is the same as that described in the General Academic Regulations (p. 118).

#### Changes in Program Requirements

Once students are admitted to the Asper School and have successfully completed any portion of the program, they will not be required to meet new course requirements subsequently stipulated for that portion of the



program, whether the requirements be for the faculty or for an individual major.

### Completing Two Majors (Second Major) Students Wishing to Complete Two Majors

Note the following Asper School of Business policy: "Students will not be given any registration priority for a second major." The Asper School of Business cannot guarantee that you will obtain space in the courses you would like for a second major. Please refer to Business Option or Elective (p. 704).

Students who have completed all the requirements or who have all the courses in registration for a major are not permitted to formally declare a different major unless there is space in the courses needed to complete the different major. Students are not permitted to declare a different major in order to obtain space in full courses.

### Course Selection and Requirements

All students are limited to a maximum of six credit hours of IDM 4050, IDM 4070, and IDM 4080. These courses are considered Business Options, rather than as part of any Major.

ACC 3080, FIN 3270, and FIN 3440 are also considered general Options. They are not part of any major.

### Degree GPA Requirement for Graduation

Students admitted to the Asper School of Business must achieve a minimum degree GPA of 2.00 on all 120 credit hours required in the Bachelor of Commerce (Honours) degree program. Students must also achieve a minimum grade of "D" or better in each course except for the individual courses required in the Track 1/Foundation course requirements that require a grade of "C" or better in each course and/or specified core courses in certain majors.

All Track 1/Foundation courses, Core courses, Major courses, Business Options, and Electives applicable to the Bachelor of Commerce (Honours) degree requirements, as well as the grades achieved in each course, are transferred into the Asper School of Business and are included in the degree GPA. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business (or equivalent).

### Eligibility Requirements for Awards

To be eligible for the Dean's Honours List a student must complete a minimum of 12 credit hours of courses at the University of Manitoba during one academic term and achieve a term GPA of at least 3.50. Students participating in approved International Exchange Programs may be eligible for the Dean's Honour List.

To be eligible for most awards, a student must complete a minimum of 24 credit hours of courses at the University of Manitoba during an academic year consisting of consecutive Fall and Winter terms. Co-operative Education students are eligible to apply for most awards; please check the Asper Undergraduate Program web site and/or with the Financial Aid and Awards (<https://umanitoba.ca/financial-aid-and-awards/>) Office for more information on the eligibility requirements for Co-operative Education students.

The degree "With Distinction" will be awarded to all students graduating with the Bachelor of Commerce (Honours) Degree who attain a degree GPA of 3.80 or better on the following criteria: students admitted to the Asper School of Business in 2011 and thereafter will have their degree

GPA determined on the basis of all courses which form a part of the 120 credit hours required in the four-year degree program.

The University Gold Medal, Silver Medal and Bronze Medal in Business shall be awarded annually. The candidate for the one medal may be a graduate from either the Bachelor of Commerce (Honours) or the Bachelor of Commerce (Honours) [Co-operative Education Option]. Students graduating in October, February, and May are eligible for these awards in Business which shall be awarded annually at the spring convocation.

Students interested in the detailed terms of reference for the University Gold Medal in Business or who are interested in bursaries, awards and scholarships should contact the Undergraduate Program Office in Asper or the University's Financial Aid and Awards Office. (<https://umanitoba.ca/financial-aid-and-awards/>)

### Evening Program

The Asper School of Business does not offer an evening program. Although a limited number of business courses may be offered in evening time slots during both the Regular and Summer Sessions, it is not possible to complete all the course requirements of the Bachelor of Commerce (Honours) program without recourse to daytime attendance.

### Examination Regulations

The faculty adheres to the University Policy and Procedures Final Examinations and Final Grades Policy and Procedure (p. 48). For particular examination regulations, including deferred examinations, pertinent to the Faculty, students are referred to the pamphlet, Examination Regulations for the Asper School of Business, available from the Undergraduate Program Office. The faculty does not offer supplemental examinations. The faculty does not offer Challenge for Credit examinations.

### Letter of Permission to Take Courses at Another University for Transfer of Credit

Students wishing to complete courses at another institution for credit at the University of Manitoba will apply for written permission from the Registrar's Office prior to registering at the other institution. Students should apply for the Letter of Permission at least 4-6 weeks in advance.

To be eligible to take courses on a Letter of Permission, a Business student must:

1. be applying to take a course not currently offered by Asper (when applying to take a course transferred as an Asper course) in the term for which they are applying and
2. have completed a minimum of 24 credit hours in the Asper School of Business in addition to any transfer credits received upon admission.

Students (including Asper students on an exchange program) will not be granted a Letter of Permission for capstone courses of the Bachelor of Commerce (Honours) Program or capstone courses in its majors (regardless if the course is or is not being offered in any term).

See the on-line University of Manitoba "Academic Calendar and Catalog", Faculty of Management/I.H. Asper School of Business, Program and Graduation Requirements, Program Requirements for Majors, for the defined capstone courses of the Bachelor of Commerce (Honours) program and capstone courses in its majors.

### Maximum Course Load/Minimum Course Load

Students are not permitted to take more than 18 credit hours during an academic term without permission from the Undergraduate Program Manager.

Students enrolled in the Asper Co-op Option must register in a minimum of 9 credit hours between co-op work terms, unless written permission is obtained from the co-op office to complete back to back work terms (see Academic Term Requirements for the Asper Co-op Program (p. 700)).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit and may not take more than one course at a time (see Work Term Requirements for the Asper Co-op Program (p. 700)).

### Plagiarism, Cheating and Personation

The Asper School of Business has adopted the Senate definition and policy on plagiarism, cheating and personation as described in the General Academic Regulations (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/#Academic-Integrity>). A student found guilty of participating in any of these activities is subject to serious academic penalty and possible prosecution under the Canadian Criminal Code.

### Prerequisite Requirements

Prerequisite requirements must be met for entry into and continuance in the faculty.

Students must also meet all individual course prerequisites for further study in the program.

A passing grade is acceptable for prerequisite purposes for courses offered by the Asper School of Business unless a higher grade is called for in the course description.

### Probation Regulations

#### Maximum Number of Failures

Each student in the Asper School of Business is permitted a maximum of 15 credit hours of failures. If a student has more than 15 credit hours of failed courses and a degree grade point average (DGPA) of 2.00 or higher, the student will be placed on Probation and have a formal academic assessment of "On Probation" automatically placed on their academic record. Such students will be subject to the course load and performance requirements of the Probation Program.

Details and procedures concerning the Probation Program are available from the Undergraduate Program Office or see Academic Policies and Procedures on the Asper School of Business website.

### Probation Program

Students in academic jeopardy should carefully monitor each term's academic results. Students placed on Probation, will immediately be placed on "hold" in the Asper School of Business and have a formal academic assessment of "On Probation" added to their transcript.

Students who have been placed on Probation must process all registration through an Asper Program Advisor and will only be reinstated to regular student status in the Asper School of Business if all the specific conditions of the Probation Program have been met, including having met a minimum DGPA of 2.00.

If a student successfully completes the Probation Program, their student status is automatically reinstated to regular student status.

A student who fails the first Probation Program is permitted to enter a second Probation Program.

A student who successfully completes the Probation Program and who later fails an additional course in a subsequent term will immediately be placed on Probation again and be permitted another opportunity to enter the Probation Program.

Students are permitted a maximum of 2 consecutive attempts in the Probation Program. If a student fails the second consecutive Probation Program, the student will automatically have an academic assessment of "Required to Withdraw from Faculty" (WF) placed on their academic record. (Please refer to Required to Withdraw from Bachelor of Commerce (Honours) Program. (p. 698))

Details and procedures concerning the Probation Program are available from the Undergraduate Program Office or see Academic Policies and Procedures on the Asper School of Business website.

### Repeating, Substituting and Extra Courses

#### Required Courses

A student who withdraws from a Core course or who wants to repeat a Core course because of a passing or failing grade, should, if possible, repeat that course during the following Fall or Winter Term. The student will be subject to Limited Access as per the University's Voluntary Withdrawal (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/#text/#Attendance-Withdrawal>) and Repeat Course Policies under the General Academic Regulations. If a student repeats a course for which a grade was recorded, only the highest of the grades achieved will be included in the computation of the degree GPA.

Students may not substitute another course for a Core course.

### Major Courses

Students who achieve a grade of "F" in a Major course must either repeat that course or substitute another Major course if the Major requirements permit an alternate choice. Upon completion of the Major course, only the highest of the grades achieved will be included in the computation of the degree GPA. When a course is to be substituted, the student must seek the approval of the Undergraduate Program Office, in writing, prior to enrolling in the new course; failure to do so may result in a denial of the course substitution.

### Electives and Business Options

Students who achieve a grade of "F" in an Elective or Option may either repeat that course or substitute another approved course in its place. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other Faculties and Schools, excluding the Asper School of Business. Upon completion of the course, only the highest of the grades achieved will be included in the computation of the degree GPA.

When a course is substituted for a failed Elective or Option, a student must request approval from the Undergraduate Program Office in writing prior to enrolling in the new course; failure to do so may result in a denial of the course substitution.

Students who want to supplement their Majors may take up to 12 hours of their Business Options from that area.

### Voluntary Withdrawals and Voluntary Repeats

**Limited Access (see University Policy and Procedures-Limited Access section 2.5** (<https://catalog.umanitoba.ca/undergraduate-studies/>

policies-procedures/repeated-course-policy/#Limited%20Access) **will not affect registration for the 2022-2023 (including Summer Term 2023).**

If a student voluntarily withdraws from a course and wants to enrol in the course in another term or if a student wants to voluntarily repeat any course in which a passing grade has been achieved (for example, in order to improve their degree GPA, or to meet a prerequisite requirement) they will be subject to all published University or Faculty registration restrictions (for example, students repeating courses will be subject to Limited Access as per the University's Voluntary Withdrawal (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/#text/#Attendance-Withdrawal>) and Repeat Course Policies (p. 55) under the General Academic Regulations (p. 118) and University Policy and Procedures (p. 37)). After completion of a voluntary course repeat only the highest of the grades achieved will be included in the computation of the degree GPA. When a student wishes to voluntarily repeat a course, the student should seek written approval of the Undergraduate Program Office.

### Extra or Substitute Courses

Students who would like to take courses extra to their degree are permitted, however students should seek approval of the Undergraduate Program Office prior to registration. When a course is extra to the degree but a student would like to substitute the course for another already in the degree, the student should seek written approval of the Undergraduate Program Office, prior to enrolling in the new course; failure to do so may result in a denial of the course substitution.

### Residency Requirement

All Business students must complete a minimum of 60 credit hours at the University of Manitoba in order to satisfy the residence requirement of the Bachelor of Commerce (Honours) degree.

Students participating in approved International Exchange Programs may be exempt from the 60 credit hour requirement. See Academic Term Requirements.

Students considering completing course work at another university are referred to the General Academic Regulations (p. 118) for the Letter of Permission.

**Note:** Students admitted to the Asper School of Business prior to the current year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Required to Withdraw (WF) from the Bachelor of Commerce (Honours) Program

All students admitted in September 2015 and thereafter, in the I. H. Asper School of Business will have a formal academic assessment once they have completed 24 or more credit hours of coursework. After that point a student will have a formal academic assessment at the end of every Fall, Winter and Summer term.

At any point of formal academic assessment, if a student i) has a degree grade point average (DGPA) of less than 2.00 or ii) fails a second consecutive Probation Program, they will be required to withdraw from the Asper School of Business. A student in this situation will automatically have an academic assessment of "Required to Withdraw from Faculty" (WF) placed on their academic record.

Such a student will cease to be a student in the Asper School of Business but may apply for admission to another Faculty according to the rules of that unit. If such a student desires to gain entry back to the Asper School

of Business, they must re-apply for admission and will have to meet the requirements for admission at the time of the new application.

### Security of Academic Records

The Asper School of Business has adopted supplementary criteria and procedures on access to student academic records to supplement the university policy on Disclosure and Security (p. 47) of Student Academic Records. Copies of these policies are available in the Undergraduate Program Office. (Currently under review.)

### Student Appeals of Academic Regulations

Except as otherwise noted, student appeals should be directed to the Secretary of the Undergraduate Program Committee in the Undergraduate Program Office. The Committee considers appeals from Asper students who request special consideration in respect to rules and regulations governing their programs of study.

A certificate from an appropriate professional agency, such as the University Counselling Service (<https://umanitoba.ca/student-supports/counselling-resources-students/>) or a licensed medical practitioner, should support appeals based on compassionate or medical problems.

### Student Responsibility

The Bachelor of Commerce (Honours) program undergoes changes from time to time. As a result, some changes in program structure, content and regulations may be made for the current and upcoming academic year. Specific program information for the regular program, the co-operative education program option, Joint Programs, and 2+2 Programs may be obtained from the Undergraduate Program Office.

### Student's Responsibility

It is the responsibility of all students to ensure that they follow the program of study as outlined in their chosen Major and that they meet all the requirements as specified by the University of Manitoba and the Asper School of Business.

When you are registering for courses, it is your responsibility to ensure that you have satisfied all prerequisite and concurrent course requirements.

It is your responsibility to ensure you have registered for the correct courses to satisfy the requirements of the Bachelor of Commerce (Honours) degree.

Read course descriptions carefully to make sure you are not registered for a course that "May Not Be Held With" a course you have already taken. You will not be allowed to apply both courses toward your degree requirements.

### Time Limit for Completion of Degree

The maximum period of eight years for completion of degree requirements will be reduced by one year for each block of 15 credit hours of advance standing received at the point of admission. This time limit applies to all students, whether full-time or part-time.

The maximum period for completion of degree requirements for students enrolled in the co-operative education option is currently under faculty review.

A student who does not complete all degree requirements within the time limit permitted will be required to withdraw from the faculty. Students may appeal to the Undergraduate Program Committee for a one year time extension; all appeals must be accompanied by a detailed letter

explaining the student's circumstances and appropriate supporting documentation.

## Transcripts and Degree Parchments

### Majors on Transcripts

After you graduate with your Bachelor of Commerce (Honours) degree, your formally declared major will appear on your University of Manitoba transcript. Your major will appear on your transcript once you have formally declared it on Aurora. Your major will not be listed on the Bachelor of Commerce (Honours) parchment.

If you complete the requirements of a second major within the credit hours required for the Bachelor of Commerce (Honours) degree, you may request that the second major also appear on your transcript after you graduate. See the Undergraduate Program Office in your graduating term to complete a request form.

### Co-operative Education Option on Transcripts

If you have successfully completed the Asper Co-operative Program, it will appear on your University of Manitoba transcript after you graduate with your Bachelor of Commerce (Honours) degree. The Asper Co-operative Program will appear on your transcript once you have formally declared it on Aurora. Also, the Asper Co-operative Program will appear on the Bachelor of Commerce (Honours) parchment.

## Withdrawal from the Asper Co-Op Program

Details for all the Asper Co-op Program's requirements can be found under the Co-operative Option (p. 700) tab.

**Note:** Please refer to the Cooperative Option tab; Withdrawal from the Asper Co-op Program (p. 701).

## Withdrawal from Bachelor of Commerce (Honours) Program for No Registration After Admission

- A student who does not register for any courses in the Fall or Winter term after admission will cease to be a student in the Asper School of Business. Such students must re-apply for admission if that is desired and will have to meet the requirements for admission at the time of the new application.
- A student who registers for course work in the Fall or Winter term after admission but subsequently voluntarily withdraws from all course work may be permitted to re-register at any time thereafter, subject to all faculty policies and requirements as they existed at the time of first admission and completing a signed declaration of non-attendance at another post-secondary institution. Such students should be aware of the time limit for completion of the degree.
- A student who applies for transfer to another university program and subsequently registers for courses will cease to be a student in the Asper School of Business. Such a student must re-apply for admission if that is desired and will have to meet the requirements for admission at the time of the new application.

## Withdrawal from Individual Courses

### Required Courses

Students in the Asper School of Business may withdraw without academic penalty from a required Core course provided they have not previously failed or withdrawn from that course and that they have met the Voluntary Withdrawal deadlines established by the university (see Deadline for Withdrawals in the Academic Schedule (p. 28)).

### Electives and Business Options

Students may withdraw without academic penalty from an Elective or Option provided they do so before the final date for withdrawal (see Deadline for Withdrawals in the Academic Schedule (p. 28)). An Elective

is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business.

### Authorized Withdrawals

Authorized Withdrawals from courses after the registration revision period in each term may be granted on the basis of medical and compassionate grounds. A medical certificate signed by a physician or other appropriate professional must document medical grounds. Appeals based on compassionate reasons and circumstances must be supported by appropriate documentation. Students requesting Authorized Withdrawals should contact the Undergraduate Program Office.

## Minors for Non-Business Students

### Leadership for Business and Organizations Minor for Non-Business Students

The Minor in Leadership for Business and Organizations is offered to non-Management students whose faculties permit a Minor. The minor combines subject knowledge with conceptual organizational knowledge and competencies in leading teams, conflict resolution, organizational change, negotiations as well as corporate responsibility and other leadership components that facilitate and support personal, work group and organizational success.

A limited number of seats in this minor will be available each year. Supplementary entrance requirements and enrolment limits may vary with a student's Faculty of registration. Students planning to enrol in this minor should consult a student advisor in their home Faculty.

The Minor in Leadership for Business and Organizations consists of 18 credit hours from the following:

Course	Title	Hours
GMGT 1010	Business and Society <sup>1,2</sup>	3
GMGT 2060	Management and Organizational Theory <sup>1,2</sup>	3
GMGT 2070	Introduction to Organizational Behaviour	3
LEAD 4010	Leading Change	3
Select 6 credit hours from the following:		6
GMGT 3010	Management Decision-Making	
LEAD 3010	Negotiation and Conflict Management	
LEAD 3020	Team Building and Diversity	
LEAD 3030	Corporate, Social, and Environmental Responsibility	
LEAD 4020	Leadership, Power and Politics in Organizations	
PSYC 2540	Social Psychology	
INDG 3350	Indigenous Organizations	
INDG 4320	Indigenous Economic Leadership	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Entrance to the Minor in Leadership for Business and Organizations is comprised of these two courses (6 credit hours of prerequisite courses) completed with a minimum grade of "C" or better. After entry to the minor students complete the remaining requirements.

<sup>2</sup> Other Faculty specific entrance requirements may be required because of the limited seats available each year; students must consult a student advisor in their home Faculty for additional information.

## Management Minor for Non-Business Students

The Management Minor consists of any 18 hours of credit in courses offered by the Asper School of Business. Entrance requirements and enrolment limits vary with a student's faculty of registration. Students planning to enrol in this minor should consult a Student/Program Advisor in their home Faculty.

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

### Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 700).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students

do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

### Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

### Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

### Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 701) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

### Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 701)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 701) for the Asper Co-op Program)

### Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of "C" on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 701) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: "Required to Withdraw from the Asper Co-op Program".

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program.

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student's written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a "C" grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application

- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

### Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

### Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 703) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals

are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Accounting, B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.



## The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

## Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

## Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

## Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

## Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1500	Introduction to Calculus	3
MATH 1520	Introductory Calculus for Management and Social Sciences	3
STAT 1000 or STAT 1150	Basic Statistical Analysis <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3

Select 3 credit hours of Electives <sup>7</sup>	3	
<b>Hours</b>	<b>12</b>	
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>	<b>18</b>	
<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>	3	
Select 3 credit hours from Ethics <sup>10</sup>	3	
<b>Hours</b>	<b>9</b>	
<b>Years 3-4</b>		
Select 12 credit hours of Major courses	12	
Select 15 credit hours of Business Options <sup>11</sup>	15	
Select 12 credit hours of Electives <sup>7</sup>	12	
<b>Hours</b>	<b>39</b>	
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>	3	
<b>Hours</b>	<b>6</b>	
<b>Total Hours</b>	<b>120</b>	

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details).MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2:ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Accounting Major consists of:

Course	Title	Hours
ACC 2010	Intermediate Accounting - Assets (C)	3
ACC 2020	Intermediate Accounting - Equities (C)	3
ACC 3040	Cost Accounting (C)	3
ACC 4030	Accounting Theory (C)	3
<b>Total Hours</b>		<b>12</b>

To graduate with an Accounting Major, it is a requirement that students have a minimum of C+ in the prerequisite courses of ACC 1100 and ACC 1110 and a minimum grade of C in each of ACC 2010, ACC 2020, ACC 3040 and ACC 4030.

The prerequisite for:

- ACC 2010 is ACC 1100 (C+),
- ACC 2020 is ACC 2010 (C) and FIN 2200 (C),
- ACC 3040 is ACC 1110 (C+)
- ACC 4030 is ACC 2020 (C) and FIN 2200 (C).

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake

**Telephone:** 204-474-8521

**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

## Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 706).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program

as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

## Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op

work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 707) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 706)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study,

departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 706) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of "C" on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 706) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: "Required to Withdraw from the Asper Co-op Program".

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program.

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student's written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved

to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a "C" grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume

- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/ixchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

### Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

### Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be

permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 709) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Actuarial Mathematics, B.Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business

- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>

Year 3		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
Years 3-4		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
Year 4		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270.

Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Actuarial Mathematics Major consists of:

Course	Title	Hours
Select 12 credit hours from the following:		12
ACT 2020	Economic and Financial Applications	
ACT 2120	Interest Theory	
ACT 3130	Actuarial Models 1	
ACT 3230	Actuarial Models 2	
ACT 3340	Financial Derivatives for Actuarial Practice	
ACT 4010	Regression Modeling in Actuarial Science	
ACT 4020	Short Term Actuarial Mathematics I	
ACT 4030	Short Term Actuarial Mathematics II	
<b>Total Hours</b>		<b>12</b>

### Notes:

- ACT 4020 and ACT 4030 collectively satisfy the requirement for the Short-Term Actuarial Mathematics Exam by the Society of Actuaries.
- Student declaring Actuarial Mathematics as their first major may take MATH 2720 as either a Business Option or non-Business Elective.

Students admitted to the Asper School of Business prior to the current academic year should refer to the Academic Calendar for the year in which they were admitted for the requirements for this major.

To graduate with an Actuarial Mathematics Major, students are required to attain a minimum grade of "C+" in all 12 credit hours of Actuarial courses that will contribute to the Major.

If STAT 2150 is completed, this satisfies the prerequisite for FIN 3410. Alternatively STAT 2000 is a recommended elective as a prerequisite for FIN 3410.

Prior to registration, all students interested in or enrolled in Actuarial Mathematics are highly encouraged to consult the Director of the Warren Centre or an Undergraduate Program Advisor for program planning advice.



# Program Requirements for the Asper Co-op Program

## Contact and Program Information

**Director:** Kelly Mahoney  
 Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

## Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 712).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of

Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

## Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 713) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 713)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 713) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of "C" on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 713) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: "Required to Withdraw from the Asper Co-op Program".

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student's written request, accompanied by any supporting

documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a "C" grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** [amber.pohl@umanitoba.ca](mailto:amber.pohl@umanitoba.ca)

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term

- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

### Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

### Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 715) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from

the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Entrepreneurship/Small Business, B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3

SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270.

Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Entrepreneurship/Small Business Major consists of:

Course	Title	Hours
ENTR 3100	Small Business Management	3
ENTR 4100	New Venture Analysis	3
FIN 3240	Entrepreneurial Finance	3
Select one of the following:		3
ENTR 3102	Technological Entrepreneurship	
ENTR 3104	Selected Topics in Small Business/ Entrepreneurship	
ENTR 3106	Family Business Management	
<b>Total Hours</b>		<b>12</b>

Effective September 2019, along with all existing course prerequisites, ENTR 2030 (C) will be added to the following Entrepreneurship courses: ENTR 3100, ENTR 3102, ENTR 3104, ENTR 3106, and ENTR 4100. The prerequisite to ENTR 2030 is GMGT 1010 (D).

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to

complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

## Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 718).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a

cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

## Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result

of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 719) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

### Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 718)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 718) for the Asper Co-op Program)

### Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,

- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of "C" on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 718) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: "Required to Withdraw from the Asper Co-op Program".

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

### Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student's written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

### Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements



as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a “C” grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant’s academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

### Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

### Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University’s residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 721) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

### Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Finance B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)

- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer

from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1500	Introduction to Calculus	3
MATH 1520	Introductory Calculus for Management and Social Sciences	3
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3

Select 3 credit hours from Alternative Management Studies <sup>12</sup>	3
<b>Hours</b>	<b>6</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, POLS 3270, or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).  
Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Finance major consists of:

Course	Title	Hours
FIN 3410	Investments <sup>1</sup>	3
FIN 3480	Corporate Finance Theory and Practice <sup>1</sup>	3
FIN 4400	Financial Management Practices <sup>2,3</sup>	3
Select one Approved Elective		3
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> The prerequisites for FIN 3410, FIN 3460 and FIN 3480 are: [FIN 2200 (C+), MATH 1220 (C) or MATH 1300 (C) or MATH 1310 (C)], and [STAT 2000 (C) or STAT 2150 (C)].

<sup>2</sup> The prerequisite for FIN 4400 is FIN 3480 (D).

<sup>3</sup> Capstone Course: FIN 4400

## Approved Electives

Course	Title	Hours
FIN 3400	Investment Banking	3
FIN 3420	Security Analysis	3
FIN 3450	International Finance	3
FIN 3460	Financial Markets and Institutions <sup>1</sup>	3
FIN 4240	Financial Modeling	3
FIN 4250	Behavioral Finance	3
FIN 4260	Advanced Finance Theory	3
FIN 4270	Options and Futures	3

<sup>1</sup> The prerequisites for FIN 3410, FIN 3460 and FIN 3480 are: [FIN 2200 (C+), MATH 1220 (C) or MATH 1300 (C) or MATH 1310 (C)], and [STAT 2000 (C) or STAT 2150 (C)].

To graduate with a Finance Major, a minimum grade of C+ in the prerequisite course of FIN 2200.

Finance students are also required to take MATH 1300 (C) or MATH 1310 (C) and STAT 2000 (C) as part of the electives in their program since they are part of the prerequisite for the finance courses as stated in the footnote above.

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

Director: Kelly Mahoney

Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

## Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 724).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be

immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

## Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of “C” is required in each co-op work term course. Students who fail to meet the minimum “C” grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript “Required to Withdraw from the Asper Co-op Program”.

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript “Required to Withdraw from the Asper Co-op Program”. The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 725) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 724)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student’s performance will be evaluated following each academic term to ensure standards are met

for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 724) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of “C” on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 724) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: “Required to Withdraw from the Asper Co-op Program”.

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript “Required to Withdraw from the Asper Co-op Program”.

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student’s written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals

related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a "C" grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume

- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

### Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

### Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be

permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 727) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Generalist, B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance



- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements

for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GMGT 3300	Business Law	3

Select 3 credit hours from International Business Requirement <sup>9</sup>	3
Select 3 credit hours from Ethics <sup>10</sup>	3
<b>Hours</b>	<b>9</b>
<b>Years 3-4</b>	
Select 12 credit hours of Major courses	12
Select 15 credit hours of Business Options <sup>11</sup>	15
Select 12 credit hours of Electives <sup>7</sup>	12
<b>Hours</b>	<b>39</b>
<b>Year 4</b>	
GMGT 4010 Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>	3
<b>Hours</b>	<b>6</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Generalist Major consists of 12 credit hours that must include one course from the required list of courses from four different Majors (i.e., Options that are not part of a Major's required course requirements are not eligible for the Generalist Major).

Select 12 credit hours from the following:

Course	Title	Hours
<b>Accounting</b>		
ACC 2010	Intermediate Accounting - Assets (C)	3
ACC 2020	Intermediate Accounting - Equities (C)	3
ACC 3040	Cost Accounting (C)	3
ACC 4030	Accounting Theory (C)	3
<b>Actuarial Mathematics</b>		
ACT 2020	Economic and Financial Applications	3
ACT 2120	Interest Theory	3
ACT 3130	Actuarial Models 1	3
ACT 3230	Actuarial Models 2	3
ACT 3340	Financial Derivatives for Actuarial Practice	3
ACT 4010	Regression Modeling in Actuarial Science	3
ACT 4020	Short Term Actuarial Mathematics I	3
ACT 4030	Short Term Actuarial Mathematics II	3
<b>Entrepreneurship/Small Business</b>		
ENTR 3100	Small Business Management	3
ENTR 4100	New Venture Analysis	3
FIN 3240	Entrepreneurial Finance	3
<b>Finance</b>		
FIN 3410	Investments	3
FIN 3480	Corporate Finance Theory and Practice	3
FIN 4400	Financial Management Practices	3
<b>Human Resource Management/Industrial Relations</b>		
HRIR 3450	Labour and Employment Relations	3
<b>Indigenous Business Studies</b>		
INDG 3120	Exploring Indigenous Economic Perspectives	3
INDG 4320	Indigenous Economic Leadership	3
<b>International Business</b>		

FIN 3450	International Finance	3
INTB 2200	International Management	3
HRIR 4520	Comparative Industrial Relations and Human Resource Management	3
MKT 3300	International Marketing	3
<b>Leadership and Organizations</b>		
GMGT 3010	Management Decision-Making	3
LEAD 3010	Negotiation and Conflict Management	3
LEAD 3020	Team Building and Diversity	3
LEAD 3030	Corporate, Social, and Environmental Responsibility	3
LEAD 3040	Special Topics in Leadership and Organization	3
LEAD 4010	Leading Change	3
LEAD 4020	Leadership, Power and Politics in Organizations	3
<b>Logistics and Supply Chain Management</b>		
SCM 2210	Transportation Principles	3
SCM 2230	Introduction to Supply Chain Management	3
SCM 3360	Supply Chain Logistics	3
<b>Management Information Systems</b>		
MIS 3500	Database Management Systems	3
MIS 3510	Systems Analysis and Design	3
MIS 3520	Data Communications and Networking	3
MIS 4500	Management Information Systems Strategy	3
<b>Marketing</b>		
MKT 3220	Marketing Research	3
MKT 3230	Consumer Behaviour	3
MKT 3390	Integrated Marketing Communications	3
MKT 4210	Marketing Management	3
<b>Operational Research/Operations Management</b>		
MSCI 3400	Intermediate Management Science	3
OPM 3650	Management of Quality and Reliability	3
OPM 3660	Operations Management in Service Organizations	3
OPM 3670	POM Project in Industry	3
MSCI 4220	Management Science Models in Business and Industry	3
OPM 4620	Production Management Seminar	3

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of

three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

### Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 731).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper

Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

## Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are

questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 731) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 731)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 731) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,

- Failure to achieve a minimum grade of “C” on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 731) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: “Required to Withdraw from the Asper Co-op Program”.

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript “Required to Withdraw from the Asper Co-op Program”.

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

### Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student’s written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student’s satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

### Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of

co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a “C” grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant’s academic standing is verified by the Undergraduate Program Office.

Application Deadline: Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/>)

programs/undergraduate/iexchange/outgoing/apply-now.html), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

## Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

## Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 733) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or

- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Human Resources Management/ Industrial Relations, B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)

- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3

Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
	<b>Hours</b>	<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
	<b>Hours</b>	<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
	<b>Hours</b>	<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
	<b>Hours</b>	<b>18</b>
<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
	<b>Hours</b>	<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
	<b>Hours</b>	<b>39</b>
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
	<b>Hours</b>	<b>6</b>
	<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.



## Specific Requirements for the Major

The Human Resources Management /Industrial Relations Major consists of:

Course	Title	Hours
HRIR 3450	Labour and Employment Relations	3
Select one of the following options:		
Option 1 - Select three courses from List A		
Option 2 - Select two courses from List A and one course from List B		
<b>Total Hours</b>		<b>12</b>

### List A

Course	Title	Hours
HRIR 4410	Staffing and Management Development	3
HRIR 4420	Compensation	3
HRIR 4480	Collective Bargaining and Administration	3
HRIR 4520	Comparative Industrial Relations and Human Resource Management	3
<b>Total Hours</b>		<b>12</b>

### List B

Course	Title	Hours
HRIR 3430	Selected Topics in Industrial Relations	3
LABR 3010	Labour Law	3
LABR 3060	Workplace Health and Safety	3
LABR 3070	Labour Relations and Occupational Health and Safety Law	3
LABR 3130	Employment Legislation and the Protection of Workers	3
LABR 3140	Pensions and Benefits	3

Students entering the second year of the four-year program are advised to take HRIR 2440 since it is a prerequisite to advanced courses in the area.

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work

terms can combine the work terms together to satisfy 3 credit hours of Business Options.

## Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 737).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper

Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

## Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are

questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 737) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 737)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 737) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,

- Failure to achieve a minimum grade of “C” on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 737) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: “Required to Withdraw from the Asper Co-op Program”.

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript “Required to Withdraw from the Asper Co-op Program”.

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student’s written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student’s satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of

co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a “C” grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant’s academic standing is verified by the Undergraduate Program Office.

Application Deadline: Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/>)

programs/undergraduate/iexchange/outgoing/apply-now.html), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

## Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

## Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 739) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or

- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Indigenous Business Studies, B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)

- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3

Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Indigenous Business Studies Major consists of:

Course	Title	Hours
INDG 3120	Exploring Indigenous Economic Perspectives	3
INDG 4320	Indigenous Economic Leadership	3
Select 3 credit hours from List A		3
Select 3 credit hours from List A (not already taken) or from List B		3
<b>Total Hours</b>		<b>12</b>

### List A

Course	Title	Hours
ACC 3040	Cost Accounting	3
ENTR 3100	Small Business Management	3
ENTR 4100	New Venture Analysis	3
FIN 3270	Personal Financial Planning	3
HRIR 4410	Staffing and Management Development	3
LEAD 2010	Learning to Lead	3

### List B

Course	Title	Hours
INDG 2100	Indigenous Spirituality	3
INDG 2110	Introduction to Indigenous Community Development	3
INDG 2220	Indigenous Societies and the Political Process	3
INDG 3100	Indigenous Healing Ways	3
INDG 3160	Fundraising for Indigenous Organizations	3
INDG 3310	Canadian Law and Indigenous Peoples	3
INDG 3360	Indigenous Women in Canada	3
INDG 3370	Political Development in the North	3
INDG 4200	First Nations' Government	3
INDG 4220	Environment, Economy and Indigenous Peoples	3

Effective September 2019, along with all existing course prerequisites, the mandatory core course ENTR 2030 (C) has been added to the following Entrepreneurship courses in this major: ENTR 3100 and ENTR 4100. The prerequisite to ENTR 2030 is GMGT 1010 (D).

**Note:** Students interested in the Indigenous Business Studies Major are encouraged to discuss course options with an Asper Program Advisor as not all courses are offered every year.

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
 Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

### Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 743).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

## Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide

students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 744) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 743)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 743) for the Asper Co-op Program)



## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of “C” on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 743) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: “Required to Withdraw from the Asper Co-op Program”.

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript “Required to Withdraw from the Asper Co-op Program.”

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student’s written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student’s satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a “C” grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

## Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance,

maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

## Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

## Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 745) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# International Business, B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

#### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

#### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

#### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business

- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

#### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

#### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

#### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

#### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>

<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, POLS 3270, SOC 3838 or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270.

Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The International Business Major consists of:

Course	Title	Hours
FIN 3450	International Finance	3
INTB 2200	International Management	3
HRIR 4520	Comparative Industrial Relations and Human Resource Management	3
MKT 3300	International Marketing	3
<b>Total Hours</b>		<b>12</b>

One of the above four courses may be used in the core program; therefore the major will be comprised of the remaining three courses plus one course from the following list: MKT 3240 (Cross-Cultural Brand Management topic only) or SCM 3230.

Students majoring in International Business are permitted to take 12 credit hours of a foreign language and/or courses with an international focus from an approved list and have these non-business courses count as Business Options. The list is available in the Undergraduate Program Office.

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September

2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

## Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or completed or

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 749).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper

Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

## Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are

questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 749) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 749)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 749) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,

- Failure to achieve a minimum grade of “C” on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 749) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: “Required to Withdraw from the Asper Co-op Program”.

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript “Required to Withdraw from the Asper Co-op Program”.

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student’s written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student’s satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of

co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a “C” grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant’s academic standing is verified by the Undergraduate Program Office.

Application Deadline: Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/>)

programs/undergraduate/iexchange/outgoing/apply-now.html), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

## Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

## Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 751) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or

- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Leadership and Organizations, B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)



- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3

Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis 1 <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Leadership and Organizations Major consists of 12 credit hours from:

Course	Title	Hours
Select 12 credit hours from the following:		12
GMGT 3010	Management Decision-Making	
LEAD 3010	Negotiation and Conflict Management	
LEAD 3020	Team Building and Diversity	
LEAD 3030	Corporate, Social, and Environmental Responsibility	
LEAD 3040	Special Topics in Leadership and Organization	
LEAD 4010	Leading Change	
LEAD 4020	Leadership, Power and Politics in Organizations	
<b>Total Hours</b>		<b>12</b>

Students entering the second year of the four year program are advised to take GMGT 2070 and GMGT 2060 as they are prerequisites to some of the advanced courses in the major.

Students entering second year are strongly recommended to take LEAD 2010 prior to taking LEAD 4020 and speak with an Asper Student Program Advisor for course planning advice.

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

### Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work

term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 754).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

### Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 755) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 755)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 755) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of "C" on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 755) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will

have the following academic assessment placed on their transcript: "Required to Withdraw from the Asper Co-op Program".

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

### Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student's written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

### Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a "C" grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or

that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

## Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

## Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 757) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

## Logistics and Supply Chain Management, B. Comm., Honours

### Overview/Entrance Requirements

#### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want

to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6

Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010 Business and Society <sup>4</sup>		3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060 Management and Organizational Theory <sup>4,6</sup>		3
GMGT 2070 Introduction to Organizational Behaviour <sup>4,6</sup>		3
MKT 2210 Fundamentals of Marketing <sup>4,6</sup>		3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100 Introductory Financial Accounting		3
GMGT 2010 Business Communications		3
ENTR 2030 Introduction to Entrepreneurship		3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110 Introductory Managerial Accounting		3
FIN 2200 Corporate Finance <sup>8</sup>		3
HRIR 2440 Human Resource Management <sup>8</sup>		3
MIS 2000 Information Systems for Management <sup>8</sup>		3
MSCI 2150 Introduction to Management Sciences <sup>8</sup>		3
SCM 2160 Supply Chain and Operations Management <sup>8</sup>		3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GMGT 3300 Business Law		3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
GMGT 4010 Administrative Policy		3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Logistics and Supply Chain Management Major consists of:

Course	Title	Hours
SCM 2210	Transportation Principles	3
SCM 2230	Introduction to Supply Chain Management	3
SCM 3360	Supply Chain Logistics	3
Select one Supply Chain Management Elective		3
<b>Total Hours</b>		<b>12</b>



### Supply Chain Management Electives

Course	Title	Hours
SCM 2220	Selected Topics in Logistics and Transportation	3
SCM 2240	Purchasing and Supply Management	3
SCM 2260	Transportation Strategy and Policy	3
SCM 3230	Global Supply Chains	3
SCM 3250	Airline Business	3
SCM 3260	Supply Chain Sustainability	3
SCM 3270	Lean Management	3
SCM 3280	Project Management in Supply Chain	3

### Recommended Business Options/Electives in this Area

Course	Title	Hours
MIS 3500	Database Management Systems	3
MIS 3510	Systems Analysis and Design	3
INTB 2200	International Management	3
HRIR 3450	Labour and Employment Relations	3
GMGT 3160	Managerial Economics	3
MSCI 3400	Intermediate Management Science	3
IDM 4050	Readings in Management	3
IDM 4070	Management Research 1	3
IDM 4080	Management Research 2	3
MKT 3220	Marketing Research	3
MKT 3340	Services Marketing	3
ECON 2010	Microeconomic Theory 1	3
ECON 3010	Microeconomic Theory 2	3

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
 Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

### Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 760).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

### Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and

- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 761) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so,

including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 761)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 761) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of "C" on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 761) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills,

aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: "Required to Withdraw from the Asper Co-op Program".

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student's written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a "C" grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake  
**Telephone:** 204-474-6752  
**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

## Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

## Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

## Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 763) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the

Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

# Management Information Systems, B. Comm., Honours

## Overview/Entrance Requirements

### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the

year in which they were admitted for a description of their program requirements.

### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may

want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	

STAT 1000 or STAT 1150	Basic Statistical Analysis 1 <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3
MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

- <sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.
- <sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.
- <sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.
- <sup>5</sup> PHIL 1290 is a preferred elective in Year 1.
- <sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.
- <sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.
- <sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.
- <sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230
- <sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.
- <sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.
- <sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Management Information Systems Major consists of:

Course	Title	Hours
MIS 3500	Database Management Systems	3
MIS 3510	Systems Analysis and Design	3

MIS 3520	Data Communications and Networking	3
MIS 4500	Management Information Systems Strategy	3
<b>Total Hours</b>		<b>12</b>

To graduate with the MIS Major, it is a requirement that students have a minimum C+ in the prerequisite course of MIS 2000.

MIS 3510 (D) and COMP 1010 (C) are prerequisites for the required MIS 3500 course.

Options available in this area are ACC 3530 and MIS 4250.

Students interested in pursuing the Management Information Systems Major are encouraged to take MIS 2000 in the second year of the four-year program since it is a prerequisite to advanced courses in the area.

Students interested in pursuing the Management Information Systems Major are also encouraged, but not required, to complete COMP 1020.

Capstone Course: MIS 4500.

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

### Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 766).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

### Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>),

except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

## Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 767) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each

co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 767)); choosing to do so does not reduce the requirement of enrolment in a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 767) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of "C" on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 767) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: "Required to Withdraw from the Asper Co-op Program".

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following



academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program.

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student's written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a "C" grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

# Asper International Exchange Program

## Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

## Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term
- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

## Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

## Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 769) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any

other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.

## Marketing, B. Comm., Honours

### Overview/Entrance Requirements

#### Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry Track 1 and Track 2 (Including Students Admitted from International Articulation Agreements)

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (54 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (12 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits and definitions are defined below.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

#### Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the

Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

### The Core

The CORE consists of 54 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

### The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Indigenous:

- Accounting
- Actuarial Mathematics
- Entrepreneurship/Small Business
- Finance
- Generalist
- Human Resources Management/Industrial Relations
- Indigenous Business Studies
- International Business
- Logistics and Supply Chain Management
- Management Information Systems
- Leadership and Organizations
- Marketing, and
- Operational Research/Operations Management

A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

### Business Options

This component of the program consists of a required number of Business courses, meaning courses taught by the Faculty of Management/I.H. Asper School of Business, freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives (Non-Business Courses)

This component of the program is the **Non-Business Elective** requirement; within this document it will be referred to as an Elective. An Elective is any three or six credit hour course freely chosen

by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 12 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 6 credit hours of the Electives must comprise a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

### Capstone Courses for the Faculty and its Majors

The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

**Note:** Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the requirements for the majors. Université de Saint-Boniface courses end in the number "1" (e.g. ACC 1101).

## Degree Requirements

### Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
<b>Year 1</b>		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles <sup>1</sup>	3
Select one of the following:		3
MATH 1230	Differential Calculus <sup>1</sup>	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis <sup>1</sup> or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC <sup>1,2</sup>		6
Select 3 credit hours of Written English "W" <sup>1,3</sup>		3
GMGT 1010	Business and Society <sup>4</sup>	3
Select 3 credit hours of Electives <sup>1,5</sup>		3
		<b>Hours</b>
		<b>27</b>
<b>Years 1-2</b>		
GMGT 2060	Management and Organizational Theory <sup>4,6</sup>	3
GMGT 2070	Introduction to Organizational Behaviour <sup>4,6</sup>	3

MKT 2210	Fundamentals of Marketing <sup>4,6</sup>	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship	3
Select 3 credit hours of Electives <sup>7</sup>		3
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance <sup>8</sup>	3
HRIR 2440	Human Resource Management <sup>8</sup>	3
MIS 2000	Information Systems for Management <sup>8</sup>	3
MSCI 2150	Introduction to Management Sciences <sup>8</sup>	3
SCM 2160	Supply Chain and Operations Management <sup>8</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GMGT 3300	Business Law	3
Select 3 credit hours from International Business Requirement <sup>9</sup>		3
Select 3 credit hours from Ethics <sup>10</sup>		3
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options <sup>11</sup>		15
Select 12 credit hours of Electives <sup>7</sup>		12
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies <sup>12</sup>		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.

<sup>2</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.

<sup>3</sup> Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

<sup>4</sup> GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.

<sup>5</sup> PHIL 1290 is a preferred elective in Year 1.

<sup>6</sup> It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.

<sup>7</sup> The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.

<sup>8</sup> 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.

<sup>9</sup> International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230

<sup>10</sup> Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

<sup>11</sup> 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

<sup>12</sup> Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, PO any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270. Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

## Specific Requirements for the Major

The Marketing Major consists of:

Course	Title	Hours
MKT 3220	Marketing Research	3
MKT 3230	Consumer Behaviour	3
MKT 3390	Integrated Marketing Communications	3
MKT 4210	Marketing Management	3
<b>Total Hours</b>		<b>12</b>

Students admitted to the Asper School of Business prior to September 2019 should refer to the Archived Academic Calendar (<https://umanitoba.ca/registrar/academic-calendar/past-academic-calendars/>) for the year in which they were admitted for the requirements for this major.

Students admitted to the Asper School of Business prior to September 2019 and following the old Marketing Major will be permitted to use MKT 3248 as one of the list of additional Marketing courses for their major.

In addition to the 12 credit hours required for the major, Marketing students may take up to an additional 12 credit hours of courses from the Marketing Department as Business-Options (p. 770).

Capstone Course: MKT 4210.

## Program Requirements for the Asper Co-op Program

### Contact and Program Information

**Director:** Kelly Mahoney  
Asper Co-op Office Room 254 Drake  
**Telephone:** 204-474-8521  
**Email:** aspercoop@umanitoba.ca

The Asper School of Business offers a co-operative education option designed to complement and enrich the academic program with work experience. The co-op work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview, (p. 692) as well as the Option and Elective course components. Students who intend to complete the Asper Co-op Program must also complete a minimum of three (3) 4-month co-op work terms. Students admitted from September 2011 and who successfully complete the minimum three co-op work terms can combine the work terms together to satisfy 3 credit hours of Business Options.

### Entrance Requirements and Selection Criteria for the Asper Co-op Program

Those applying to the Asper Co-op Program must have completed or obtained:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business.
- A minimum degree grade point average of 3.0 upon assessment of the Asper School of Business Bachelor of Commerce (Honours) Program.
- A minimum of 45 credit hours in the Bachelor of Commerce (Honours) Program, before commencing the student's first work term, and no fewer than 39 credit hours remaining in the Bachelor of Commerce (Honours) Program before the commencement of the first co-op work term.

In addition to the above requirements:

- An interview with the Co-op Office will be required for admission to the Asper Co-op Program and
- Applicants for the Asper Co-op Program will be evaluated based on a complete application (p. 772).

**Note:** Each year, 5 seats will be allotted to the Canadian Indigenous Ancestry Category. This category is intended for all First Nations, Métis, and Inuit applicants who have attained a minimum DGPA of 2.75 and met all other requirements for application to the Asper Co-op Program. Students wishing to be considered in the Canadian Indigenous Ancestry Category must indicate so in the appropriate section on the Asper Co-op Program Application Form. If students do not indicate this on the application form, they will not be eligible

for consideration within this category. All applicants admitted under this category are required to register with the Indigenous Business Education Partners (IBEP) for a period of at least two academic terms following admission. If you are unsure whether to apply under this category, please consult with the Indigenous Business Education Partners (IBEP), 350 Drake Centre, phone (204) 474-7401. Proof of Indigenous Ancestry will be required to register for IBEP. Unfilled seats in this category will not be filled from outside the category and will not be transferred for use in future years.

If a student has been found to have deliberately falsified information in the application for the Asper Co-op Program, the matter will be immediately reported to the Associate Dean, Undergraduate Program as an allegation of academic dishonesty and handled according to the University Student Discipline Bylaw. (p. 84)

If, prior to acceptance into the Asper Co-op Program, it is found that the student has had an allegation of academic dishonesty upheld against them the student will no longer be eligible for entrance to the co-operative education option.

Students are advised that satisfying the minimum entrance requirements does not guarantee a place in the Asper Co-op Program. In the event that the demand for placements exceeds the number of places available or that appropriate levels of staffing of the co-op office are not available, a cap may be placed on the number of students accepted into the Asper Co-op Program. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

### Application Requirements for the Asper Co-op Program

In addition to the minimum requirements of the Asper School of Business, applicants for the Asper Co-op Program will be evaluated based on a complete application. This will include the following:

- A completed co-op application form and
- A completed Consent of Release of Personal Information form and
- A statement of purpose: The applicant must submit a statement outlining his/her motivations for participating in the Asper Co-op Program, and
- A group interview conducted by the Co-op Office.

Upon completion of the co-op application form and the group interview, each applicant's academic standing is verified by the Undergraduate Program Office.

Applications to the Asper Co-op Program must be received prior to the application deadline specified on the Co-op website (<https://umanitoba.ca/faculties/management/programs/undergraduate/coop/>), except by special permission from the Program Director. All completed applications must be submitted directly to the Co-operative Education Program Office.

### Structure and Sequencing for the Asper Co-op Program

The Asper Co-op Program consists of both academic terms and co-op work terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of students and co-op employers and will be approved by the co-op office.

Students are expected to follow the academic/work term sequence defined by the Asper School of Business from admission through to graduation.

## Work Term Requirements for the Asper Co-op Program

The Asper Co-op Program will include 12 months spent in co-op work terms with a co-op office approved employer. Normally, each co-op work term will be completed with one employer. Typically, the co-op work terms will be taken in three, 4-month-long co-op work terms; however, other schedules may also be approved on an as-needed basis.

A minimum grade of "C" is required in each co-op work term course. Students who fail to meet the minimum "C" grade in each of their co-op work term courses will be required to withdraw from the co-operative education program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program".

Asper Co-op students are required to submit at least three written co-op work term reports on their work term activities. These reports are due at times designated by the co-op office. The co-op office will provide students with instructions regarding the content and format requirements of the co-op work term reports.

Indications of unsatisfactory performance by a student on a work term will be thoroughly investigated by the co-op office. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Asper Co-op Program and the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program". The student would then be assessed for eligibility to enter the regular B. Comm. (Honours) program (please refer to Withdrawal from the Asper Co-op Program (p. 773) for more information).

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit. Students wishing to enroll in more than 3 credit hours while on a co-op work term must apply to the Co-op Faculty Advisor for permission to do so, including furnishing a letter from their co-op employer indicating that the employer approves of this exception; if approved a student may not take more than six hours of academic credit while on a work term and may not take more than one course at a time.

## Academic Term Requirements for the Asper Co-op Program

Coursework requirements of the Asper Co-op Program are equivalent to the coursework requirements of the B. Comm. (Hons.) program with exception that each Co-op Work Term (Course IDM 2982, IDM 3982, IDM 4982) will receive 1 credit hour for each co-op work term course passed. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

Students enrolled in the Asper Co-op Program are required to maintain satisfactory progress toward their B. Comm. (Honours) degree and be registered in a minimum of 9 credit hours between co-op work terms after admission to the Asper Co-op Program, unless back to back work terms have been approved by the co-op office.

While on a co-op work term, a Cooperative Option student is not normally permitted to take more than three hours of academic credit (please refer to Work Term Requirements for the Asper Co-op Program (p. 773)); choosing to do so does not reduce the requirement of enrolment in

a minimum of 9 credit hours in each academic term unless written permission is obtained from the co-op office.

Students whose degree G.P.A. falls below 2.0 in any given term are subject to withdrawal from the B. Comm. (Hons) program as per the Faculty Academic Regulations, Required to Withdraw from the Bachelor of Commerce (Honours) Program (p. 698) in the Asper Undergraduate Calendar.

To continue in the Asper Co-op Option a student's performance will be evaluated following each academic term to ensure standards are met for continuance in the Asper Co-op Program. The student must meet all academic degree and individual course prerequisites for further study, departmental continuation and graduation requirements. Continuation is also contingent upon satisfactory performance on co-op work terms (please refer to Work Term Requirements (p. 773) for the Asper Co-op Program)

## Withdrawal from the Asper Co-op Program

Students may be required to withdraw from the Asper Co-op Program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the Asper Co-op Program,
- Failure to achieve a minimum grade of "C" on any work term,
- Unsatisfactory performance in the work place during a co-op work term (please refer to Work Term Requirements (p. 773) for the Asper Co-op Program),
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Co-op Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper Co-op Program successfully.

Students who have been required to withdraw from the Asper Co-op Program for either academic assessment reasons or other reasons will have the following academic assessment placed on their transcript: "Required to Withdraw from the Asper Co-op Program".

A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a co-op work term, without written approval of the Co-op Faculty Advisor or Co-op Director, will be withdrawn from the Asper Co-op Program and have the following academic assessment noted on their transcript "Required to Withdraw from the Asper Co-op Program.

Students who wish to withdraw voluntarily from the Asper Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a co-op work term. Students may be granted permission to revert back to the regular Bachelor of Commerce (Honours) program without being required to withdraw.

## Appeals for Exceptions to Academic and Non-Academic Regulations and Appeals in the Asper Co-op Program

Appeals to academic regulations relating to the Asper Co-operative Education Option (i.e., those relating to the entrance, continuing, and

graduation requirements) will be processed in a similar manner to any other request for exception to academic regulations. Normally, the student's written request, accompanied by any supporting documentation, e.g. written notice of medical or compassionate circumstances, and a written recommendation from the Co-op Faculty Advisor with or the Co-op Director, will be directed to the Undergraduate Program Manager for either immediate disposition or to forward on to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program-related issues should be resolved by contact with the Co-op Director, or the Co-op Faculty Advisor. Appeals related to non-academic entrance or continuance issues are the responsibility of the Co-op Director. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Graduation from the Asper Co-op Program

B. Comm.(Hons.) Cooperative Option students who are required to revert or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

To graduate from the Asper Co-op Program, students are required to meet the Bachelor of Commerce (Honours) Program graduation requirements as outlined in the Asper School of Business section of the University of Manitoba Undergraduate Calendar, plus completion of twelve months of co-op work terms (or a minimum of 3 approved co-op work terms) with each Co-op work term course having been assigned a "C" grade or better. Students passing all three co-op work term courses will be permitted to use the three co-op work term courses together as equivalent to three (3) credit hours of a 2000+ level business option.

## Asper International Exchange Program

### Contact and Program Information

**Coordinator:** Amber Pohl

**Room:** 268 Drake

**Telephone:** 204-474-6752

**Email:** amber.pohl@umanitoba.ca

The Asper School of Business offers an International Exchange Program, designed to complement and enrich the academic program with international experience. All students must complete all 120 credit hours of the program including the Core, one of the Majors listed in the overview tab (p. 692), as well as the Option and Elective course components.

### Entrance Requirements

At the time of assessment, those applying to the Asper International Exchange program must possess:

- All Bachelor of Commerce (Honours) admission requirements as specified in the University of Manitoba Undergraduate Calendar, the Asper School of Business
- A minimum degree grade point average of 3.0 upon assessment of application
- Completion of a minimum of 12 University of Manitoba credit hours at the time of application
- Direct entry students must complete a minimum of 24 credit hours at the University of Manitoba at the time of commencement of the international exchange term

- Transfer students must have completed a minimum of 12 credit hours at Asper at the commencement of their international exchange term
- Students may participate in an exchange in their final term before graduation

In addition to meeting the above requirements, the following are required of students:

- Completed application form
- Submission of 1-3 page Statement of Intent
- Submission of current resume
- Submission of three recommendation forms (one academic reference, one professional/volunteer reference, one academic OR professional/volunteer reference)
- A meeting conducted by an interview committee or Director, International Programs (or designate) to assess academic background and suitability, based on academic performance, maturity level, motivation, and personal characteristics. Where deemed necessary, a second meeting with the Director, International Programs (or designate) may be required

Upon completion of the application process, each applicant's academic standing is verified by the Undergraduate Program Office.

**Application Deadline:** Applications to the Asper International Exchange Program must be received prior to the application deadlines specified on the Exchange website (<https://umanitoba.ca/faculties/management/programs/undergraduate/iexchange/outgoing/apply-now.html>), except by special permission.

Students are advised that satisfying the minimum entrance requirements does not guarantee acceptance into the program. In the event that demand for space exceeds the number of spaces available, a cap may be placed on the number of students accepted. In such situations, the Asper School of Business reserves the right to determine and select the best qualified applicants.

Students are required to have an academic record free of any allegation of academic dishonesty where the allegation has been upheld. If it is found that during the assessment of the entrance requirements a student has had an allegation of academic dishonesty upheld against them, or that they have deliberately provided false application information, the student will no longer be eligible for entrance into the Asper International Exchange Program.

### Program Structure

The program consists of academic terms in the fall, winter and summer. Full academic terms in fall or winter will be a minimum of four months in duration depending on host institution scheduling. Short term summer programs will vary in length depending upon host institution scheduling.

### Academic Term Requirements

Students participating in a regular academic exchange term (defined as Fall or Winter by the University of Manitoba) are required to be registered in a minimum of 12 credit hours during each term. Students participating in an international summer school are required to be registered in a minimum of 3 credit hours.

Senate approved regulations (approved May 18, 1994) allow an Asper student to receive a waiver of the University's residency requirement. The University allows 60 of the 120 credit hours of the degree program to be external. Asper exchange students can be permitted a waiver of this to go

on an international exchange, assessed internally by the Asper Associate Undergraduate Dean/Director, International Programs.

All students going on international exchange may be considered for a waiver of the university residency requirement only if they can complete the degree and ensure at least 48 credit hours of coursework are courses taken at the University of Manitoba.

Current Faculty Council guidelines (approved December 11, 2009) for students admitted under domestic or international joint articulation agreements to participate in an Exchange must still be adhered to. Domestic or international joint articulation agreement students will be permitted to apply for a maximum 1-term exchange with a maximum of 15 credit hours. Refer to appendix (p. 775) regarding students admitted under the Ningbo 2+2 articulation agreement up to and including the final student intake in September 2019.

Dual degree students may need permission from their home institution to participate if approved by Asper.

## Withdrawal

Students may be required to withdraw from the Asper International Exchange Program, prior to departure, for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business, or
- Failure to successfully complete a minimum of 24 credit hours upon commencement of their exchange term, or
- Found to have engaged in academic and/or non-academic misconduct, or
- When, in the opinion of the Director, International Programs (or designate), the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the Asper International Exchange Program successfully

Students who wish to withdraw from the Asper International Exchange Program prior to departure voluntarily may do so by written letter to the Asper Coordinator of Student Exchanges and International Cooperation/ Student Advisor at any time prior to the start of their exchange term.

## Appeals of Decisions to Academic and Non-Academic Matters

Appeals of academic decisions relating to the Asper International Exchange Program (i.e. those relating to the entrance, continuing and graduation requirements) will be processed in a similar manner to any other appeals for decisions of academic regulations. Normally, the student's written request, accompanied by any supporting medical and/or compassionate documentation and a written recommendation from the Coordinator of Student Exchanges and International Cooperation/ Student Advisor will be directed to the Undergraduate Program Manager for either immediate disposition or to send to the Undergraduate Program Committee for its consideration.

Appeals to non-academic program related issues should be resolved by contact with the Asper Coordinator of Student Exchanges and International Cooperation/Student Advisor or Director, International Programs. Appeals related to non-academic entrance are the responsibility of the Director, International Programs. If these appeals are not resolved to the student's satisfaction, the student may appeal in writing to the Undergraduate Program Committee through the Undergraduate Program Manager.

## Appendix A

In addition to meeting all other requirements, approval from the Asper Associate Undergraduate Dean/Director, International Programs and from the Dean or designate at Ningbo University is required for Ningbo 2+2 students admitted up to and including the final intake in September 2019.



## Management / Red River College Polytech Joint Program, B.Comm Honours

### Program Requirements for the Asper School of Business/Red River College Polytech Articulation Agreement

September 2022 will be the last intake under the articulation agreement.

### Specific Required Course Work at Red River College

To be considered for admission, applicants must have completed the following courses at Red River College with a minimum grade of "C":

Course	Title	Hours
ECON- 1022	Microeconomics	
ECON- 2000	Macroeconomics	
MATH -1020	Statistics	
COMP- 1975	Business Computing	

To be eligible for admission, applicants must achieve a minimum grade point average of 3.00 on their RRC Business Administration Diploma and that GPA must be equal to or greater than the competitive GPA of those admitted to the Asper School of Business under Track 1.

#### Notes:

1. Red River College applicants are admitted solely based on their college coursework.
2. The maximum allowed external transfer, from all sources combined, is 60 credit hours. If the student has additional post-secondary work other than from Red River College, it will be assessed for potential transfer credit.
3. If Psychology (SOSC 3001) and/or Sociology (SOSC 3007) are taken at Red River College, the student must achieve a minimum grade of "C" in the course to receive transfer credit to the Bachelor of Commerce (Honours) program.
4. All applicants whose primary language is not English and who do not qualify for a waiver under the University of Manitoba's English language proficiency regulations will be required to demonstrate proficiency in English through one of the options listed at the University of Manitoba Admissions web site.
5. All program requirements are listed in the Faculty Requirements (p. 693). The specific courses that must be completed after admission and transfer credit assignment will vary from student to student. Please see an Asper Program Advisor for individual advice in this regard.
6. Students admitted to the Asper School of Business prior to the current calendar year should refer to the archived Academic Calendar (<https://umanitoba.ca/registrar/academic-calendar/past-academic-calendars/>) for the year in which they were admitted for a description of their program requirements.

## Management / Assiniboine Community College Joint Program, B.Comm Honours

### Program Requirements for the Asper School of Business /Assiniboine Community College Joint Program

September 2022 will be the last intake from the articulation agreements with Manitoba Colleges.

Prior to admission to the Asper School of Business/Assiniboine Community College Joint Program students must complete the Business Administration Diploma (University Stream) at Assiniboine Community College with a minimum cumulative grade point average of 3.00. Students must have graduated from the Diploma program within the last 5 years to be eligible for admission. Admission is limited and competitive. Following admission to the Asper School of Business, students in the Joint Program will be required to complete 66 credit hours to earn the Bachelor of Commerce (Honours) degree. The 66 credit hours can be divided into the following components: the Core, the Major, Business Options, and Elective courses. These components and their associated limits are defined below.

**Note:** The Joint Program is currently under review; transfer credit details are subject to change. Please contact the Asper Undergraduate Program Office, Room 268 Drake, for information and details on the admission requirements and transfer credit processing.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

#### The Core

The **Core** comprises 39 credit hours of the 66 required in the Joint Program. The Foundation courses (12 credit hours) should be taken in the first year in the Asper School. Students must achieve a minimum "C" grade in each Track 1/Foundation course. The Program Core courses (27 credit hours) may be taken at any point in the program, but the course GMGT 4010 must be taken in the student's final term. Core courses are listed below in Course Requirements for ACC Joint Program Students.

#### The Major

Each student must complete the course requirements of one **Major**. Each Major will consist of a 12 credit hour unit of course work. Information on completing a Second Major can be found in the Faculty Academic Regulations (p. 696) under Completing Two Majors. The Majors are listed in the overview (p. 692) and program tab. (p. 692)

Students may begin taking courses for their major as soon as prerequisites are met. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

**Note:** Students in the Asper School of Business/Assiniboine Community College Joint Program who want to major in Finance will be required to take FIN 2200 as one of their Business options. Likewise, students who

want to major in Marketing must take MKT 2210 as one of their Business Options.

## Business Options

This component of the program consists of a required number of Business courses freely selected by the student. These courses are referred to as Business **Options**. Students must take 12 credit hours of Business Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Business Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in other Majors. Students who want to supplement their Majors may take up to 9 hours of their Business Options from that area. Students may complete a second Major as part of their Business Options requirements. Such students should consult with staff in the Undergraduate Program Office.

## Electives

This component of the program is the **Elective** requirement. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must 3 credit hours of Electives that is a freely chosen course that meets the Written English "W" requirement at any level.

## Course Requirements for ACC Joint Program Students

The course requirements for the Asper School of Business/Assiniboine Community College Joint Program are as follows.

Students should register for the Track 1/Foundation courses in their first year at the University of Manitoba and must achieve a minimum "C" grade in each course.

Course	Title	Hours
<b>Foundation Courses</b>		
Select 6 credit hours from: ANTH, HIST, MATH, PHIL, POLS, PSYC OR SOC <sup>1</sup>		6
Select one of the following: <sup>2</sup>		3
MATH 1520	Introductory Calculus for Management and Social Sciences	
MATH 1500	Introduction to Calculus	
MATH 1230	Differential Calculus	
Select one Written English Course <sup>3</sup>		3
<b>Program Core Requirements</b>		
ENTR 2030	Introduction to Entrepreneurship	3
MIS 2000	Information Systems for Management	3
GMGT 1010	Business and Society	3
MSCI 2150	Introduction to Management Sciences	3
SCM 2160	Supply Chain and Operations Management	3
GMGT 4010	Administrative Policy (must be taken in final term)	3
Select one Ethics Course <sup>4</sup>		3
Select one Alternative Management Studies Course <sup>5</sup>		3
Select one International Business Course <sup>6</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.

<sup>2</sup> The prerequisite for MATH 1520 or MATH 1500 is a 60 per cent in Grade 12 Pre-Calculus Mathematics 40S or equivalent or a grade of "C" in the MSKL 0100 course taught by Extended Education; the prerequisite for MATH 1230 is a 70% in Pre-calculus Mathematics or the former Mathematics 40S (300) (70%) or the MSKL 0100 offered by Extended Education (B). Students who have been admitted into the Joint Program and who successfully complete the Mathematical Skills course may be entitled to an additional three credit hour Elective from their Business Administration diploma.

<sup>3</sup> Students are required to select a three credit hour course to satisfy the Written English "W" requirement. The "W" course for the Foundation course requirement must be from a specific discipline (ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/ Foundation Written English course requirement). Courses that satisfy the Written English requirement (p. 118) are listed in the General Academic Regulations.

<sup>4</sup> All Business students must complete three credit hours of Ethics. Students may fulfil this requirement by completing one of the following courses: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count toward the core Ethics requirement and 3 credit hours will count as Electives.

<sup>5</sup> Alternative Management Requirement: One of the following must be chosen: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, NATV 3120, NATV 4220, NATV 4320, POLS 3250, POLS 3270, SOC 3838 or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: NATV 3120, NATV 4220, NATV 4320, and POLS 3270; students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

<sup>6</sup> International Business Requirement: One of the following courses must be chosen: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management topic only), SCM 3230 or ACT 4250.

## Overall Program Requirements Credit Hours

- Track 1/Foundation Courses (12 credit hours)
- Program Core Courses (27 credit hours)
- Major Courses (12 credit hours)
- Business Options (12 credit hours)
- Electives (3 credit hours)

**Total credit hours 66 credit hours**

# Management / University College of the North Joint Program, B.Comm Honours

## Program Requirements for the Asper School of Business /University College of the North Joint Program

**September 2022 will be the last intake from under the articulation agreements with Manitoba Colleges.**

Prior to admission to the Asper School of Business/University College of the North Joint Program students must complete the Business Administration Diploma (University Stream) at University College of the North with a minimum cumulative grade point average of 3.00. Students must have graduated from the Diploma program within the last 5 years to be eligible for admission. Admission is limited and competitive. Following admission to the Asper School of Business, students in the Joint Program will be required to complete 81 credit hours to earn the Bachelor of Commerce (Honours) degree. The 81 credit hours can be divided into the following components: the Core, the Major, Business Options, and Electives. These components and their associated limits are defined below.

**Note:** The Joint Program is currently under review; transfer credit details are subject to change. Please contact the Asper Undergraduate Program Office, Room 268 Drake, for information and details on the admission requirements and transfer credit processing.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Academic Calendar for the year in which they were admitted for a description of their program requirements.

### The Core

The **Core** comprises 45 credit hours of the 81 required in the Joint Program. The Foundation courses (18 credit hours) should be taken in the first year in the Asper School. Students must achieve a minimum "C" grade in each Foundation course. The Program Core courses (27 credit hours) may be taken at any point in the program, but the course GMGT 4010 must be taken in the student's final term. Core courses are listed below in Course Requirements for UCN Joint Program Students

### The Major

Each student must complete the course requirements of one **Major**. Each Major will consist of a 12 credit hour unit of course work. Information on completing a Second Major are found in the Faculty Academic Regulations (p. 696) under Completing Two Majors. The Majors are listed in the overview (p. 692) and the program tab (p. 692).

Students may begin taking courses for their major as soon as prerequisites are met. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

**Note:** Students in the Asper School of Business/University College of the North Joint Program who want to major in Finance will be required to take FIN 2200 as one of their Business Options. Likewise, students who want to major in Marketing must take MKT 2210 as one of their Business Options.

### Business Options

This component of the program consists of a required number of Business courses freely selected by the student. These courses are referred to as Business **Options**. Students must take 15 credit hours of Business Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Business Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in other Majors. Students who want to supplement their Major may take up to 12 hours of their Business Options from that area. Students may complete a second Major as part of their Business Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives

This component of the program is the **Elective** requirement. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must take 9 credit hours of Electives that meet the following criteria; 3 credit hours must be at the 2000 Level or higher, 3 credit hours must be a freely chosen course that meets the Written English "W" requirement at any level plus a 3 credit hour elective at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

## Course Requirements for UCN Joint Program Students

The course requirements for the Asper School of Business/University College of the North Joint Program are as follows.

Students should register for the Foundation courses in their first year at the University of Manitoba and must achieve a minimum "C" grade in each course.

Course	Title	Hours
<b>Foundation Courses</b>		
Select 6 credit hours from: ANTH, HIST, MATH, PHIL, POLS, PSYC OR SOC <sup>1</sup>		6
Select one of the following: <sup>2</sup>		3
MATH 1520	Introductory Calculus for Management and Social Sciences	
MATH 1500	Introduction to Calculus	
MATH 1230	Differential Calculus	
Select one Written English Course <sup>3</sup>		3
STAT 1000	Basic Statistical Analysis 1 <sup>4</sup>	3
	or STAT 1150 Introduction to Statistics and Computing	
Select one Elective		3
<b>Program Core Requirements</b>		
ENTR 2030	Introduction to Entrepreneurship	3
MIS 2000	Information Systems for Management	3
GMGT 1010	Business and Society	3
MSCI 2150	Introduction to Management Sciences	3
SCM 2160	Supply Chain and Operations Management	3

GMGT 4010	Administrative Policy (must be taken in final term)	3
Select one Ethics Course	<sup>5</sup>	3
Select one Alternative Management Studies Course	<sup>6</sup>	3
Select one International Business Course	<sup>7</sup>	3
<b>Total Hours</b>		<b>45</b>

- Business Options (15 credit hours)
- Electives (6 credit hours)

**Total Credit Hours 81**

- <sup>1</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.
- <sup>2</sup> The prerequisite for MATH 1520 or MATH 1500 is a 60 per cent in Grade 12 Pre-Calculus Mathematics 40S or equivalent or a grade of "C" in the MSKL 0100 course taught by Extended Education; the prerequisite for MATH 1230 is a 70% in Pre-calculus Mathematics or the former Mathematics 40S (300) (70%) or the MSKL 0100 offered by Extended Education (B). Students who have been admitted into the Joint Program and who successfully complete the Mathematical Skills course may be entitled to an additional three credit hour Elective from their Business Administration diploma.
- <sup>3</sup> Students are required to select a three credit hour course to satisfy the Written English "W" requirement. The "W" course for the Foundation course requirement must be from a specific discipline (ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/ Foundation Written English course requirement). Courses that satisfy the Written English requirement (p. 118) are listed in the General Academic Regulations.
- <sup>4</sup> The prerequisite for STAT 1150 is a minimum of 70% in Pre-calculus Mathematics 40S or a grade of B or better in MSKL 0100 offered by Extended Education or equivalent.
- <sup>5</sup> All Business students must complete three credit hours of Ethics. Students may fulfil this requirement by completing one of the following courses: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count toward the core Ethics requirement and 3 credit hours will count as Electives.
- <sup>6</sup> Alternative Management Requirement: One of the following must be chosen: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, NATV 3120, NATV 4220, NATV 4320, POLS 3250, POLS 3270, SOC 3838 or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: NATV 3120, NATV 4220, NATV 4230, and POLS 3270; students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.
- <sup>7</sup> International Business Requirement: One of the following courses must be chosen: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management topic only), SCM 3230 or ACT 4250.

## Overall Program Requirements Credit Hours

- Foundation Courses (18 credit hours)
- Program Core Courses (27 credit hours)
- Major Courses (12 credit hours)

# Management / École Technique et Professionnelle Joint Program, B.Comm Honours

## Program Requirements for the Asper School of Business /École technique et professionnelle joint program

**September 2022 will be the last intake from under the articulation agreements with Manitoba Colleges.**

Prior to admission to the Asper School of Business/École technique et professionnelle Joint Program students must complete the Business Administration Diploma (University Stream) at École technique et professionnelle with a minimum cumulative grade point average of 3.00. Students must have graduated from the Diploma program within the last 5 years to be eligible for admission. Admission is limited and competitive. Following admission to the Asper School of Business, students in the Joint Program will be required to complete 66 credit hours to earn the Bachelor of Commerce (Honours) degree. The 66 credit hours can be divided into the following components: the Core, the Major, Business Options, and Electives. These components and their associated limits are defined below.

**Note:** The Joint Program is currently under review; transfer credit details are subject to change. Please contact the Asper Undergraduate Program Office, Room 268 Drake, for information and details on the admission requirements and transfer credit processing.

**Note:** Students admitted to the Asper School of Business prior to the current calendar year should refer to the Archived Academic Calendar (<https://umanitoba.ca/registrar/academic-calendar/past-academic-calendars/>) for the year in which they were admitted for a description of their program requirements.

### The Core

The **Core** comprises 39 credit hours of the 66 required in the Joint Program. The Foundation courses (12 credit hours) should be taken in the first year in the Asper School. Students must achieve a minimum "C" grade in each Foundation course. The Program Core courses (27 credit hours) may be taken at any point in the program, but the course GMGT 4010 must be taken in the student's final term. Core courses are listed below in Course Requirements for ETP Joint Program Students.

### The Major

Each student must complete the course requirements of one **Major**. Each Major will consist of a 12 credit hour unit of course work. Information on completing a Second Major is found in the Faculty Academic Regulations (p. 696). The Majors are found in the overview (p. 692) and the program tab (p. 692).

Students may begin taking courses for their major as soon as prerequisites are met. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

**Note:** Students in the Asper School of Business/École technique et professionnelle joint program who want to major in Finance will be required to take FIN 2200 as one of their Business Options.

### Business Options

This component of the program consists of a required number of Business courses freely selected by the student. These courses are referred to as Business **Options**. Students must take at least nine and not more than 9 hours of Business Options. All Business Options courses must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. Some students may want to take Business Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in other Majors. Students who want to supplement their Majors may take up to 9 hours of their Business Options from that area. Students may complete a second Major as part of their Business Options requirements. Such students should consult with staff in the Undergraduate Program Office.

### Electives

This component of the program is the **Elective** requirement. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must take at least 3 credit hours of Electives that meet the following criteria; 3 credit hours must be a freely chosen course that meets the Written English "W" requirement at any level.

### Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective but it must be at the 2000 Level or higher.

## Course Requirements for ETP Joint Program Students

The course requirements for the Asper School of Business/École technique et professionnelle Joint Program are as follows.

Students should register for the Foundation courses in their first year at the University of Manitoba and must achieve a minimum "C" grade in each course.

Course	Title	Hours
<b>Foundation Courses</b>		
Select 6 credit hours from: ANTH, HIST, MATH, PHIL, POLS, PSYC OR SOC <sup>1</sup>		6
Select one of the following: <sup>2</sup>		3
MATH 1520	Introductory Calculus for Management and Social Sciences	
MATH 1500	Introduction to Calculus	
MATH 1230	Differential Calculus	
Select one Written English Course <sup>3</sup>		3
<b>Program Core Requirements</b>		
ENTR 2030	Introduction to Entrepreneurship	3
MIS 2000	Information Systems for Management	3
GMGT 1010	Business and Society	3
MSCI 2150	Introduction to Management Sciences	3
SCM 2160	Supply Chain and Operations Management	3
GMGT 4010	Administrative Policy (must be taken in final term)	3
Select one Ethics Course <sup>4</sup>		3
Select one Alternative Management Studies Course <sup>5</sup>		3

Select one International Business Course <sup>6</sup>	3
<b>Total Hours</b>	<b>39</b>

- <sup>1</sup> 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.
- <sup>2</sup> The prerequisite for MATH 1520 or MATH 1500 is a 60 per cent in Grade 12 Pre-Calculus Mathematics 40S or equivalent or a grade of "C" in the MSKL 0100 course taught by Extended Education; the prerequisite for MATH 1230 is a 70% in Pre-calculus Mathematics or the former Mathematics 40S (300) (70%) or the MSKL 0100 offered by Extended Education (B). Students who have been admitted into the Joint Program and who successfully complete the Mathematical Skills course may be entitled to an additional three credit hour Elective from their Business Administration diploma.
- <sup>3</sup> Students are required to select a three credit hour course to satisfy the Written English "W" requirement. The "W" course for the Foundation course requirement must be from a specific discipline (ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/ Foundation Written English course requirement). Courses that satisfy the Written English requirement (p. 118) are listed in the General Academic Regulations.
- <sup>4</sup> All Business students must complete three credit hours of Ethics. Students may fulfil this requirement by completing one of the following courses: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count toward the core Ethics requirement and 3 credit hours will count as Electives.
- <sup>5</sup> Alternative Management Requirement: One of the following must be chosen: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, NATV 3120, NATV 4220, NATV 4230, POLS 3250, POLS 3270, SOC 3838 or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: NATV 3120, NATV 4220, NATV 4230, and POLS 3270; students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.
- <sup>6</sup> International Business Requirement:  
One of the following courses must be chosen: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management topic only), SCM 3230 or ACT 4250.

## Overall Program Requirements Credit Hours

- Foundation Courses (12 credit hours)
- Program Core Courses (27 credit hours)
- Major Courses (12 credit hours)
- Business Options (2000+ level, except for language courses used as part of the International Business Major.) (9 credit hours)
- Electives (2000+ level & a "W" elective course any level) (3 credit hours)
- Business Option or Elective (3 credit hours)

**Total Credit Hours (66 credit hours)**

## Marcel A. Desautels Faculty of Music

### General Office

**Dean:** Dr. Edward Jurkowski

**Associate Dean(s):** Dr. Laura Loewen (Undergraduate Programs); Dr. James Maiello (Graduate Programs and Research)

**Campus Address/General Office:** T319 Tache Hall, 150 Dafoe Road

**Telephone:** (204) 474-9310

**Fax:** (204) 474-7546

**Email Address:** music@umanitoba.ca

**Website:** [umanitoba.ca/music/](http://umanitoba.ca/music/) (<http://umanitoba.ca/music/>)

**Academic Staff:** Please refer to the Faculty of Music website at [umanitoba.ca/music/](http://umanitoba.ca/music/) (<https://umanitoba.ca/music/faculty-instructors-staff/>)

### Voluntary Minors

Effective Fall 2015:

All undergraduate Marcel A. Desautels Faculty of Music students may declare and complete a minor from faculties, schools, departments and interdisciplinary programs in which a minor is offered, provided the minor constitutes a minimum of 18 credit hours. Please contact a Faculty Advisor for more information and program planning.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Music, B.Jazz Jazz Studies (p. 783)	4*	126	
Music, B.Mus. Composition (p. 789)	4*	126	
Music, B.Mus. General (p. 795)	4*	126	
Music, B.Mus. History (p. 791)	4*	126	
Music, B.Mus. Performance (p. 793)	4*	126	
Music Education, B.Mus. (p. 784)	4*	132	
Music Minor for Students in Faculties other than the Faculty of Music (p. 797)		18	
Post-Baccalaureate Diploma in Performance (PBDP) (p. 797)		30	

## Faculty Academic Regulations

### Admission to Music

#### Course Requirements for Admission from High School

Admission to the Faculty is directly from high school, although admission from University 1 is an option.

#### Other Requirements

High school prerequisites: Music 40S is strongly recommended, while a second 40S language is recommended. Private lessons in your instrument and formal instruction in music theory and keyboard study are strongly recommended. Good academic performance in subject areas other than music is also strongly recommended. Refer to Desautels Faculty of Music (<https://umanitoba.ca/faculties/music/prospective/Undergraduate.html>) for audition information or [music@umanitoba.ca](mailto:music@umanitoba.ca).

## Offerings for Non-Music Students

Some courses are offered outside the Bachelor of Music and Bachelor of Jazz Studies programs for students in other faculties. For information, contact the Marcel A. Desautels Faculty of Music Student Advisor.

Four courses are available without pre-requisites or special permission from Music, for non-music students:

- MUSC 1010
- MUSC 1020
- MUSC 1030
- MUSC 1930 - is not applicable to a Music Minor

For information on completing a Music Minor in another faculty, please refer to Music Minor for Students in Faculties (p. 797) other than the in the Marcel A. Desautels Faculty of Music calendar.

## Programs

\* Minimum time to graduation: Four years if admission is directly from high school and five years if admission is via University 1

Minors (optional or required) are part of degree programs - for program length, refer to the Years to Completion.

## Academic Regulations

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

The provisions of the General Academic Regulations (p. 118), and the University Policies and Procedures (p. 37), apply to all students. In addition, the Faculty has regulations and requirements, published below, which apply specifically to its students. Detailed information regarding regulations is available in the general office of the Faculty. The aim of the Bachelor of Music and Bachelor of Jazz Studies programs is to provide a basic framework of knowledge and ability; both theoretical and practical, from which either professional activities or graduate specialization can start. The Bachelor of Music four-year program contains concentrations in specified areas in the third and fourth years. After their first two years, students select the area in which their interests and abilities are strongest. The Faculty offers four-year programs leading to the degree of

either Bachelor of Music, with the following concentrations: Performance, Composition, History, Education and General Music. The four-year Bachelor of Jazz Studies is a direct entry program from high school. Practical study is offered in standard classical and jazz instruments and voice. Ensemble work is included in all years of the program. Music courses are available to students in other faculties and schools. Please see the specific regulations for each faculty for more information.

### Written English Requirement and Mathematics Requirement

The University's written requirement is met through any three credit hour course that fulfills the "W" requirement. The University's mathematics requirement is met through MUSC 3230 or a three credit hour MATH 1XXX or STAT 1XXX course. These courses are listed as requirements to complete the first year of all Bachelor of Music programs and Bachelor of Jazz Studies.

### Electives (Non-Music)

Students are required to take course(s) in a subject other than music for each year of the Bachelor of Music and Bachelor of Jazz Studies program to a total of 18 credit hours. With the exception of the university's written English and Mathematics Requirements in the first year, the student is free to choose any subject but is advised to seek the advice of faculty.

### Ensembles

The Faculty offers a wide variety of opportunities for participation in ensembles such as the Women's Choir, Concert Choir, University Concert Band, University Singers, University Symphony Orchestra, University Wind Ensemble, University Jazz Orchestra, Jazz Ensembles, Opera Theatre, Chamber Ensembles, Percussion Ensemble, Musical Theatre, XIE (eXperimental Improv Ensemble), and other wind, string and keyboard combinations. Bachelor of Music students are required to participate in two ensembles each year for four years. Bachelor of Jazz Studies students are required to participate in one ensemble each year for four years. The Ensemble Committee determines placement in credit ensembles; such participation will normally be in ensembles directly relevant to the student's major practical study area. Students from other faculties and non-university musicians are welcome to participate as space and instrumental balance allow, but all participation is at the discretion of the conductor or coach of the ensemble. Some ensembles are offered for credit in other faculties.

### Scholarships

Entrance and continuing scholarships are available for Faculty students. Details may be obtained from Financial Aid and Awards (<https://umanitoba.ca/financial-aid-and-awards/>) or the Marcel A. Desautels Faculty of Music.

### Scholastic Progress

Within the first week of the term, students will be informed of the organization of materials, the nature and timing of testing, and the proportionate weighting of marks that contribute to the final grade in all academic courses at the Marcel A. Desautels Faculty of Music. Regulations regarding the grading of all practical courses at the Faculty are contained in the Student Handbook (<https://umanitoba.ca/music/student-experience/bachelor-of-music-student-handbook/>); special attention is called to the Concert Credit and Masterclass Attendance Policy which is an integral part of the grading system for Major Practical Study in each year of the program. A grade of "C" or better is required in each Music course throughout the Bachelor of Music and Bachelor of Jazz Studies programs, except where the Faculty Student Handbook states otherwise. Students who take Music elective courses and fail to achieve a minimum grade of "C" in them should repeat these courses. Due to the system of rotating electives, this may not be possible and

in such a case another approved Music elective may be substituted. Supplemental examinations are not normally given in the Faculty, with the following exception: where a jury mark of "D" has been assigned in Major Practical Study, the juried examination may be reheard prior to the next registration. A sessional (September to April) Grade Point Average of less than 2.0 (C), or failure to achieve a grade of "C" or better in two Music courses will result in a student being placed on probation. While on probation, the student remains in the program but is subject to a set of conditions that are established by the Faculty. A student failing to meet these conditions may be placed on suspension. Each student is permitted a maximum 21 credit hours of failed Music courses in the Bachelor of Music and Bachelor of Jazz Studies programs. Students will not be permitted to register for a required music course more than twice without the permission of the Dean.

### Dean's Honour List

Bachelor of Music and Bachelor of Jazz Studies students who achieve a sessional (September to April) Grade Point Average of 3.5 and are registered in a minimum of 80% of a full-time program in both fall and winter terms will be eligible for the Dean's Honour List. Students who are granted incomplete or deferred status will not be eligible.

### Attendance

Regular attendance is expected of all students in all courses. Any unexcused absences from Ensemble or Major Practical Study courses or three unexcused absences from any other music course may result in the student being required to withdraw from the course or Ensemble, or may result in a failing grade being assigned. Students absent from a class for three or more consecutive meetings due to illness may be required to present a certificate from a physician. Prior approval for extended absences from class for reasons other than illness must be obtained from the instructor and the Dean. Unexcused absence from a class test may result in a grade of zero for the test. Make-up tests may be allowed in special circumstances.

## Music, B.Jazz Jazz Studies Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1112	Jazz Theory 1	3
MUSC 1184	Jazz Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1194	Jazz Improvisation 1	3
MUSC 1386	Jazz Musicianship 1	2
MUSC 1388	Jazz Musicianship 2	2
MUSC 1400	Major Practical Study	6
MUSC 3230	Acoustics of Music <sup>1</sup>	3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 2122	Jazz Theory 2	3
MUSC 2184	Jazz Ensemble	2
MUSC 2190	Ensemble	2



MUSC 2194	Jazz Improvisation 2	3
MUSC 2386	Jazz Musicianship 3	2
MUSC 2388	Jazz Musicianship 4	2
MUSC 2400	Major Practical Study	6
Select one Non-Music Elective		3
Select one Written English Requirement <sup>2</sup>		3
<b>Hours</b>		<b>32</b>
<b>Year 3</b>		
MUSC 3112	Jazz Composition and Arranging 1	3
MUSC 3126	Jazz Composition and Arranging 2	3
MUSC 3184	Jazz Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3194	Jazz Improvisation 3	3
MUSC 3470	Major Practical Study	6
MUSC 3554	Jazz Recital 1 <sup>3</sup>	3
Select one Music Elective		3
Select two Non-Music Electives		6
<b>Hours</b>		<b>31</b>
<b>Year 4</b>		
MUSC 4184	Jazz Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4194	Jazz Improvisation 4	3
MUSC 4452	Jazz Pedagogy	3
MUSC 4470	Major Practical Study	6
MUSC 4564	Jazz Recital 2 <sup>4</sup>	3
Select one Music Elective		3
Select three non-Music Electives		9
<b>Hours</b>		<b>31</b>
<b>Total Hours</b>		<b>126</b>

<sup>1</sup> A 3 credit hour MATH 1XXX or STAT 1XXX may be taken in place of MUSC 3230.

<sup>2</sup> Any 3 credit hour course that meets the written English requirement; consult with an advisor before making a selection.

<sup>3</sup> A grade of at least "B" in MUSC 3554 is required to continue in the Bachelor of Jazz Studies Program

<sup>4</sup> A grade of at least "B" in MUSC 4564 is required for graduation with a Bachelor of Jazz Studies

## Music Education, B.Mus.

### Degree Requirements

#### Early Years Concentration

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2

MUSC 1400	Major Practical Study	6
Select one Mathematics Requirement course <sup>1</sup>		3
Select one Written English Requirement course <sup>1</sup>		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
Select two Breadth Requirement courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>35</b>
<b>Year 3</b>		
MUSC 3102	Composition, Technology and Improvisation for Music Educators	3
MUSC 3200	Orff Schulwerk 1 (Summer Term)	6
or MUSC 3220	or Kodály Music Education 1	
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3772	Vocal Pedagogy for Choirs	3
MUSC 4752	Elementary and Middle Years Choral Methods	3
Select two Teachable Minor courses		6
Select two Breadth Requirement courses		6
<b>Hours</b>		<b>37</b>
<b>Year 4</b>		
MUSC 3730	Early Music Development	3
MUSC 4160	Major Practical Study	3
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4896	Cultural Perspectives for Music Educators	3
Select two Teachable Minor courses		6
Select two Breadth Requirement courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>28</b>
<b>Total Hours</b>		<b>132</b>

<sup>1</sup> Can be used to fulfill the breadth component.

#### Requirements for Breadth Component Effective 2018-2019

- 6 credit hours of English Literature and/or French Literature
- 6 credit hours of Social Studies (History and/or Geography)
- 12 credit hours of Mathematics & Science comprised of:
  - 6 credit hours of Mathematics or Statistics
  - 6 credit hours from Science: Biology, Chemistry, Environmental Science, Geological Science or Physics

## Early Years Concentration (With “W” or “Math” Requirement as Teachable Minor)

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
Select one Mathematics Requirement course <sup>1</sup>		3
Select one Written English Requirement course <sup>1</sup>		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
Select two Breadth Requirement courses		6
Music History Elective		3
<b>Hours</b>		<b>35</b>
<b>Year 3</b>		
MUSC 3102	Composition, Technology and Improvisation for Music Educators	3
MUSC 3200 or MUSC 3220	Orff Schulwerk 1 (Summer Term) or Kodály Music Education 1	6
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3772	Vocal Pedagogy for Choirs	3
MUSC 4752	Elementary and Middle Years Choral Methods	3
Select two Teachable Minor courses		6
Select two Breadth Requirement courses		6
<b>Hours</b>		<b>37</b>
<b>Year 4</b>		
MUSC 3730	Early Music Development	3
Select one of the following options:		6
Option 1:		
MUSC 4470	Major Practical Study	
Option 2:		
MUSC 4160	Major Practical Study	
MUSC XXXX	Music Elective	

MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4896	Cultural Perspectives for Music Educators	3
Select one Teachable Minor course		3
Select two Breadth Requirement courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>28</b>
<b>Total Hours</b>		<b>132</b>

<sup>1</sup> Can be used to fulfill the breadth component (Math requirement may not be MUSC 3230)

### Requirements for Breadth Component Effective 2018-2019

- 6 credit hours of English Literature and/or French Literature
- 6 credit hours of Social Studies (History and/or Geography)
- 12 credit hours of Mathematics & Science comprised of:
  - 6 credit hours of Mathematics or Statistics
  - 6 credit hours from Science: Biology, Chemistry, Environmental Science, Geological Science or Physics

### Instrumental Concentration

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
Select one Mathematics Requirement course		3
Select one Written English Requirement course		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
Select one Music History Elective		3
Select two Teachable Minor courses		6
<b>Hours</b>		<b>35</b>
<b>Year 3</b>		
MUSC 3102	Composition, Technology and Improvisation for Music Educators	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2

MUSC 3470	Major Practical Study	6
MUSC 3780	Woodwind Techniques	3
MUSC 3790	Brass Techniques	3
MUSC 4772	Instrumental Music Methods 1	3
Select one Music Elective		3
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>34</b>

**Year 4**

MUSC 3690	Percussion Techniques	3
MUSC 3884	Introduction to Jazz for Music Educators	3
Select one of the following options:		6
Option 1:		
MUSC 4470	Major Practical Study	
Option 2:		
MUSC 4160	Major Practical Study	
MUSC XXXX	Music Elective	
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4782	Instrumental Music Methods 2	3
MUSC 4896	Cultural Perspectives for Music Educators	3
Select one Music Elective		3
Select two Teachable Minor courses		6
<b>Hours</b>		<b>31</b>

**Total Hours 132****Instrumental Concentration (With "W" or "Math" Requirement as Teachable Minor)**

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
Select one Mathematics Requirement course		3
Select one Written English Requirement course		3
<b>Hours</b>		<b>32</b>

**Year 2**

MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6

MUSC 2460	Conducting	3
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>35</b>

**Year 3**

MUSC 3102	Composition, Technology and Improvisation for Music Educators	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3780	Woodwind Techniques	3
MUSC 3790	Brass Techniques	3
MUSC 4772	Instrumental Music Methods 1	3
Select one Music Elective		3
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>34</b>

**Year 4**

MUSC 3690	Percussion Techniques	3
MUSC 3884	Introduction to Jazz for Music Educators	3
Select one of the following options:		6
Option 1:		
MUSC 4470	Major Practical Study	
Option 2:		
MUSC 4160	Major Practical Study	
MUSC XXXX	Music Elective	
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4782	Instrumental Music Methods 2	3
MUSC 4896	Cultural Perspectives for Music Educators	3
Select two Music Electives		6
Select one Teachable Minor course		3
<b>Hours</b>		<b>31</b>

**Total Hours 132****Choral Concentration**

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
Select one Mathematics Requirement course		3
Select one Written English Requirement course		3
<b>Hours</b>		<b>32</b>

<b>Year 2</b>		
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>35</b>
<b>Year 3</b>		
MUSC 3102	Composition, Technology and Improvisation for Music Educators	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3772	Vocal Pedagogy for Choirs	3
MUSC 4752	Elementary and Middle Years Choral Methods	3
MUSC 4762	Senior Years and Community Choral Methods	3
Select four Teachable Minor courses		12
Select one Music Elective		3
<b>Hours</b>		<b>37</b>
<b>Year 4</b>		
MUSC 3730	Early Music Development	3
MUSC 3884	Introduction to Jazz for Music Educators	3
Select one of the following options:		6
Option 1:		
MUSC 4470	Major Practical Study	
Option 2:		
MUSC 4160	Major Practical Study	
MUSC XXXX	Music Elective	
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4156	Choral Music Literature and Programming	3
MUSC 4896	Cultural Perspectives for Music Educators	3
Select one Music Elective		3
Select one Music History Elective		3
<b>Hours</b>		<b>28</b>
<b>Total Hours</b>		<b>132</b>

### Choral Concentration (With "W" or "Math" Requirement as Teachable Minor)

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3

MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
Select one Mathematics Requirement course		3
Select one Written English Requirement course		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>35</b>
<b>Year 3</b>		
MUSC 3102	Composition, Technology and Improvisation for Music Educators	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3772	Vocal Pedagogy for Choirs	3
MUSC 4752	Elementary and Middle Years Choral Methods	3
MUSC 4762	Senior Years and Community Choral Methods	3
Select one Music Elective		3
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>34</b>
<b>Year 4</b>		
MUSC 3730	Early Music Development	3
MUSC 3884	Introduction to Jazz for Music Educators	3
Select one of the following options:		6
Option 1:		
MUSC 4470	Major Practical Study	
Option 2:		
MUSC 4160	Major Practical Study	
MUSC XXXX	Music Elective	
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4156	Choral Music Literature and Programming	3
MUSC 4896	Cultural Perspectives for Music Educators	3
Select two Music Electives		6

Select one Teachable Minor course	3
<b>Hours</b>	<b>31</b>
<b>Total Hours</b>	<b>132</b>

## Guitar/Strings Concentration

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
Select one Mathematics Requirement course		3
Select one Written English Requirement course		3
<b>Hours</b>		<b>32</b>

<b>Year 2</b>		
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>35</b>

<b>Year 3</b>		
MUSC 3102	Composition, Technology and Improvisation for Music Educators	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3894 or MUSC 3800	Guitar Techniques or String Techniques	3
MUSC 4752 or MUSC 4772	Elementary and Middle Years Choral Methods or Instrumental Music Methods 1	3
Select two Music Electives		6
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>34</b>

<b>Year 4</b>		
MUSC 3884	Introduction to Jazz for Music Educators	3
MUSC 3730	Early Music Development	3
Select one of the following options:		6
Option 1:		

MUSC 4470	Major Practical Study	
Option 2:		
MUSC 4160	Major Practical Study	
MUSC XXXX	Music Elective	
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
Select one of the following:		3
MUSC 4752	Elementary and Middle Years Choral Methods	
MUSC 4762	Senior Years and Community Choral Methods	
MUSC 4772	Instrumental Music Methods 1	
MUSC 4782	Instrumental Music Methods 2	
Select one of the following:		3
MUSC 4894	Advanced Guitar Techniques	
MUSC XXXX	Music Elective	
MUSC 4896	Cultural Perspectives for Music Educators	3
Select one Music Elective		3
Select one Teachable Minor course		3
<b>Hours</b>		<b>31</b>
<b>Total Hours</b>		<b>132</b>

## Guitar/Strings Concentration (With "W" or "Math" Requirement as Teachable Minor)

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
Select one Mathematics Requirement course		3
Select one Written English Requirement course		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>35</b>

<b>Year 3</b>		
MUSC 3102	Composition, Technology and Improvisation for Music Educators	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3894 or MUSC 3800	Guitar Techniques or String Techniques	3
MUSC 4752 or MUSC 4772	Elementary and Middle Years Choral Methods or Instrumental Music Methods 1	3
Select two Music Electives		6
Select two Teachable Minor courses		6
Select one Music History Elective		3
<b>Hours</b>		<b>34</b>
<b>Year 4</b>		
MUSC 3730	Early Music Development	3
MUSC 3884 or MUSC 4452	Introduction to Jazz for Music Educators or Jazz Pedagogy	3
Select one of the following options:		6
Option 1:		
MUSC 4470	Major Practical Study	
Option 2:		
MUSC 4160	Major Practical Study	
MUSC XXXX	Music Elective	
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
Select one of the following:		3
MUSC 4752	Elementary and Middle Years Choral Methods	
MUSC 4762	Senior Years and Community Choral Methods	
MUSC 4772	Instrumental Music Methods 1	
MUSC 4782	Instrumental Music Methods 2	
Select one of the following:		3
MUSC 4894	Advanced Guitar Techniques	
MUSC XXXX	Music Elective	
MUSC 4896	Cultural Perspectives for Music Educators	3
Select one Music Elective		3
Select one Teachable Minor course		3
<b>Hours</b>		<b>31</b>
<b>Total Hours</b>		<b>132</b>

MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
MUSC 3230	Acoustics of Music <sup>1</sup>	3
Select one Written English Requirement course <sup>2</sup>		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
Select two Core Music History Elective <sup>3</sup>		6
Select two Non-Music Electives		6
<b>Hours</b>		<b>32</b>
<b>Year 3</b>		
MUSC 2460	Conducting	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3650	Electroacoustic Music	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 3974	Music Theory After 1900	3
Select one Music or Non-Music Elective <sup>4</sup>		3
Select two Non-Music Electives		6
<b>Hours</b>		<b>31</b>
<b>Year 4</b>		
MUSC 3550	Recital 1	3
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4470	Major Practical Study	6
MUSC 4650	Interactive Computer Music	3
MUSC 4660	Computer Assisted Composition	3
Select one Core Music History Elective <sup>3</sup>		3
Select one Music Theory Elective <sup>4</sup>		3
Select two Non-Music Electives		6
<b>Hours</b>		<b>31</b>
<b>Total Hours</b>		<b>126</b>

## Music, B.Mus. Composition Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2

<sup>1</sup> A 3 credit hour MATH 1XXX or STAT 1XXX may be taken in place of MUSC 3230.

<sup>2</sup> Any 3 credit hour course that meets the Written English Requirement; consult with an advisor before making a selection.

<sup>3</sup> See Core Music History Electives.

<sup>4</sup> Composition students are required to take MUSC 3150 as a Music or Music Theory elective.

**Electives: Third & Fourth Years, All Concentrations**

Course	Title	Hours
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2122	Jazz Theory 2	3
MUSC 2460	Conducting	3
MUSC 3050	Research Methods	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3100	Opera Repertoire	3
MUSC 3012	Advanced Diction 2	3
MUSC 3104	History of Opera I: from Monteverdi to Mozart	3
MUSC 3114	History of Opera II: from Mozart to the Modern Era	3
MUSC 3150	Orchestration	3
MUSC 3200	Orff Schulwerk 1 (Summer Term)	6
MUSC 3210	Orff Schulwerk 2	6
MUSC 3220	Kodály Music Education 1 (Summer Term)	6
MUSC 3222	Kodály Music Education 2 (Summer Term)	6
MUSC 3230	Acoustics of Music (fulfills University "M" requirement)	3
MUSC 3270	Performance Skills	3
MUSC 3360	Topics in Music Education	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3480	Minor Practical Study	3
MUSC 3620	Independent Study 1	3
MUSC 3650	Electroacoustic Music	3
MUSC 3690	Percussion Techniques	3
MUSC 3730	Early Music Development	3
MUSC 3772	Vocal Pedagogy for Choirs	3
MUSC 3780	Woodwind Techniques	3
MUSC 3790	Brass Techniques	3
MUSC 3800	String Techniques	3
MUSC 3820	Topics in Music	3
MUSC 3830	Topics in Music	3
MUSC 3840	Course no longer offered	
MUSC 3850	Course no longer offered	
MUSC 3884	Introduction to Jazz for Music Educators	3
MUSC 3894	Guitar Techniques	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 3974	Music Theory After 1900	3
MUSC 4010	French Diction and Repertoire	3
MUSC 4020	Italian Diction and Repertoire	3
MUSC 4030	German Diction and Repertoire	3

MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3
MUSC 4156	Choral Music Literature and Programming	3
MUSC 4212	Orff Schulwerk 3 (Summer Term)	6
MUSC 4224	Kodály Music Education 3 (Summer Term)	6
MUSC 4330	Advanced Analysis	3
MUSC 4360	Wind Repertoire	3
MUSC 4370	Wind Conducting Techniques	3
MUSC 4380	Piano Repertoire	3
MUSC 4390	Piano Chamber Music Literature Seminar	3
MUSC 4430	Pedagogy and Repertoire	3
MUSC 4440	Vocal Pedagogy	3
MUSC 4480	Minor Practical Study	3
MUSC 4490	Piano Pedagogy	3
MUSC 4520	Coaching Skills	3
MUSC 4530	Operatic Piano	3
MUSC 4630	20th to 21st Century Piano Repertoire	3
MUSC 4650	Interactive Computer Music	3
MUSC 4660	Computer Assisted Composition	3
MUSC 4752	Elementary and Middle Years Choral Methods	3
MUSC 4762	Senior Years and Community Choral Methods	3
MUSC 4772	Instrumental Music Methods 1	3
MUSC 4782	Instrumental Music Methods 2	3
MUSC 4896	Cultural Perspectives for Music Educators	3

**General Notes Regarding Electives**

Most electives are not offered every year; some are offered every other year and some are offered less frequently. The listing of a subject as an elective does not guarantee that it will always be available or that it will be possible to fit it into all of the many varied timetable combinations of full- and part-time students. There may be a maximum limit set on the number of students permitted to take an elective in a particular session. Similarly, there will be a minimum limit. If registration is below the minimum, the elective will be cancelled for the session, and those registered will be required to transfer to another elective before the course change deadline date. Students are urged to discuss their elective program with members of the faculty toward the end of their second and third years to obtain advice concerning the best choice of electives for their needs.

**Core Music History Electives and Music Theory Electives****CORE MUSIC HISTORY ELECTIVES**

In addition to the required first-year Music History courses (MUSC 1004 and MUSC 1014) Bachelor of Music students must choose four additional Music History electives (12 credit hours) from the list below. Bachelor of Music (Music Education) students must choose two Music History elective (6 credit hours) from the list below.

**Note: Not all of the listed courses will be offered every year.**

Course	Title	Hours
MUSC 1020	Introduction to Popular Music	3
MUSC 1030	History of Musical Theatre	3
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 3034	Medieval Music History	3
MUSC 3044	Renaissance Music History	3

MUSC 3056	Plainchant and Liturgy in Medieval Europe	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3104	History of Opera I: from Monteverdi to Mozart	3
MUSC 3114	History of Opera II: from Mozart to the Modern Era	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3820	Topics in Music	3
or MUSC 3830	Topics in Music	
MUSC 3964	History of Western Art Music After 1900	3
MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3

### Music Theory Electives

Course	Title	Hours
MUSC 2122	Jazz Theory 2	3
MUSC 3150	Orchestration	3
MUSC 3650	Electroacoustic Music	3
MUSC 3992	Advanced Counterpoint	3
MUSC 4330	Advanced Analysis	3
MUSC 3820	Topics in Music	3
or MUSC 3830	Topics in Music	

## Music, B.Mus. History

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
MUSC 3230	Acoustics of Music <sup>1</sup>	3
Select one Written English Requirement course <sup>2</sup>		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2

MUSC 2400	Major Practical Study	6
Select two Core Music History Elective <sup>3</sup>		6
Select two Non-Music Electives		6
<b>Hours</b>		<b>32</b>
<b>Year 3</b>		
MUSC 3050	Research Methods	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3974	Music Theory After 1900	3
Select one Core Music History Elective <sup>3</sup>		3
Select one Music History Elective		3
Select one Music Theory Elective <sup>4</sup>		3
Select two Non-Music Electives		6
<b>Hours</b>		<b>31</b>
<b>Year 4</b>		
MUSC 4110	Special Area Paper	3
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4470	Major Practical Study <sup>5</sup>	6
or MUSC 4160	or Major Practical Study	
Select one Core Music History Elective <sup>3</sup>		3
Select one Music History Elective		3
Select two Music Electives <sup>5</sup>		6
Select two Non-Music Electives		6
<b>Hours</b>		<b>31</b>
<b>Total Hours</b>		<b>126</b>

<sup>1</sup> A 3 credit hour MATH 1XXX or STAT 1XXX may be taken in place of MUSC 3230.

<sup>2</sup> Any 3 credit hour course that meets the Written English Requirement; consult with an advisor before making a selection.

<sup>3</sup> See Core Music History Electives.

<sup>4</sup> Music Theory Electives: MUSC 2122, MUSC 3150, MUSC 3650, MUSC 3992 Topic: Advanced Counterpoint, MUSC 4330 Topic: Advanced Analysis.

<sup>5</sup> 9 credit hours if MUSC 4160 is elected.

### Electives: Third & Fourth Years, All Concentrations

Course	Title	Hours
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2122	Jazz Theory 2	3
MUSC 2460	Conducting	3
MUSC 3050	Research Methods	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3100	Opera Repertoire	3



MUSC 3012	Advanced Diction 2	3
MUSC 3104	History of Opera I: from Monteverdi to Mozart	3
MUSC 3114	History of Opera II: from Mozart to the Modern Era	3
MUSC 3150	Orchestration	3
MUSC 3200	Orff Schulwerk 1 (Summer Term)	6
MUSC 3210	Orff Schulwerk 2	6
MUSC 3220	Kodály Music Education 1 (Summer Term)	6
MUSC 3222	Kodály Music Education 2 (Summer Term)	6
MUSC 3230	Acoustics of Music (fulfills University "M" requirement)	3
MUSC 3270	Performance Skills	3
MUSC 3360	Topics in Music Education	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3480	Minor Practical Study	3
MUSC 3620	Independent Study 1	3
MUSC 3650	Electroacoustic Music	3
MUSC 3690	Percussion Techniques	3
MUSC 3730	Early Music Development	3
MUSC 3772	Vocal Pedagogy for Choirs	3
MUSC 3780	Woodwind Techniques	3
MUSC 3790	Brass Techniques	3
MUSC 3800	String Techniques	3
MUSC 3820	Topics in Music	3
MUSC 3830	Topics in Music	3
MUSC 3840	Course no longer offered	
MUSC 3850	Course no longer offered	
MUSC 3884	Introduction to Jazz for Music Educators	3
MUSC 3894	Guitar Techniques	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 3974	Music Theory After 1900	3
MUSC 4010	French Diction and Repertoire	3
MUSC 4020	Italian Diction and Repertoire	3
MUSC 4030	German Diction and Repertoire	3
MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3
MUSC 4156	Choral Music Literature and Programming	3
MUSC 4212	Orff Schulwerk 3 (Summer Term)	6
MUSC 4224	Kodály Music Education 3 (Summer Term)	6
MUSC 4330	Advanced Analysis	3
MUSC 4360	Wind Repertoire	3
MUSC 4370	Wind Conducting Techniques	3
MUSC 4380	Piano Repertoire	3
MUSC 4390	Piano Chamber Music Literature Seminar	3
MUSC 4430	Pedagogy and Repertoire	3
MUSC 4440	Vocal Pedagogy	3
MUSC 4480	Minor Practical Study	3
MUSC 4490	Piano Pedagogy	3
MUSC 4520	Coaching Skills	3

MUSC 4530	Operatic Piano	3
MUSC 4630	20th to 21st Century Piano Repertoire	3
MUSC 4650	Interactive Computer Music	3
MUSC 4660	Computer Assisted Composition	3
MUSC 4752	Elementary and Middle Years Choral Methods	3
MUSC 4762	Senior Years and Community Choral Methods	3
MUSC 4772	Instrumental Music Methods 1	3
MUSC 4782	Instrumental Music Methods 2	3
MUSC 4896	Cultural Perspectives for Music Educators	3

### General Notes Regarding Electives

Most electives are not offered every year; some are offered every other year and some are offered less frequently. The listing of a subject as an elective does not guarantee that it will always be available or that it will be possible to fit it into all of the many varied timetable combinations of full- and part-time students. There may be a maximum limit set on the number of students permitted to take an elective in a particular session. Similarly, there will be a minimum limit. If registration is below the minimum, the elective will be cancelled for the session, and those registered will be required to transfer to another elective before the course change deadline date. Students are urged to discuss their elective program with members of the faculty toward the end of their second and third years to obtain advice concerning the best choice of electives for their needs.

## Core Music History Electives and Music Theory Electives

### Core Music History Electives

In addition to the required first-year Music History courses (MUSC 1004 and MUSC 1014) Bachelor of Music students must choose four additional Music History electives (12 credit hours) from the list below. Bachelor of Music (Music Education) students must choose two Music History elective (6 credit hours) from the list below.

**Note: Not all of the listed courses will be offered every year.**

Course	Title	Hours
MUSC 1020	Introduction to Popular Music	3
MUSC 1030	History of Musical Theatre	3
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 3034	Medieval Music History	3
MUSC 3044	Renaissance Music History	3
MUSC 3056	Plainchant and Liturgy in Medieval Europe	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3104	History of Opera I: from Monteverdi to Mozart	3
MUSC 3114	History of Opera II: from Mozart to the Modern Era	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3820	Topics in Music	3
or MUSC 3830	Topics in Music	
MUSC 3964	History of Western Art Music After 1900	3

MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3

### Music Theory Electives

Course	Title	Hours
MUSC 2112	Course no longer offered	
MUSC 2122	Jazz Theory 2	3
MUSC 3150	Orchestration	3
MUSC 3650	Electroacoustic Music	3
MUSC 3992	Advanced Counterpoint	3
MUSC 4330	Advanced Analysis	3
MUSC 3820	Topics in Music	3
	or MUSC 3830 Topics in Music	

## Music, B.Mus. Performance Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
MUSC 3230	Acoustics of Music <sup>1</sup>	3
Select one Written English Requirement course <sup>2</sup>		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
Select two Core Music History Elective <sup>3</sup>		6
Select two Non-Music Electives		6
<b>Hours</b>		<b>32</b>
<b>Year 3</b>		
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3550	Recital 1 <sup>4</sup>	3
MUSC 3974	Music Theory After 1900	3
Select one Core Music History Elective <sup>3</sup>		3
Select two Music Electives <sup>6, 7, 8</sup>		6
Select two Non-Music Electives		6
<b>Hours</b>		<b>31</b>

### Year 4

MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4470	Major Practical Study	6
MUSC 4560	Recital 2 <sup>5</sup>	6
Select one Core Music History Elective <sup>3</sup>		3
Select two Music Electives <sup>6, 7, 8</sup>		6
Select two Non-Music Electives		6
<b>Hours</b>		<b>31</b>
<b>Total Hours</b>		<b>126</b>

<sup>1</sup> A 3 credit hour MATH 1XXX or STAT 1XXX may be taken in place of MUSC 3230.

<sup>2</sup> Any 3 credit hour course that meets the Written English Requirement; consult with an advisor before making a selection.

<sup>3</sup> See Core Music History Electives.

<sup>4</sup> A grade of at least "B" in MUSC 3550 is required to continue in the Performance Concentration.

<sup>5</sup> A grade of at least "B" in MUSC 4560 is required for graduation with the Performance Concentration.

<sup>6</sup> Performance students whose Major Practical Study is Voice are required to take MUSC 4440 as one of their Music electives.

<sup>7</sup> Performance students whose Major Practical Study is either Piano or Organ are required to take MUSC 4490 as one of their Music electives.

<sup>8</sup> Performance students whose Major Practical Study is Piano are required to take MUSC 4380 as one of their Music electives.

### Electives: Third & Fourth Years, All Concentrations

Course	Title	Hours
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2122	Jazz Theory 2	3
MUSC 2460	Conducting	3
MUSC 3050	Research Methods	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3100	Opera Repertoire	3
MUSC 3012	Advanced Diction 2	3
MUSC 3104	History of Opera 1: from Monteverdi to Mozart	3
MUSC 3114	History of Opera II: from Mozart to the Modern Era	3
MUSC 3150	Orchestration	3
MUSC 3200	Orff Schulwerk 1 (Summer Term)	6
MUSC 3210	Orff Schulwerk 2	6
MUSC 3220	Kodály Music Education 1 (Summer Term)	6
MUSC 3222	Kodály Music Education 2 (Summer Term)	6
MUSC 3230	Acoustics of Music (fulfills University "M" requirement)	3
MUSC 3270	Performance Skills	3

MUSC 3360	Topics in Music Education	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3480	Minor Practical Study	3
MUSC 3620	Independent Study 1	3
MUSC 3650	Electroacoustic Music	3
MUSC 3690	Percussion Techniques	3
MUSC 3730	Early Music Development	3
MUSC 3772	Vocal Pedagogy for Choirs	3
MUSC 3780	Woodwind Techniques	3
MUSC 3790	Brass Techniques	3
MUSC 3800	String Techniques	3
MUSC 3820	Topics in Music	3
MUSC 3830	Topics in Music	3
MUSC 3840	Course no longer offered	
MUSC 3850	Course no longer offered	
MUSC 3884	Introduction to Jazz for Music Educators	3
MUSC 3894	Guitar Techniques	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 3974	Music Theory After 1900	3
MUSC 4010	French Diction and Repertoire	3
MUSC 4020	Italian Diction and Repertoire	3
MUSC 4030	German Diction and Repertoire	3
MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3
MUSC 4156	Choral Music Literature and Programming	3
MUSC 4212	Orff Schulwerk 3 (Summer Term)	6
MUSC 4224	Kodály Music Education 3 (Summer Term)	6
MUSC 4330	Advanced Analysis	3
MUSC 4360	Wind Repertoire	3
MUSC 4370	Wind Conducting Techniques	3
MUSC 4380	Piano Repertoire	3
MUSC 4390	Piano Chamber Music Literature Seminar	3
MUSC 4430	Pedagogy and Repertoire	3
MUSC 4440	Vocal Pedagogy	3
MUSC 4480	Minor Practical Study	3
MUSC 4490	Piano Pedagogy	3
MUSC 4520	Coaching Skills	3
MUSC 4530	Operatic Piano	3
MUSC 4630	20th to 21st Century Piano Repertoire	3
MUSC 4650	Interactive Computer Music	3
MUSC 4660	Computer Assisted Composition	3
MUSC 4752	Elementary and Middle Years Choral Methods	3
MUSC 4762	Senior Years and Community Choral Methods	3
MUSC 4772	Instrumental Music Methods 1	3
MUSC 4782	Instrumental Music Methods 2	3
MUSC 4896	Cultural Perspectives for Music Educators	3

### General Notes Regarding Electives

Most electives are not offered every year; some are offered every other year and some are offered less frequently. The listing of a subject as an elective does not guarantee that it will always be available or that it will be possible to fit it into all of the many varied timetable combinations of full- and part-time students. There may be a maximum limit set on the number of students permitted to take an elective in a particular session. Similarly, there will be a minimum limit. If registration is below the minimum, the elective will be cancelled for the session, and those registered will be required to transfer to another elective before the course change deadline date. Students are urged to discuss their elective program with members of the faculty toward the end of their second and third years to obtain advice concerning the best choice of electives for their needs.

### Core Music History Electives and Music Theory Electives

#### CORE MUSIC HISTORY ELECTIVES

In addition to the required first-year Music History courses (MUSC 1004 and MUSC 1014) Bachelor of Music students must choose four additional Music History electives (12 credit hours) from the list below. Bachelor of Music (Music Education) students must choose two Music History elective (6 credit hours) from the list below.

**Note: Not all of the listed courses will be offered every year.**

Course	Title	Hours
MUSC 1020	Introduction to Popular Music	3
MUSC 1030	History of Musical Theatre	3
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 3034	Medieval Music History	3
MUSC 3044	Renaissance Music History	3
MUSC 3056	Plainchant and Liturgy in Medieval Europe	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3104	History of Opera I: from Monteverdi to Mozart	3
MUSC 3114	History of Opera II: from Mozart to the Modern Era	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3820	Topics in Music	3
or MUSC 3830	Topics in Music	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3

#### Music Theory Electives

Course	Title	Hours
MUSC 2112	Course no longer offered	
MUSC 2122	Jazz Theory 2	3
MUSC 3150	Orchestration	3
MUSC 3650	Electroacoustic Music	3
MUSC 3992	Advanced Counterpoint	3

MUSC 4330	Advanced Analysis	3
MUSC 3820	Topics in Music	3
or MUSC 3830	Topics in Music	

Select two Non-Music Electives	6
<b>Hours</b>	<b>31-34</b>
<b>Total Hours</b>	<b>126-129</b>

## Music, B.Mus. General

### Degree Requirements

Course	Title	Hours
<b>Year 1</b>		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
MUSC 3230	Acoustics of Music <sup>1</sup>	3
Select one Written English Requirement course <sup>2</sup>		3
<b>Hours</b>		<b>32</b>
<b>Year 2</b>		
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
Select two Core Music History Elective <sup>3</sup>		6
Select two Non-Music Electives		6
<b>Hours</b>		<b>32</b>
<b>Year 3</b>		
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3974	Music Theory After 1900	3
Select one Core Music History Elective <sup>3</sup>		3
Select one Music Theory Elective <sup>4</sup>		3
Select one Music Elective <sup>6,7</sup>		3
Select one Music or Non-Music Elective		3
Select two Non-Music Electives		6
<b>Hours</b>		<b>31</b>
<b>Year 4</b>		
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4470	Major Practical Study	6
or MUSC 4160	or Major Practical Study	
Select one Core Music History Elective <sup>5</sup>		3
Select two Music Electives <sup>3,6,7</sup>		6-9
Select two Music or Non-Music Electives		6

- <sup>1</sup> A 3 credit hour MATH 1XXX or STAT 1XXX may be taken in place of MUSC 3230.
- <sup>2</sup> Any 3 credit hour course that meets the Written English Requirement; consult with an advisor before making a selection.
- <sup>3</sup> 9 credit hours if MUSC 4160 is elected.
- <sup>4</sup> Music Theory Electives: MUSC 2122, MUSC 3150, MUSC 3650, MUSC 3992 Topic: Advanced Counterpoint, MUSC 4330 Topic: Advanced Analysis.
- <sup>5</sup> See Core Music History Electives.
- <sup>6</sup> General students whose Major Practical Study is Voice are required to take MUSC 4440 as one of their Music electives.
- <sup>7</sup> General students whose Major Practical Study is either Piano or Organ are required to take MUSC 4490 as one of their Music electives.

### Electives: Third & Fourth Years, All Concentrations

Course	Title	Hours
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 2100	Introduction to Music Teaching and Learning	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2122	Jazz Theory 2	3
MUSC 2460	Conducting	3
MUSC 3050	Research Methods	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3100	Opera Repertoire	3
MUSC 3012	Advanced Diction 2	3
MUSC 3104	History of Opera I: from Monteverdi to Mozart	3
MUSC 3114	History of Opera II: from Mozart to the Modern Era	3
MUSC 3150	Orchestration	3
MUSC 3200	Orff Schulwerk 1 (Summer Term)	6
MUSC 3210	Orff Schulwerk 2	6
MUSC 3220	Kodály Music Education 1 (Summer Term)	6
MUSC 3222	Kodály Music Education 2 (Summer Term)	6
MUSC 3230	Acoustics of Music (fulfills University "M" requirement)	3
MUSC 3270	Performance Skills	3
MUSC 3360	Topics in Music Education	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3480	Minor Practical Study	3
MUSC 3620	Independent Study 1	3

MUSC 3650	Electroacoustic Music	3
MUSC 3690	Percussion Techniques	3
MUSC 3730	Early Music Development	3
MUSC 3772	Vocal Pedagogy for Choirs	3
MUSC 3780	Woodwind Techniques	3
MUSC 3790	Brass Techniques	3
MUSC 3800	String Techniques	3
MUSC 3820	Topics in Music	3
MUSC 3830	Topics in Music	3
MUSC 3840	Course no longer offered	
MUSC 3850	Course no longer offered	
MUSC 3884	Introduction to Jazz for Music Educators	3
MUSC 3894	Guitar Techniques	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 3974	Music Theory After 1900	3
MUSC 4010	French Diction and Repertoire	3
MUSC 4020	Italian Diction and Repertoire	3
MUSC 4030	German Diction and Repertoire	3
MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3
MUSC 4156	Choral Music Literature and Programming	3
MUSC 4212	Orff Schulwerk 3 (Summer Term)	6
MUSC 4224	Kodály Music Education 3 (Summer Term)	6
MUSC 4330	Advanced Analysis	3
MUSC 4360	Wind Repertoire	3
MUSC 4370	Wind Conducting Techniques	3
MUSC 4380	Piano Repertoire	3
MUSC 4390	Piano Chamber Music Literature Seminar	3
MUSC 4430	Pedagogy and Repertoire	3
MUSC 4440	Vocal Pedagogy	3
MUSC 4480	Minor Practical Study	3
MUSC 4490	Piano Pedagogy	3
MUSC 4520	Coaching Skills	3
MUSC 4530	Operatic Piano	3
MUSC 4630	20th to 21st Century Piano Repertoire	3
MUSC 4650	Interactive Computer Music	3
MUSC 4660	Computer Assisted Composition	3
MUSC 4752	Elementary and Middle Years Choral Methods	3
MUSC 4762	Senior Years and Community Choral Methods	3
MUSC 4772	Instrumental Music Methods 1	3
MUSC 4782	Instrumental Music Methods 2	3
MUSC 4896	Cultural Perspectives for Music Educators	3

### General Notes Regarding Electives

Most electives are not offered every year; some are offered every other year and some are offered less frequently. The listing of a subject as an elective does not guarantee that it will always be available or that it will be possible to fit it into all of the many varied timetable combinations of full- and part-time students. There may be a maximum limit set on the number of students permitted to take an elective in a particular session. Similarly, there will be a minimum limit. If registration is below the minimum, the elective will be cancelled for the session, and those registered will be required to transfer to another elective before the course change deadline date. Students are urged to discuss their elective

program with members of the faculty toward the end of their second and third years to obtain advice concerning the best choice of electives for their needs.

## Core Music History Electives and Music Theory Electives

### CORE MUSIC HISTORY ELECTIVES

In addition to the required first-year Music History courses (MUSC 1004 and MUSC 1014) Bachelor of Music students must choose four additional Music History electives (12 credit hours) from the list below. Bachelor of Music (Music Education) students must choose two Music History elective (6 credit hours) from the list below.

**Note: Not all of the listed courses will be offered every year.**

Course	Title	Hours
MUSC 1020	Introduction to Popular Music	3
MUSC 1030	History of Musical Theatre	3
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 3034	Medieval Music History	3
MUSC 3044	Renaissance Music History	3
MUSC 3056	Plainchant and Liturgy in Medieval Europe	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3104	History of Opera I: from Monteverdi to Mozart	3
MUSC 3114	History of Opera II: from Mozart to the Modern Era	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3820	Topics in Music	3
or MUSC 3830	Topics in Music	
MUSC 3964	History of Western Art Music After 1900	3
MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3

### Music Theory Electives

Course	Title	Hours
MUSC 2112	Course no longer offered	
MUSC 2122	Jazz Theory 2	3
MUSC 3150	Orchestration	3
MUSC 3650	Electroacoustic Music	3
MUSC 3992	Advanced Counterpoint	3
MUSC 4330	Advanced Analysis	3
MUSC 3820	Topics in Music	3
or MUSC 3830	Topics in Music	

# Music Minor for Students in Faculties other than the Faculty of Music

## Minor Requirements

The music minor requires 18 credit hours of MUSC courses as follows:

Course	Title	Hours
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
Select 9 credit hours in Music courses <sup>1</sup>		9
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Students pursuing a Music Minor can take any of the music courses in the Academic Calendar for which they have the prerequisites or permission, if required, **except for** MUSC 1400, MUSC 2400, MUSC 3470, MUSC 4160, MUSC 4470. Minor practical study (MUSC 1460, MUSC 2480, MUSC 3480, MUSC 4480) is possible with permission of the Dean.

For a minor in music, it is recommended that MUSC 1004, MUSC 1014 and MUSC 1110 be taken before all other courses.

### Note for Ensembles:

1. All Ensembles courses are 2 credit hours each.
2. Students may take a maximum of three ensemble courses as part of a minor in music.
3. Participation in ensembles is determined by audition.

**Note:** Completion of a minor in music does not satisfy the “teachable minor” required for admission to the After Degree B.Ed. Program in middle years and senior years.

## Post-Baccalaureate Diploma in Performance (PBDP)

### Overview/Entrance Requirements

The Marcel A. Desautels Faculty of Music offers a Post-Baccalaureate Diploma in Performance (PBDP) designed for musicians who wish to further their performance skills in preparation for further study or professional activity. The unique features of the PBDP program are that students can design their own program of study and tailor it to their own areas of interest. They may take courses at the Faculty as well as in other faculties and schools at the University of Manitoba.

### Admission Requirements

Applicants for Admission must submit the completed application form and fee, and must possess a Bachelor of Music degree or a Conservatory Diploma taken in residence. They must also pass an entrance audition, which requires the performance of three works of contrasting styles and/or historical periods appropriate to the audition medium. This audition would normally be held in person, but video auditions may be accepted where distance is a prohibitive factor. Application materials which misrepresent the level of performance ability will be treated as fraudulent, resulting in dismissal from the program. Admission may not be possible for all qualified applicants, as it is dependent on the number of spaces available, the major practical study area, and

instructor availability. Applicants who hold the PBDP from the University of Manitoba (or an equivalent Post-Baccalaureate one-year program from another institution) may apply for a second PBDP if studying a different applied instrument than that of their first PBDP in their Major Practical Study, and Recital courses, and if the remaining course credits taken do not duplicate those of the first PBDP.

### Admission Procedures

Applications are made through the University's Admission Office (<https://umanitoba.ca/explore/undergraduate-admissions/apply/>) and information can be found on the Faculty's website (<https://umanitoba.ca/music/>). Application deadlines are: February 15 to begin a program in September (Fall Term), or June 15 to begin a program in January (Winter Term).

All those who complete the application and provide the required documentation are granted an audition. Audition dates are scheduled as required.

It is recommended that students be admitted for a program start in Fall Term.

### Academic Standing

Regulations for the Post-Baccalaureate Diploma program regarding academic standing, scholastic progress, attendance, required GPA, probation and suspension will follow those governing the Bachelor of Music and Bachelor of Jazz Studies programs as outlined in the Faculty Student Handbook (<https://umanitoba.ca/music/student-experience/bachelor-of-jazz-studies-student-handbook/>).

### Maximum Time Limits

Expected time to complete program: 1 year. The maximum time allowed for completing the Post-Baccalaureate Diploma program is 3 years. The Dean may grant extensions for medical or compassionate reasons. Medical: A letter from the student's physician stating the diagnosis and treatment with projected recovery. Compassionate: A letter from the student outlining the reasons for the extension showing that extenuating circumstances beyond the student's control have contributed to the need for an extension. Students will not be permitted to transfer for credit any course completed more than five years prior to the completion date of the diploma.

### Courses Available

Undergraduate 3000 and 4000 level courses approved by the Dean may be used as electives in designing the program of study. Students will register for their courses after their program has been determined in consultation with their Major Practical Study Instructor who will act as an advisor during the PBDP. Students may not count toward the PBDP any courses that counted for credit in a previous degree.

### Credit Transfer

The Student Advisor in the faculty will process transfer of credits into the PBDP program. A maximum of 12 credit hours of courses may be transferred into the PBDP program provided that they have not counted toward any previous degree. A minimum of 18 credit hours must be taken within the Faculty, although up to the full 30 credit hours of the diploma program may be taken within the Faculty. Transfer of credits from the PBDP program into the Master of Music is processed through the Faculty of Graduate Studies. Courses may not be counted for more than one degree, and may be transferred from the PBDP to the Master of Music

only if they have not been counted toward the PBDP, or more than the minimum credit hours have been taken.

## Assessment

**Student Assessment:** Type of evaluation: Academic freedom dictates that there will be variation between classes according to the professor's preferred systems, approaches, materials, readings, and assignments. However, the University of Manitoba regulations as outlined in the General Academic Regulations, (p. 118) state that within the first week of lectures, instructors must inform the class of the method of evaluation to be used in each course. **Minimum Grade Requirements:** In the Faculty students must attain a grade of "C" or higher for a course to count toward a degree, except in the case of Recital where a minimum of "B" is required. The PBDP program will be governed by these regulations, as outlined in the Faculty Student Handbook (<https://umanitoba.ca/music/student-experience/bachelor-of-jazz-studies-student-handbook/>). Should the student transfer to another faculty in the university that faculty's regulations would apply relating to transfer of credit. Successful completion of the program will be achieved by receiving a "C" or higher in 30 credit hours. **Teacher Assessment:** The SEEQ course evaluations will be used in the PBDP program for academic courses, and the Faculty's specialized forms will be used for the performance-related courses.

## Degree Requirements

Course	Title	Hours
MUSC 5400	Major Practical Study	6
MUSC 5560	Recital	6
MUSC 5180	Ensemble	3
Select 15 credit hours from 3000 and 4000 level courses recommended by the Faculty Advisor and approved by the Faculty		15
<b>Total Hours</b>		<b>30</b>

Note: A minimum of 18 credit hours must be taken in the Marcel A. Desautels Faculty of Music (although all 30 may be taken within the Faculty).

Reminder: While Faculty staff and faculty are available to clarify Faculty and university regulations and degree requirements, it is the student's responsibility to ensure that diploma and program requirements are met.

# Faculty of Science

## General Office

**Dean:** Dr. Brian Mark

**Associate Dean(s):** Krystyna Koczanski, Ayush Kumar, Horace Luong, Sean McKenna, Steve Whyard

**Campus Address/General Office:** 230 Machray Hall

**Telephone:** (204) 474 8256

**Fax:** (204) 474 7618

**Email Address:** Contact a Science Advisor (<https://sci.umanitoba.ca/students/undergraduate-students/academic-advisors/>)

**Website:** [sci.umanitoba.ca](https://sci.umanitoba.ca) (<https://sci.umanitoba.ca>)

**Academic Staff:** For complete listings of the Faculty of Science Academic Staff, please refer to departmental websites.

The Faculty of Science is made up of 7 departments, which offer a number of different programs, minors, and concentrations. Departments may also work together to offer joint programs. The departments in the Faculty of Science include Biological Sciences, Chemistry, Computer Science, Mathematics, Microbiology, Physics and Astronomy, and Statistics.

Degree programs offered include: B.Sc. General, B.Sc. Major (with Co-operative Option), B.Sc. Double Major, B.Sc. Honours (with a Co-operative Option in some programs), B.Sc. Double Honours, and the B.C.Sc. Honours (Computer Science Honours with a Co-operative Option).

Programs of study include offerings in:

- Actuarial Mathematics
- Biochemistry
- Biological Sciences
- Biotechnology\*
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Applied Mathematics with Computer Science Option

- Applied Mathematics with Economics Option
- Applied Mathematics with Statistics Option
- Microbiology
- Physics and Astronomy
- Psychology
- Statistics

\*As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.

The Faculty of Science also offers the following Joint Honours.

- Chemistry – Physics Program
- Computer Science – Mathematics Program
- Computer Science – Physics and Astronomy Program
- Computer Science – Statistics Program
- Mathematics – Physics and Astronomy Program
- Mathematics – Economics Program
- Statistics – Actuarial Mathematics Program
- Statistics – Mathematics Program
- Statistics – Economics Program

## Programs

### Note:

- Students in the B.C.Sc. (Honours), B.Sc. (Honours) or B.Sc. (Major) Co-operative Options will take longer than 4 years to complete degrees as the time to completion includes 12 months of paid employment.
- Students may elect to pursue a Double Honours or Double Major program in consultation with departments concerned. Years to completion and total credit hours may exceed information provided in the table below.
- Minors (optional or required) are part of degree programs - for program length, refer to the Years to Completion.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Actuarial Mathematics, B.Sc. Honours (p. 813)	4	120	
Applied Mathematics with Computer Science Option, B.Sc. Major (p. 894)	4	120	Yes
Applied Mathematics with Economics Option, B.Sc. Major (p. 898)	4	120	Yes
Applied Mathematics with Statistics Option, B.Sc. Major (p. 901)	4	120	Yes
Biochemistry, B.Sc. Honours (p. 814)	4	120	Yes
Biochemistry, B.Sc. Major (p. 818)	4	120	Yes
Biological Sciences, B.Sc. Honours (p. 824)	4	120	Yes
Biological Sciences, B.Sc. Major (p. 832)	4	120	Yes



Biological Sciences Minor (p. 840)		18	
Biotechnology, B.Sc. Honours (p. 840)	4	120	Yes
Biotechnology, B.Sc. Major (p. 844)	4	120	Yes
Chemistry, B.Sc. Honours (p. 848)	4	120	Yes
Chemistry, B.Sc. Major (p. 851)	4	120	Yes
Chemistry - Physics Joint, B.Sc. Honours (p. 854)	4	120	
Chemistry Minor (p. 854)		18	
Computer Science, B.C.Sc., Honours (p. 856)	4	120	Yes
Computer Science, B.Sc. Major (p. 858)	4	120	Yes
Computer Science - Mathematics Joint, B.Sc. Honours (p. 862)	4	120	Yes
Computer Science - Physics & Astronomy Joint, B.Sc. Honours (p. 865)	4	120	Yes
Computer Science - Statistics Joint, B.Sc. Honours (p. 868)	4	120	Yes
Computer Science Minor (p. 862)		18	
Data Science, B.Sc. Major (p. 871)	4	120	Yes
General B.Sc. (p. 874)	3	90	
Genetics, B.Sc. Honours (p. 876)	4	120	Yes
Genetics, B.Sc. Major (p. 880)	4	120	Yes
Mathematics, B.Sc. Double Honours (p. 889)	4	120	Yes
Mathematics, B.Sc. Honours (p. 885)	4	120	Yes
Mathematics, B.Sc. Major (p. 891)	4	120	Yes
Mathematics - Economics Joint, B.Sc. Honours (p. 904)	4	120	
Mathematics - Physics and Astronomy Joint, B.Sc. Honours (p. 907)	4	120	Yes
Mathematics Minor (p. 904)		18	
Microbiology, B.Sc. Honours (p. 910)	4	120	Yes
Microbiology, B.Sc. Major (p. 915)	4	120	Yes
Microbiology Minor (p. 919)		30	
Physics and Astronomy, B.Sc. Honours (p. 920)	4	120	Yes
Physics and Astronomy, B.Sc. Major (p. 925)	4	120	Yes
Physics and Astronomy Minor (p. 928)		18	
Psychology, B.Sc. Honours (p. 928)	4	120	
Psychology, B.Sc. Major (p. 929)	4	120	Yes
Psychology Minor (p. 932)		18	
Statistics, B.Sc. Honours (p. 933)	4	120	Yes
Statistics, B.Sc. Major (p. 936)	4	120	Yes
Statistics - Actuarial Joint, B.Sc. Honours (p. 940)	4	120	

Statistics - Economics Joint, B.Sc. Honours (p. 941)	4	120	
Statistics - Mathematics Joint, B.Sc. Honours (p. 942)	4	120	Yes
Statistics Minor (p. 939)		18	

## Faculty Academic Regulations

### Admission to the Faculty of Science

#### Direct Entry Admissions Requirements

To enter the Faculty of Science directly from high school, a student must have:

1. Manitoba high school graduation with five full credits at the Grade 12 level in courses designated S, G, or U.
2. A minimum 80% average over the following, with no less than 60% in each course:
  - a. English 40S
  - b. Pre-Calculus Mathematics 40S (recommended) or Applied Mathematics 40S
  - c. One of Biology 40S, Chemistry 40S, Computer Science 40S, or Physics 40S
  - d. One additional (academic) 40S course

Students admitted as a Direct Entry student will be assigned to the 4-Year undeclared Major Program. See Major (Degree) Academic Regulations (p. 805) for details.

#### Entrance to Science from University 1: Transiting

Students may transit to the Faculty of Science from University 1, prior to Fall Term registration only. The transit function is available on Aurora Student. There are no fees for transiting and there is no application form required.

To be eligible to transit a student must have achieved a minimum cumulative grade point average (CGPA) of 2.00 on 24 credit hours. Students who have completed more than 24 credit hours at the point of transit must have achieved a minimum Adjusted Grade Point Average (AGPA) of 2.00. The AGPA calculation will be on the best graded 24 credit hours at the point of transit.

Students who do not meet the minimum transit eligibility requirements should refer to Admission to Faculties, Schools and Colleges Following University 1 (p. 129) in the Undergraduate Calendar for information regarding how to establish their eligibility.

When a student transits from University 1 to the Faculty of Science, they may choose to transit to a 4-year Major program for which they qualify, or they may choose to transit to the General Degree. If a student wishes to enter an Honours program in the Faculty of Science they should contact the Faculty of Science office for assistance. Students intending to enter a four year Major or Honours program should refer to the program grids (p. 799) for courses required for entry into each program. Completion of these courses in University 1 will prepare a student to complete a four year Major or Honours program in four calendar years.

For further information please contact a Faculty of Science Academic Advisor and/or refer to the Faculty of Science applicant information brochure and the University Admissions website (<https://www.umanitoba.ca/admissions/>).

#### Advanced Entry

Students who wish to transfer to the Faculty of Science from another faculty at the University of Manitoba, or another recognized post-secondary institution, must have completed a minimum of 24 credit hours of post-secondary courses and have achieved a minimum adjusted grade point average (AGPA) of at least 2.00 to be eligible.

If a student has completed 24 - 29 credit hours, the AGPA is calculated using all post-secondary course work including original grades of repeated courses.

If a student has completed 30 - 71 credit hours the AGPA is calculated by excluding the lowest credit hours of university level course work in accordance with the following table:

Credit Hours Completed	Credit Hours Dropped
0-29	0
30-35	6
36-53	9
54-71	12

If a student has completed 72 credit hours or more the AGPA is calculated on the most recent 60 credit hours of university level course work, and the worst 12 credit hours will be dropped from the calculation from within those 60 credit hours.

Students on academic suspension as a result of work completed at another post-secondary institution, or in another unit at the University of Manitoba, will not normally be considered for admission to the Faculty of Science until the suspension has been served.

#### Transfer of Credit

*External:* Please refer to the Admissions website (<https://www.umanitoba.ca/admissions/>) or the Admissions section (p. 129) in the calendar. Courses completed at an external institution ten years prior to registration in the Faculty of Science are not considered for transfer credit. Students should contact a Science Academic Advisor regarding departmental transfer credit policies. **All courses acceptable to the Faculty of Science must be transferred.**

#### Second Degree Students

Students possessing a first degree from a recognized university program and who have a minimum Cumulative Grade Point Average of 2.00 (or a 2.30 adjusted grade point average – see applicant information bulletin for details on AGPA) on all previous university work are eligible for admission as Second Degree students.

Second degree requirements may be shortened by up to 60 credit hours, and once admitted to a Second Degree Program, students will be expected to conform to all continuation, residency and graduation requirements as indicated below.

Specific information on requirements for a Bachelor of Science degree following the completion of a degree in another faculty or school, or at another university, is available in the general office.

## Special Students

### After Degree Special Students

Students who have successfully completed a first degree from a recognized university program with a Cumulative Grade Point Average of 2.00 or better are eligible for admission as Special Students.

### Auditing Students

Students who wish to audit courses must have written permission from the instructor of the desired course before they can register. Auditing students must register by contacting the Faculty of Science General Office. Students given permission to audit a course will be registered in their course(s) after the initial access period for registration.

### Returning to Science after an Extended Leave

Students who have been away from Science for more than a year are blocked from using **Aurora Student**. They must consult with a Science Academic Advisor. If the student has not attended another post-secondary institution, they are eligible to return. The advisor will determine academic progress, registration date and time, and discuss degree plans. Students planning a return to studies are strongly urged to contact an Advisor well in advance of the start of registration.

Students who have attended elsewhere since their last registration in Science must normally re-apply for admission and be academically competitive for admission on all of their previous academic work. Deadlines for application may be found on the Admissions website (<https://www.umanitoba.ca/admissions/>).

Students who have graduated must re-apply (Applicable deadlines may be found on the Admissions website) and be academically competitive for admission.

### Admission as a Dual Credit High School Student

Dual credit courses in high schools may be offered in partnership with school divisions and high schools. This opportunity is designed for students with particular interest in receiving equivalent to university-level training in a subject area and in receiving university-level credit for the training they receive at the high school level. To complete particular courses for university credit prior to their high school graduation by writing a challenge exam, some students may qualify for admission to the Faculty of Science under our Dual Credit High School Student Admissions Category.

Note that courses offered as dual credit may vary from year to year. Interested high schools should consult the Faculty of Science Dean's Office for course availability and information on the dual credit course approval processes.

All prospective students must provide the following to be eligible for admission as a Dual Credit High School Student:

- evidence of full-time registration in a Manitoba high school,
- written recommendation of academic ability from their high school principal (or designate) confirming that they are academically in good standing and academically prepared to take equivalent to university-level courses,
- written approval of the Department offering the course that they are seeking to challenge and the Faculty of Science Dean's Office,
- completion of course pre-requisites as approved by Senate.

## Academic Regulations

### Regulations Applicable to all Programs

The provisions of the "General Academic Regulations (p. 118)" and "University Policies and Procedures (p. 37)" apply to all students. In addition, the Faculty of Science has regulations and requirements published below that apply specifically to its students.

### Repeating a Course

Permission to repeat a course or a direct equivalent is not required. To take a course that is listed as "mutually exclusive" (see course descriptions) with a previously completed course requires a registration override. Please contact the Faculty of Science General Office prior to registration.

Science students are subject to the University of Manitoba regulations (see General Academic Regulations, Repeating a Course (p. 55)) and the Faculty of Science degree regulations regarding eligibility to repeat a course. See below for information on Limited Access (p. 802).

Repeating a course will **not** result in the removal of the first attempt and grade in that course from the student's record. The course will appear on the transcript as many times as it has been repeated. The grade in all attempts of a course will be calculated as part of the student's GPA.

There is a limit on the number of "F" grades permitted in the 4-year Major and Honours programs. All courses with "F" grades that are repeated count towards the limit of "F" grades permitted in a Science degree. See B.Sc. Major (p. 805) and B.Sc. Honours (p. 806) Academic Regulations.

Students who wish to repeat a course for which they have obtained a grade of "C" or better are encouraged to discuss their choice to do so with a Science Academic Advisor prior to registration.

**Note:** In most cases, professional Faculties and Schools have specific rules governing the way repeated courses are treated in their admission process. Check the applicant information bulletin of the appropriate Faculty or School, or with the Admissions Office (424 University Centre), or with a Science Academic Advisor for information regarding how different professional programs treat repeated courses in determining admission.

### Voluntary Withdrawals

The responsibility for initiating withdrawals rests solely with the student. When eligible to do so, Voluntary Withdrawals must be done through Aurora Student. No withdrawals will be permitted after the deadlines posted in the Academic Schedule (p. 28). See information on Limited Access (p. 802).

There is no limit on the number of Voluntary Withdrawal hours a student can accumulate.

In exceptional circumstances, Authorized Withdrawals may be permitted on presentation of appropriate documentation. See the "General Academic Regulations," on "Withdrawal from Courses and Programs" (p. 123) or consult a Science Academic Advisor for information.

### Limited Access

**Limited Access (see University Policy and Procedures- Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>)) will not affect registration for the 2022-2023 (including Summer Term 2023).**

Limited Access is a registration rule that allows students who have never before completed, or voluntarily withdrawn, from a course (or its

equivalent) the opportunity to register for the course before students who are repeating or have previously withdrawn from the course.

If a student has previously taken a course and received a final grade, or voluntarily withdrawn from the course (VW)<sup>1</sup>, any future attempt to take that course or its equivalent is considered a repeated course.

<sup>1</sup> A previous VW is only considered a repeat if the student voluntarily withdrew in Winter 2017 or later.

Limited Access will prevent a student from registering or placing themselves on the waitlist for a course (or equivalent) being repeated until the "Limited Access Term Expiry Date" has passed.

Limited Access applies for three consecutive terms following the term that the course in question was last completed or voluntarily withdrawn (VW).

During these three terms of Limited Access, a student may register to repeat a course, without permission, only when the Limited Access Term Expiry Date has passed.

Once the three terms of Limited Access has expired, any student wishing to repeat a course must request permission to do so from the Faculty of Science General Office prior to registration.

#### Attendance at Other Institutions/Letter of Permission

Students wishing to complete courses at another institution for credit at the University of Manitoba must apply for written permission from the Registrar's Office prior to registering at the other institution. Students should apply for the Letter of Permission well in advance of the term in which they wish to register at the other institution, processing time can take up to 8 weeks.

To be eligible to take courses on a Letter of Permission, a Faculty of Science student must:

1. Be in good standing, and not be currently assessed as Academic Warning, On Probation, On Suspension, or Required to Withdraw.
2. Not be under investigation for academic misconduct.

Students who attend other post-secondary institutions without a Letter of Permission must reapply for admission to the Faculty of Science before the application deadline and be academically competitive for admission. Similarly, students registered in the Faculty of Science may not be registered at another academic institution at the same time unless they are registered elsewhere on a Letter of Permission. The penalty for unauthorized or undisclosed attendance may be disciplinary withdrawal or academic suspension.

For more information on Letters of Permission, please refer to the website (<https://umanitoba.ca/registrar/letter-permission/>).

#### Academic Misconduct

Academic misconduct is intentional cheating, fabrication, impersonation, or plagiarism. It is also knowingly or inadvertently helping or attempting to help others to be dishonest. Academic misconduct lowers scholastic quality and defrauds others who will eventually depend on their own knowledge and integrity.

Plagiarism or any other form of cheating on examinations, term tests, or assignments is subject to academic penalty as serious as suspension or expulsion from the faculty or university.

Students who are unsure of what constitutes academic misconduct should refer to the regulations in General Academic Regulations, Academic Integrity (p. 122), and consult with a Science Academic Advisor or a faculty member. Information about academic penalties for academic misconduct is available on the Faculty of Science website.

#### Academic Assessment

Each student in the Faculty of Science who has completed a minimum of 12 credit hours will have their academic performance assessed at the end of each term in which they receive a final grade in a minimum of 1 credit hour.

Notations will appear on a student's transcripts based on their performance. The five categories are: **Minimum Met, Academic Warning, On Probation, On Suspension, Required to Withdraw.**

#### Minimum Met

Students who achieve a minimum DGPA of 2.0 at the point of assessment will receive the **Minimum Met** notation on their transcript. This indicates that the student's performance is satisfactory. This does not mean a student has satisfied the specific requirements in their program of study. Students should consult the Undergraduate Academic Calendar for the specific requirements of their program of study.

Students who do not achieve a minimum DGPA of 2.0 will be placed in one of the following assessment categories: Academic Warning, On Probation, On Suspension, or Required to Withdraw.

#### Academic Warning

Students who have completed 12-23 credit hours at the point of assessment and have a DGPA less than 2.0 will be assessed as **Academic Warning**.

A student who receives an Academic Warning assessment will be permitted to register for classes and will be assessed at the end of each term in which they register.

A student who receives an assessment of Academic Warning will be encouraged to meet with an advisor and connect with campus resources.

#### On Probation

Students who have completed 24 credit hours or more at the point of assessment and have a DGPA less than 2.0 will be assessed as **On Probation**.

The first term a student receives an assessment of On Probation, a registration hold will be placed on their student account. To have the hold lifted the student will need to meet with an academic advisor and/or participate in interventions developed for students on probation. This may include required follow up meetings with an academic advisor, participation in skill building workshops, and referrals to student support resources.

A student who receives an On Probation assessment will be permitted to register for classes. Once the student has achieved a DGPA of 2.0, they will be assessed as **Minimum Met** and the student will no longer be on probation.

If at the point of assessment, the student's DGPA is still below 2.0, they must have achieved a minimum Term GPA (TGPA) of 2.0 or higher to continue to register in a subsequent term. If a student does not achieve a minimum TGPA of 2.0 while on probation, the student will be placed **On Suspension** for a period of 1-year.

### On Suspension

A student who receives an Academic Suspension assessment from the Faculty of Science is not normally permitted to register in any other faculty or school at the University of Manitoba. If a student completes courses at another post-secondary institution while serving a suspension, the student will be required to reapply for admission to the University of Manitoba and meet admission requirements. In addition, the student will need to provide evidence that they have served their suspension (i.e. evidence that they have spent the duration of their suspension away from post-secondary studies). Students should consult Other Admission Categories (p. 129) and Attendance at Other Institutions (<https://umanitoba.ca/registrar/letter-permission/>) for more details.

Students who are on academic suspension may not use courses taken at another institution during the period of suspension, for credit towards a Science degree at the University of Manitoba.

### Returning from 1-Year Suspension

If a student has intentions to return to the Faculty of Science following a 1-year suspension, the student will be required to contact a Faculty of Science academic advisor before returning.

Upon return from a 1-year suspension, a student will resume studies **On Probation**. The student will be required to meet the requirements outlined above for students on probation. Failure to achieve a minimum TGPA of 2.0 will result in an assessment of **Required to Withdraw**.

### Required to Withdraw

The second time a student assessed as On Probation fails to achieve a minimum TGPA of 2.0 they will be required to withdraw from the Faculty of Science. A student assessed as **Required to Withdraw** will not be permitted to register as a Faculty of Science student at the University of Manitoba, or in Faculty of Science courses at the University of Manitoba, for a period of 5 calendar years.

### Returning to Science after being Required to Withdraw

After 5 calendar years a student assessed as Required to Withdraw may return to the Faculty of Science.

If the student has completed other post-secondary studies at the University of Manitoba, or at another institution, they must reapply to the Faculty of Science and meet the admission requirements. Students who are assessed as Required to Withdraw may not use courses taken at another institution during the required to withdraw period for credit towards a Science degree at the University of Manitoba.

If the student has not completed other post-secondary studies and intends to return to the Faculty of Science after 5 calendar years, the student will be required to contact a Faculty of Science academic advisor before returning. The student will be given the following irreversible options:

1. **Resume Studies** – A student choosing this option will keep all previously completed coursework and their DGPA will remain the same, thus the student will be continuing On Probation. A student who chooses this option must meet all the requirements of a student On Probation, as outlined above. Failure to meet these requirements will result in a Required to Withdraw assessment.
2. **Start Afresh** – A student choosing this option may request to bring in up to 30 credit hours of previously completed course work in which they have achieved a “C” or better. Students in this situation will only have the courses which they choose to use as part of their

“Start Afresh” as part of their DGPA and will be assigned an initial assessment of Minimum Met. A student who chooses this option will be subject to the academic assessment regulations outlined above.

In either case, this does not mean that the previous coursework will be removed from the student history or transcript.

### Spanned Courses

Students who are registered in spanned courses will be assessed at the end of each term in which they are registered. It is possible for a student to be placed on probation prior to completing a spanned course; however, an assessment of Academic Suspension or Required to Withdraw will not occur while a student is registered in a spanned course. Students on probation who are registered in spanned courses will continue On Probation until the spanned course is complete, at which time, official assessment will take place, based on the number of credit hours completed and the GPA achieved at that point in time.

### Graduation

A student who has satisfied degree requirements for their program of study and is eligible for graduation will be allowed to graduate, regardless of the status of their end-of-term assessment of academic standing. If the assessment category is one of On Probation, On Suspension, or Required to Withdraw, the notation will be removed from the final term of the student's transcript.

### Required to Withdraw from Major or Honours

If a student's last assessment was “Required to Withdraw from the Honours or the Major program,” they **must** consult a Science Academic Advisor prior to registration. An advisor will review new degree plans, determine eligibility for a desired program, and update any affected university records.

### Students on “Hold”

If a student is on “Hold”, they are prevented from any registration transaction (including Voluntary Withdrawals) until they have cleared this status. The student must contact the Faculty of Science within the normal deadline to withdraw from a course while on “Hold”.

### Term Work and Debarment

A student is responsible for the completion of laboratory work, assignments, tests and other class work as prescribed by departments. A student who does not meet term work requirements to the satisfaction of a department may receive a warning to this effect from the department or the general office. If this warning is ignored, a student may be debarred from the course. Any student debarred from a course receives an automatic grade of “F” in that course.

### Deferred Examinations

Students unable to write a final examination because of illness, disability, or for compassionate reasons, must file an application in the Faculty of Science general office for a deferred examination. The application must be filed within 48 hours of the examination. Appropriate documentation must be provided that verifies that the incapacity existed at the time the examination was to be written.

A deferred examination is offered in a manner prescribed by the head of the department concerned. This would normally be written within 30 working days of the last examination in that series. Any other consideration would be determined by the department head.

Students requesting deferred examinations on the grounds that the examinations conflict with vacation or holiday plans shall not be granted deferrals.

A deferred examination is not granted to a student who has written the final examination.

Deferred examinations that need to be re-deferred, and/or requests where a student is seeking a deferral in a third examination series (i.e. Fall 2008, Winter 2009, Winter 2010 – any course) must be approved by the Faculty of Science Committee on Student Standing. Students must appeal, in writing, to the Committee on Student Standing and provide precise documentation that outlines why a deferral request should be granted in their case.

### Appeals Involving Academic Regulations

The Committee on Student Standing in Science considers appeals from students who request special consideration in respect of rules and regulations governing their programs of study and qualification for graduation.

Appeals should be addressed to: The Secretary, Committee on Student Standing, General Office, Faculty of Science, 230 Machray Hall.

### Appeal for Authorized Withdrawal

Students who have valid and documented reasons for withdrawal, such as medical illness or compassionate circumstances, may be authorized to withdraw without penalty. Requests for authorized withdrawals must be submitted in writing to a Faculty of Science Academic Advisor. Student Advocacy (<https://umanitoba.ca/student-supports/academic-supports/student-advocacy/>) located at 520 University Centre (204-474-7423, [student\\_advocacy@umanitoba.ca](mailto:student_advocacy@umanitoba.ca)) is available to provide information and assistance.

### Statute of Limitations

Students who intend to appeal matters concerning regulations or decisions of the Faculty which may affect their registration must arrange to submit a written appeal, including pertinent documentation to the Secretary of the Faculty of Science CSS, normally within three months following the term in which the course was taken or from the date of the academic decision. Appeals will not be considered beyond three years after the end of the course, or from the date of the academic decision.

### Appeal for other Academic Concessions

Students who believe they have grounds for academic concessions based on their personal circumstances should consult with a Science Academic Advisor. Student Advocacy (<https://umanitoba.ca/student-supports/academic-supports/student-advocacy/>) located at 520 University Centre (204-474-7423, [student\\_advocacy@umanitoba.ca](mailto:student_advocacy@umanitoba.ca)) is available to provide information and assistance.

### Laboratory Registration

If a course requires registration in both a lecture and a separate appropriate laboratory section, **Aurora Student** will not permit a student to register in that course unless they register for both.

### Laboratory Exemptions

Students who think they are eligible for a laboratory exemption must check with the department offering the course to obtain formal consent of this. Once received, deliver the written permission to their faculty or school office, as an override may be required on their academic record. They must register for the laboratory exempt section.

It is the student's responsibility to ensure that they are eligible for a laboratory exemption. If they register for one of these courses and it is

subsequently determined that they are not entitled to exemption, they will be required to register for a laboratory section. If no space remains available in the laboratory, they will be required to withdraw from the course.

### Laboratory Release

Certain Chemistry and Microbiology courses require that students check out of the laboratory before they withdraw or change lab sections. It is the student's responsibility to check with the departmental office prior to making any changes to their laboratory registration. Failure to check out of the laboratory may result in the student's academic records being placed on HOLD.

## B.Sc. (General) Degree Academic Regulations

### B.Sc. (General) Three Year Degree

The three-year General program is intended to provide diversified training in Science. The program provides students with broad exposure to the major areas of Science at the introductory level with a requirement for more advanced studies in one or more areas of Science.

This program is not intended for students who desire to practice in some field of specialization in the Sciences. Students with that intent are recommended to pursue the Honours or the four-year Major program.

Students are required to have the equivalent of high school Mathematics 40S (either pre-calculus or applied mathematics) and at least one of high school Chemistry 40S or Physics 40S.

### B.Sc. General Academic Regulations

A student must complete 90 credit hours with passing grades ("D" or better) in each course. Please note higher grades are usually required for prerequisite purposes. See course descriptions for details. A student must obtain a minimum grade point average of 2.00 on the 90 credit hours, which constitute the degree to qualify for the degree of Bachelor of Science (General).

### B.Sc. General Degree Minimum Performance Requirements

Students in the B.Sc. General Degree program are subject to academic assessment regulations as specified in the Regulations Applicable to all Programs (p. 802) section of the Faculty of Science general Calendar.

### B.Sc. General Degree Residence Requirements

There are two ways in which students may fulfill the minimum requirement of credit hours that must be taken at the University of Manitoba: by taking at least 48 credit hours at the University of Manitoba; or by taking at least the final 30 credit hours at the University of Manitoba. The courses used to satisfy the residence requirement must be acceptable for credit in the Faculty of Science. Residency requirements apply to both first and second degree students.

## B.Sc. (Major) Degree Academic Regulations

Faculty of Science Direct Entry students are admitted to a 4-Year undeclared Major program. While in the undeclared Major, students will take courses to allow them to declare a specific Major or enter an Honours program. To declare a specific Major or enter an Honours program students will need to satisfy the entry requirements as outlined in each program in the Faculty of Science.

Following the completion of 24-30 credit hours students will declare their Major program, or enter the Honours program, or they may choose to enter the 3-Year General degree. Students who do not qualify for a specific Major or Honours program will be required to move into the 3-Year General degree. Students who wish to be in a Major or Honours program but did not qualify can complete the outstanding requirements

while in the General degree program and enter the program upon completion of the requirements.

Students must complete the university written English and Mathematics requirements as described in the General Academic Regulations (p. 118).

### B.Sc. (Major) Four-Year Degree

The four-year Major programs provide in-depth study in a specific discipline and enable graduates to function competently in a career in their chosen subject area.

While this program is not intended for students pursuing graduate studies, most programs allow students to do so with a minimum of difficulty.

The four-year Major program may be pursued on a part-time basis, although it must be recognized that under those conditions students would require more than four years to complete degree requirements.

### B.Sc. (Major) Academic Regulations

To qualify for the degree Bachelor of Science (Major), a student must complete 120 credit hours or more, with minimum grades of "C" on Major Program Specific courses (as specified by the department), "D" or better on the remaining courses, and a minimum Degree Grade Point Average of 2.00.

Program Specific courses are those identified by the department as being core to the given degree. Please refer to the specific departments for clarification.

At least six credit hours **must** be taken from outside the Faculty of Science. Students admitted to a Major program must complete six credit hours of courses from the Faculty of Arts. Students in the Major degree programs may take a maximum of 36 credit hours from outside the Faculty of Science.

### B.Sc. (Major) Entrance Requirements

To enter a specific four-year Major program, a student must have completed a minimum of 24 credit hours, and must normally have achieved a minimum grade of "C+" in at least one introductory course designated by the department(s). One of the entry routes to the Physics & Astronomy Major program, has a more rigorous entry requirement than listed above; please see the calendar entry for more details.

Any student who, prior to being admitted to a four-year Major program that has completed more than 30 credit hours will be allowed to apply those excess credit hours which meet the specifications of the program to the four year Major program.

Students must attain a Degree Grade Point Average of at least 2.00 regardless of the point of entry, and must meet continuation requirements as outlined below.

### B.Sc. (Major) Continuation Requirements

To continue in the program, a student must maintain a Degree Grade Point Average of 2.00 at each point of assessment. Students who do not meet this minimum will be required to withdraw from the Major program.

There is no minimum term course load requirement for the Major program.

### Failed Courses

Any student that exceeds 18 credit hours of failing grades after entering a Major program will be required to withdraw from that program. **Students**

**are also subject to the academic assessment policy**, Regulations Applicable to all Programs. (p. 802)

A student will be required to repeat those failed courses specified as required courses for the program; however, a student may substitute a new course for any elective course failed.

Major students reverting to the General program must fulfil all academic requirements of that degree.

### B.Sc. (Major) Residence Requirement

To satisfy the Faculty of Science residency requirements, a student must successfully complete at least 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Faculty of Science. Residency requirements apply to both first and second degree students.

### B.Sc. Double Major Programs

Students may wish to pursue a Double-Major program in the Faculty of Science. Consultation with, in addition to specific course selection and approval from, the departments involved must occur prior to the commencement of any Double-Major program. Students must also consult with a Faculty of Science Academic Advisor prior to the start of any Double-Major program.

## B.Sc. and B.C.Sc. (Honours) Academic Regulations

The Honours programs in the Faculty of Science are study in specific disciplines and the most heavily concentrated programs offered in the faculty. These programs lead most directly to graduate study and are in most cases prescribed extensively by the departments. A student is required to pursue this degree full-time and may be required to achieve higher grade standards than in other degree programs. The programs are regarded as professional training.

Students graduating from the Honours program in Computer Science receive the degree designation Bachelor of Computer Science (Honours), also noted as B.C.Sc. (Honours).

A student electing an Honours program will normally begin Honours work in second year and must meet the entrance requirements set out below. Honours work will consist of three years of study in prescribed courses beyond the first year and will lead to the B.Sc. (Honours) or the B.C.Sc. (Honours).

Students must complete the university written English and Mathematics requirements as described in the General Academic Regulations (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/#Residence-Written-English>).

Students admitted to Honours programs must complete six credit hours from the Faculty of Arts. Because many Honours programs in the Faculty of Science do not have room for electives in Years 2, 3 and 4, these six credit hours, including the three credit hours of written English, should be completed in Year 1.

### Honours Entrance Requirements

To enter an Honours degree program, a student must have completed at least 24 credit hours, have a minimum DGPA of 3.00 (3.5 for entry to Psychology), and a grade of "B" or better in at least one course designated by the department(s). Please refer to each department for specific information on entrance requirements.

Another way to gain entry to the Faculty of Science Honours programs is through the **Second Year Entry Route**. If a student finds himself/herself

ineligible to enter a desired Honours program following the completion of 24 or more credit hours, eligibility to enter Honours via the second year entry route can be established by taking a minimum of 18 credit hours over consecutive Fall and Winter Terms with a minimum of 9 credit hours in each term. The 18 credit hours chosen must be applicable to the program the student wishes to enter, and the student must achieve at least a "B" average on those 18 credit hours. If a student chooses to attempt more than 18 credit hours over the consecutive Fall and Winter terms, the best applicable 18 credit hours will be used to calculate whether or not the "B" average has been achieved for the purpose of assessing eligibility for entrance to the Honours program of choice. Note: Students wishing to enter an Honours program using the Second Year Entry Route must also have an overall DGPA of at least 3.00 (a 3.5 for Psychology).

### Honours Continuation Requirements

To continue in an Honours degree a minimum Degree Grade Point Average of 3.00 (a minimum 3.5 is required for Psychology) is required at each point of assessment.

Students must complete a minimum of 9 credit hours in each Fall and Winter Term (or equivalent for students in the Co-operative option).

Students who do not meet the above minimum requirement will be required to withdraw from the Honours program and may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program.

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. **Students are also subject to the academic assessment policy, Regulations Applicable to all Programs (p. 802).**

### Honours Graduation Requirements

To qualify for the degree, Bachelor of Science (Honours), a student must complete a minimum of 120 credit hours or more with a minimum grade of C on all courses contributing to the credit hours that satisfy the program requirements. The Actuarial Mathematics, the Joint Honours in Statistics and Actuarial Mathematics, and the Joint Honours in Mathematics and Physics & Astronomy have more rigorous requirements; please refer to specific unit for more details.

Additionally, students must have a minimum degree grade point average of 3.00.

### Honours Residence Requirement

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Faculty of Science. Residency requirements apply to both first and second degree students.

### Withdrawal from Honours

Honours students reverting to an alternate degree program must fulfil all academic requirements of that degree.

### Double Honours Programs

Double Honours programs may be available as specified under departmental headings. Other programs may be arranged in consultation with the departments concerned.

## Minors: Academic Regulations for Science Students

Students in B.Sc. Major and Honours programs may, if they wish, declare and complete a Minor from any department or interdisciplinary program at the University of Manitoba which offers a listed Minor. In the Faculty of Science Minors are listed in the program lists for each department and interdisciplinary program. Other available Minor requirements can be found within the appropriate departmental/school/faculty program lists. Completion of a Minor in a B.Sc. Major or Honours program is entirely optional. Students may not, however, declare both their Major and Minor from the same department/interdisciplinary program. It should be noted that for Honours students any consideration of completing a Minor should be made early on, due to restricted opportunities in later years of their programs. Completion of a Minor may require that a student take more than the minimum number of credit hours required for graduation. If they wish, students may choose to complete and declare multiple Minors in the four year Major and Honours degree programs.

The Minor is not available to students in the B.Sc. General Degree program.

A Minor will normally consist of a minimum of 18 credit hours specified by the department(s) offering the Minor. Courses required in a student's specific Honours or Major degree program are acceptable for use in a chosen Minor, subject to the Faculty of Science regulation stating that students may not declare both their Major and Minor from the same department or interdisciplinary program.

Minors not offered by the Faculty of Science can be selected from the following list. For further information about courses required for the completion of a specific Minor, please refer to the section of the calendar that relates to the chosen area.

- Agronomy
- Animal Systems
- Crop Production
- Entomology
- Food Science
- Plant Biotechnology
- Soil Science
- Art History
- Anthropology
- Asian Studies
- Canadian Studies
- Catholic Studies
- Central and East European Studies
- Classics
- Greek
- Latin
- Economics
- English
- Film Studies
- Theatre
- French
- Spanish
- Italian
- German
- Russian
- Ukrainian



- Polish
- History
- Icelandic
- Labour Studies
- Linguistics
- Medieval and Early Modern Studies
- Indigenous Studies
- Indigenous Languages
- Judaic Studies
- Philosophy
- Political Studies
- Psychology
- Religion
- Sociology
- Ukrainian Canadian Heritage Studies
- Women's and Gender Studies
- Geography
- Earth Sciences
- Physical Geography
- Environmental Science
- Environmental Studies
- Health Sciences
- Health Studies
- Human Nutrition and Metabolism
- Family Social Sciences
- Management<sup>1</sup>
- Leadership for Business and Organizations<sup>2</sup>
- Music
- Recreation Studies

<sup>1</sup> **Faculty of Management/Asper School of Business:** For entry to the Minor, the prerequisite is a grade of "C" or better in the first 6 hours of Business courses. The Management Minor will consist of any 18 hours of credit in courses offered by the Asper School of Business. Enrolment in this program will be limited to 20 students annually. Students planning to enrol in this minor must consult a Faculty of Science Academic Advisor.

<sup>2</sup> Students planning to enroll in this minor must consult a Faculty of Science Academic Advisor.

## Dean's Honour List, Degree with Distinction, First Class Honours

### Dean's Honour List (All Programs)

Students who complete 12 credit hours or more, who achieve a Term Grade Point Average of 3.75 or higher will be placed on the Dean's Honour List. The Dean's Honour List will be calculated after each term.

### Degree with Distinction (4-Year Major Degree and 3-Year General Degree)

To obtain a Degree with Distinction a student must achieve a final minimum Degree Grade Point Average of 3.80. The term "Degree with Distinction" will appear on the student's parchment and the student's transcript of marks.

### First Class Honours (Honours Degree Only)

To graduate with First Class Honours the student must achieve a final minimum Degree Grade Point Average of 3.80. The term "First Class

Honours" will appear on the student's parchment and on the student's transcript of marks.

## Faculty of Science Academic Awards

Refer to the University's Award Database (<https://umanitoba.ca/financial-aid-and-awards/>) for information on awards available to Faculty of Science Students.

To be eligible for any award granted exclusively on the basis of academic performance, a student must be enrolled in 100% of a full program as defined by the department.

## Academic Advising

### Contact Information

**Science General Office:** 230 Machray Hall

**Telephone:** (204) 474 8256

**Toll-Free:** 1 800 432 1960, extension 8256

**Website:** [sci.umanitoba.ca](http://sci.umanitoba.ca) (<http://sci.umanitoba.ca>)

**Science Advisor Availability:** [sci.umanitoba.ca/students/undergraduate-students/academic-advisors](https://sci.umanitoba.ca/students/undergraduate-students/academic-advisors) (<https://sci.umanitoba.ca/students/undergraduate-students/academic-advisors/>)

### Student Responsibility

Students must ensure that they are selecting the correct courses that will enable them to satisfy their degree requirements. Specific degree requirements are listed in the program grids (p. 799) found in the departmental/program sections. Final completion of specific degree requirements is the student's responsibility. Academic Advisors are available to answer any questions regarding a student's academic progress.

**Aurora Student** will not check degree requirements. Students are responsible for knowing the requirements of their degree. Consult with a Science Academic Advisor for advice and assistance if uncertain about degree requirements.

**Aurora Student will not prevent a student from registering in two (or more) courses that are designated as not to be held for credit with one another.** It is the student's responsibility to ensure that they are not registered for courses that are ineligible to be held for credit with one another. Read the course descriptions carefully. If unsure about a course you have selected, check with a Science Academic Advisor prior to the revision deadline. No academic concessions will be granted in this regard.

Students cannot add or change a course classification through Aurora Student ([https://aurora.umanitoba.ca/banprod/twbkwbis.P\\_GenMenu/?name=homepage](https://aurora.umanitoba.ca/banprod/twbkwbis.P_GenMenu/?name=homepage)). Therefore, if an undergraduate student wishes to take a course as a Special Student in their degree, as an Auditor, or as a Challenge for Credit, they must add this course by contacting the Science General Office within the normal deadlines for such activity.

### General Degree Program

Students in the B.Sc. General program are not required to contact a Science Academic Advisor before registration; however, they are strongly advised to do so. A Science Academic Advisor can answer any questions about degree progress and entry to professional faculties that may affect registration.

Students reverting from a Major or Honours program to the B.Sc. General program must consult a Science Academic Advisor prior to registration, so that their university records may be changed.

Science Academic Advisors may check students' degree progress periodically. These checks are completed after registration. **Reminder: It is the student's responsibility to know and satisfy all degree requirements.**

### Honours, Major, and Co-operative Options

Honours students are required to register in a minimum of 9 credit hours during each Fall and Winter Term in which they are registered. Prior to declaring graduation, Honours, Major, and Co-op students are encouraged to have their programs checked by Science Academic Advisors on a regular basis.

**Students entering or changing a program must see a Science Academic Advisor so that eligibility can be checked and university records updated**

### Course Selection

#### Important Course Selection Information

The courses required to complete the specific Honours, Major, General and Minor programs in Science are listed in the program grids (p. 799) found within each department or program entry.

Not all courses included in the course description sections are currently offered. The course schedule for the current academic year is available through **Aurora Student**. Students should note that space in Honours and Major specific courses may be reserved for students in those programs.

All Honours and Major Degree Programs (4-year degrees) offered by the Faculty of Science satisfy the University "M" (Mathematics) requirement.

Students registered in the 3-Year General Degree programs are responsible for ensuring that they successfully complete a course that will satisfy the University's "M" (Mathematics) requirement.

Students in all programs are responsible for ensuring that they successfully complete a course that will satisfy the University's "W" (Written English) requirement. It is strongly recommended that this requirement be completed in Year 1.

For a complete listing of courses that satisfy the University's "W" and "M" requirements refer to the General Academic Regulations (p. 118).

In the Faculty of Science, unless otherwise noted, a minimum grade of "C" is required in any course listed as a prerequisite. See course descriptions.

Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program grids (p. 799). See course descriptions in Aurora Student ([https://aurora.umanitoba.ca/banprod/bwckctlg.p\\_disp\\_dyn\\_ctlg/](https://aurora.umanitoba.ca/banprod/bwckctlg.p_disp_dyn_ctlg/)) for information on course equivalencies; Université de Saint-Boniface courses are taught in French and end in odd numbers, eg: BIOL 1021.

**Note:** Course prerequisites may be waived with written consent of the department.

### Courses Offered in Other Faculties and Schools

All courses acceptable for credit in any degree program at the University of Manitoba are acceptable for credit in Science (excluding Pass/Fail courses) subject to overall degree requirements. All courses will be included on admission to the Faculty and will be applied toward the elective requirement in all degree programs offered in Science. For course descriptions, including any prerequisites and/or restrictions, please refer to the course descriptions found in each department.

Students are reminded that normally a maximum of 30 credit hours (General Degree) or 36 credit hours (Major Degree) from courses offered

by Faculties or Schools other than the Faculty of Science can contribute to degree requirements.

### Requirements for Dual Credit High School Students

Students admitted as dual credit high school students will be required to demonstrate their competencies in a course by challenging the university final exam.

Challenge exams will be scheduled by the relevant Department and may be invigilated either on the University of Manitoba campus or at the student's high school. The University of Manitoba faculty member who is responsible for the delivery of the course will determine the structure and duration of the exam.

High schools will be responsible for delivering the appropriate content to ensure students are prepared for the examinations. If they are willing to do so, a UM faculty member will work with each high school to ensure that high school instructors are provided with the course content equivalent to the content of the corresponding courses offered at the University of Manitoba. Such support includes supplying course outlines, textbook information, and where appropriate, sample midterms and final examinations. These arrangements must be approved by the Department Head within the unit that is responsible for these course offerings at the University of Manitoba.

Students admitted will be subject to the same regulations concerning voluntary withdrawals and appeal procedures as all other students admitted to the Faculty of Science. Limited access restrictions will apply to university courses from which students have voluntarily withdrawn while enrolled as a Dual Credit High School student.

In addition to the university requirements listed above, all dual credit high school courses must adhere to requirements outlined in the provincial dual credit policy. Contact the Faculty of Science Student Services office for information on available courses and for information regarding which high schools may offer dual credit for their students as an option.

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology

- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Resources for Students Interested in Science Related Professional Schools or Faculties

Program	University	Website	Phone Number
U of Manitoba Admissions Office	U of Manitoba Admissions Office	<a href="http://umanitoba.ca/student/admissions">http://umanitoba.ca/student/admissions</a> ( <a href="http://umanitoba.ca/student/admissions/">http://umanitoba.ca/student/admissions/</a> )	204.474.8808
Agriculture and Food Science	Manitoba	<a href="http://umanitoba.ca/faculties/afs">http://umanitoba.ca/faculties/afs</a> ( <a href="http://umanitoba.ca/faculties/afs/">http://umanitoba.ca/faculties/afs/</a> )	204.474.7525
Dental Hygiene	Manitoba	<a href="http://www.umanitoba.ca/faculties/dentalhygiene/index.html">http://www.umanitoba.ca/faculties/dentalhygiene/index.html</a> ( <a href="http://www.umanitoba.ca/faculties/dentalhygiene/">http://www.umanitoba.ca/faculties/dentalhygiene/</a> )	204.789.3683
Dentistry	Manitoba	<a href="http://umanitoba.ca/healthsciences/dentistry">http://umanitoba.ca/healthsciences/dentistry</a> ( <a href="http://umanitoba.ca/healthsciences/dentistry/">http://umanitoba.ca/healthsciences/dentistry/</a> )	204.789.3631
Education	Manitoba	<a href="http://umanitoba.ca/faculties/education">http://umanitoba.ca/faculties/education</a> ( <a href="http://umanitoba.ca/faculties/education/">http://umanitoba.ca/faculties/education/</a> )	204.474.9004
Engineering	Manitoba	<a href="http://umanitoba.ca/faculties/engineering">http://umanitoba.ca/faculties/engineering</a> ( <a href="http://umanitoba.ca/faculties/engineering/">http://umanitoba.ca/faculties/engineering/</a> )	204.474.9807

Environment	Manitoba	<a href="http://umanitoba.ca/faculties/environment">http://umanitoba.ca/faculties/environment</a> ( <a href="http://umanitoba.ca/faculties/environment/">http://umanitoba.ca/faculties/environment/</a> )	204.474.7252
Human Ecology	Manitoba	<a href="http://umanitoba.ca/faculties/human_ecology">http://umanitoba.ca/faculties/human_ecology</a> ( <a href="http://umanitoba.ca/faculties/human_ecology/">http://umanitoba.ca/faculties/human_ecology/</a> )	204.474.8508
Kinesiology	Manitoba	<a href="http://www.umanitoba.ca/faculties/kinrec">http://www.umanitoba.ca/faculties/kinrec</a> ( <a href="http://www.umanitoba.ca/faculties/kinrec/">http://www.umanitoba.ca/faculties/kinrec/</a> )	204.474.9747
Management	Manitoba	<a href="http://umanitoba.ca/management">http://umanitoba.ca/management</a> ( <a href="http://umanitoba.ca/management/">http://umanitoba.ca/management/</a> )	204.474.9353
Medical Rehabilitation	Manitoba	<a href="http://umanitoba.ca/medrehab">http://umanitoba.ca/medrehab</a> ( <a href="http://umanitoba.ca/medrehab/">http://umanitoba.ca/medrehab/</a> )	204.789.3897
Medicine	Manitoba	<a href="http://umanitoba.ca/medicine">http://umanitoba.ca/medicine</a> ( <a href="http://umanitoba.ca/medicine/">http://umanitoba.ca/medicine/</a> )	204.789.3557
Nursing	Manitoba	<a href="http://umanitoba.ca/nursing">http://umanitoba.ca/nursing</a> ( <a href="http://umanitoba.ca/nursing/">http://umanitoba.ca/nursing/</a> )	204.474.7452
Pharmacy	Manitoba	<a href="http://umanitoba.ca/pharmacy">http://umanitoba.ca/pharmacy</a> ( <a href="http://umanitoba.ca/pharmacy/">http://umanitoba.ca/pharmacy/</a> )	204.474.9306

Graduate Studies	Manitoba	<a href="http://umanitoba.ca/graduate_studies">http://umanitoba.ca/graduate_studies</a> ( <a href="http://umanitoba.ca/graduate_studies/">http://umanitoba.ca/graduate_studies/</a> )	204.474.9377
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### Related Programs not Offered at the U of Manitoba

Program	University	Website	Phone Number
Optometry	Waterloo	<a href="http://optometry.uwaterloo.ca/">http://optometry.uwaterloo.ca/</a>	519.888.4567
Veterinary Medicine	Saskatchewan	<a href="http://www.usask.ca/wcvm">http://www.usask.ca/wcvm</a> ( <a href="http://www.usask.ca/wcvm/">http://www.usask.ca/wcvm/</a> )	306.966.7447
Meteorology		<a href="https://collaboration.cmc.ec.gc.ca/science/rpn.comm/html/en/index.php">https://collaboration.cmc.ec.gc.ca/science/rpn.comm/html/en/index.php</a> ( <a href="https://collaboration.cmc.ec.gc.ca/science/rpn.comm/html/en/#">https://collaboration.cmc.ec.gc.ca/science/rpn.comm/html/en/#</a> )	

## Actuarial Mathematics

**Campus Address/General Office:** 640 Drake Centre

**Telephone:** 204 474 6412

**Email Address:** warrencentre@umanitoba.ca

**Website:** [www.umanitoba.ca/actuarial](http://www.umanitoba.ca/actuarial) (<http://umanitoba.ca/actuarial/>)

## Actuarial Mathematics

This is an interdisciplinary program leading to a Bachelor of Science (Honours) degree in Actuarial Mathematics offered in collaboration with the Warren Centre for Actuarial Studies and Research of the I.H. Asper School of Business. The program covers mathematical, statistical, financial and economic concepts required to develop skills in the modelling and management of financial risk and contingent events. In the Faculty of Science the program has a greater emphasis on the mathematical and statistical courses than does the Actuarial Mathematics program offered by the I.H. Asper School of Business.

The Warren Centre, with the department of Statistics, offers a joint Honours program, please refer to Statistics-Actuarial Mathematics Joint Honours (p. 940).

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Actuarial Mathematics, B.Sc. Honours (p. 813)	4	120	
Statistics - Actuarial Mathematics Joint, B.Sc. Honours (p. 940)			

# Actuarial Mathematics, B.Sc. Honours

## Actuarial Mathematics Honours Entrance, Continuation, and Graduation Requirements

To **enter** the program, a student must have completed a minimum of 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in one of the courses listed in Year 1 of the program grid. All of the courses listed in Year 1 of the program grid are program requirements and students are strongly urged to take them in the first year.

To **continue** in the Actuarial Mathematics Honours program, students must maintain a minimum DGPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term.

To **graduate** with the B.Sc. Honours degree, a student must achieve a minimum DGPA of 3.00, a minimum grade of "C+" in each of the Honours Program Specific courses below, and a minimum grade of "C" on all remaining courses that contribute to the 120 credit hours of the degree.

## Honours Program Specific Courses

Students must achieve a minimum grade of "C+" in each of the following for both prerequisite purposes and graduation requirements.

Course	Title	Hours
ACT 2020	Economic and Financial Applications	3
ACT 2120	Interest Theory	3
ACT 2210	Introduction to Risk Management	3
ACT 3130	Actuarial Models 1	3
ACT 3230	Actuarial Models 2	3
ACT 3340	Financial Derivatives for Actuarial Practice	3
One of:		6
ACT 3130 & ACT 3230	Actuarial Models 1 and Actuarial Models 2	
ACT 4010	Regression Modeling in Actuarial Science	3
ACT 4020	Short Term Actuarial Mathematics I	3
ACT 4030	Short Term Actuarial Mathematics II	3
ACT 4060	Actuarial Aspects of Investment Practice	3
ACT 4160	Introduction to Property and Casualty Insurance Industry	3

## Degree Requirements

### Honours

Course	Title	Hours
<b>Year 1</b>		
For entry to this program a student requires a minimum grade of "B" in one of the courses below (excluding elective credits).		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus 1	3
MATH 1232	Integral Calculus 1	3

MATH 1240	Elementary Discrete Mathematics	3
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
STAT 2150	Statistics and Computing	3
6 credit hours of electives		6

**Hours 30**

<b>Year 2</b>		
ACT 2020	Economic and Financial Applications	3
ACT 2120	Interest Theory	3
ACT 2210	Introduction to Risk Management	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
ACC 1100	Introductory Financial Accounting <sup>2</sup>	3
FIN 2200	Corporate Finance <sup>2</sup>	3
MATH 2720	Multivariable Calculus	3
GMGT 2010	Business Communications <sup>3</sup>	3
3 credit hours of electives		3

**Hours 30**

<b>Year 3</b>		
One of:		6
ACT 3130 & ACT 3230	Actuarial Models 1 and Actuarial Models 2	
ACT 3630	Course no longer offered	
ACT 3340	Financial Derivatives for Actuarial Practice	3
ACT 4020	Short Term Actuarial Mathematics I <sup>4</sup>	3
ACT 4030	Short Term Actuarial Mathematics II <sup>4</sup>	3
STAT 3030	Introduction to Stochastic Processes	3
STAT 3100	Introduction to Statistical Inference	3
9 credit hours of electives <sup>5</sup>		9

**Hours 30**

<b>Year 4</b>		
ACT 4010	Regression Modeling in Actuarial Science	3
ACT 4060	Actuarial Aspects of Investment Practice	3
ACT 4160	Introduction to Property and Casualty Insurance Industry	3
STAT 3450	Linear Models <sup>4</sup>	3
STAT 3490	Time Series Analysis <sup>4</sup>	3
MSCI 2150	Introduction to Management Sciences	3
12 credit hours of electives <sup>5</sup>		12

**Hours 30**

**Total Hours 120**

<sup>1</sup> The following substitutions are allowed:

- MATH 1300 (C) or MATH 1310 in place of MATH 1220 (C),
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230 (C),
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232 (C),
- STAT 1000 (C) and STAT 2000 (B) in place of STAT 1150.

<sup>2</sup> Students are strongly urged to complete ACC 1100 in Year 1 when possible. FIN 2200 may be taken in Year 2, 3 or 4; however, it is strongly recommended that it be completed in Year 2. Note that ACC 1100 is a prerequisite for FIN 2200.

<sup>3</sup> GMGT 2010 fulfills the written English requirement.

<sup>4</sup> STAT 3450, STAT 3490, ACT 4020 and ACT 4030 may be taken in Year 3 or 4.

<sup>5</sup> It is recommended that electives in Year 3 and Year 4 be chosen from Actuarial Mathematics, Business courses, Computer Science, Economics, Mathematics (3000 or 4000 level) and Statistics (4000 level courses). Other electives may be selected through consultation with the program director. Examples include:

- *Year 3:* FIN 3410, FIN 3450, FIN 3480, MSCI 3400, STAT 3150, STAT 3550, STAT 3690
- *Year 4:* FIN 4240, STAT 4100, STAT 4150, STAT 4250, STAT 4630.

## Biochemistry

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## Biochemistry

The Biochemistry programs are jointly offered by the Departments of Chemistry and Microbiology.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biochemistry, B.Sc. Honours (p. 814)	4	120	Yes
Biochemistry, B.Sc. Major (p. 818)	4	120	Yes

## Biochemistry, B.Sc. Honours

### Biochemistry Honours Entrance, Continuation, and Graduation Requirements

To enter the Joint Honours program in Biochemistry, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00 and also obtained a minimum grade of "B" in CHEM 1110 and a minimum grade of "C+" in CHEM 1120 and BIOL 1020. CHEM 1100, BIOL 1030, PHYS 1050 (or PHYS 1020), MATH 1500, STAT 1150 (or STAT 1000), and 6 credit hours from the Faculty of Arts, including a course that satisfies the "W" requirement are required courses in the program and students are strongly encouraged to complete them in first year.

To continue in the Biochemistry Joint Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the Biochemistry Joint Honours degree, a student must achieve a minimum DGPA of 3.00 and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

### Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 817) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Students are required to complete the first and second year requirements of the program and MBIO 3410 before beginning their first co-op work term.

## Degree Requirements

### Honours

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (B)	3
CHEM 1120	Introduction to Chemistry Techniques (C+)	3
BIOL 1020	Biology 1: Principles and Themes (C+)	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
PHYS 1050 or PHYS 1020	Physics 1: Mechanics or General Physics 1	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>24</b>

### Years 1-2

In Year 1 or Year 2 the following must be completed:		
6 credit hours from the Faculty of Arts including the University Written English "W" requirement <sup>3</sup>		6
<b>Hours</b>		<b>6</b>

### Year 2

CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2520	Introduction to Analytical Chemistry Techniques	2

CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
MBIO 1010	Microbiology I <sup>4</sup>	3
MBIO 2020	Microbiology II	3
<b>Hours</b>		<b>29</b>

**Year 3**

BIOL 2520	Cell Biology	3
CHEM 3700	Biophysical Chemistry	3
CHEM 3760	Advanced Methods for the Biochemistry Laboratory	4
MBIO 3410	Molecular Biology	3
<b>Hours</b>		<b>13</b>

**Years 3-4**

9 credit hours from: 9

MBIO 3450	Regulation of Biochemical Processes	
MBIO 3460	Membrane and Cellular Biochemistry	
CHEM 4360	Signalling and Regulation of Gene Expression	
CHEM 4620	Biochemistry of Nucleic Acids	
MBIO 4540	Biological Energy Transduction	
MBIO 4612	Molecular Genetics of Eukaryotes - Lectures	

18 credit hours from the list of Chemistry and Microbiology optional courses listed below. Of these 18 credit hours, at least 6 hours must be 4000 level courses.

12 credit hours selected from the Faculty of Science <sup>5</sup> 12

<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
CHEM 4630	Biochemistry of Proteins	3
CHEM 4710 or MBIO 4530	Research Project in Chemistry or Biochemistry or Project in Microbiology	6
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> CHEM 1126 may be used in lieu of CHEM 1120.<sup>2</sup> MATH 1230 or MATH 1510 or MATH 1520 or MATH 1690 may be taken in place of MATH 1500.<sup>3</sup> As there are no electives in Year 2 of the program, students should complete the university written English requirement in Year 1. If not completed in Year 1, a "W" course must be completed prior to Year 3 in addition to the required Year 2 courses.<sup>4</sup> MBIO 1010 can be taken in Year 1 after BIOL 1020.<sup>5</sup> MATH 1010, MATH 1020, the former MATH 1190, the former COMP 1260, the former COMP 1270, COMP 1500 and COMP 1600 may not be chosen to satisfy this requirement.

(Letters in brackets indicate minimum prerequisite standing for further study.)

**Honours Co-operative Option**Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (B)	3
CHEM 1120	Introduction to Chemistry Techniques (C+) <sup>2</sup>	3
BIOL 1020	Biology 1: Principles and Themes (C+)	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
PHYS 1050 or PHYS 1020	Physics 1: Mechanics or General Physics 1	3
MATH 1500	Introduction to Calculus <sup>3</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>24</b>

**Years 1-2**

In Year 1 or Year 2 the following must be completed:

6 credit hours from the Faculty of Arts including the University Written English "W" requirement <sup>4</sup>	6
<b>Hours</b>	<b>6</b>

**Year 2**

CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2520	Introduction to Analytical Chemistry Techniques	2
CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
MBIO 1010	Microbiology I <sup>5</sup>	3
MBIO 2020	Microbiology II	3
<b>Hours</b>		<b>29</b>

**Year 3**

BIOL 2520	Cell Biology	3
CHEM 3700	Biophysical Chemistry	3
CHEM 3760	Advanced Methods for the Biochemistry Laboratory	4
MBIO 3410	Molecular Biology	3
<b>Hours</b>		<b>13</b>

**Years 3-4**

9 credit hours from:	9
MBIO 3450	Regulation of Biochemical Processes
MBIO 3460	Membrane and Cellular Biochemistry



CHEM 4360	Signalling and Regulation of Gene Expression	
CHEM 4620	Biochemistry of Nucleic Acids	
MBIO 4540	Biological Energy Transduction	
MBIO 4612	Molecular Genetics of Eukaryotes - Lectures	
24 credit hours selected from the list of Chemistry and Microbiology optional courses listed below. Of these 24 credit hours, at least 12 hours must be 4000 level courses.		24
12 credit hours selected from the Faculty of Science <sup>6</sup>		12
<b>Co-op Requirements:</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>45</b>
<b>Year 4</b>		
CHEM 4630	Biochemistry of Proteins	3
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students in the co-operative program must ensure that they are able to satisfy the prerequisites for all 3000 and 4000 level courses they plan to take.

<sup>2</sup> CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> MATH 1230 or MATH 1510 or MATH 1520 or MATH 1690 may be taken in place of MATH 1500.

<sup>4</sup> As there are no electives in Year 2 of the program, students should complete the university written English requirement in Year 1. If not completed in Year 1, a "W" course must be completed prior to Year 3 in addition to the required Year 2 courses.

<sup>5</sup> MBIO 1010 can be taken in Year 1 after BIOL 1020.

<sup>6</sup> MATH 1010, MATH 1020, the former MATH 1190, the former COMP 1260, the former COMP 1270, COMP 1500 and COMP 1600 may not be chosen to satisfy this requirement.

(Letters in brackets indicate minimum prerequisite standing for further study.)

### Chemistry and Microbiology Optional Courses for Biochemistry Honours Students

Course	Title	Hours
<b>Chemistry</b>		
CHEM 2300	Inorganic Chemistry 1: Structure and Applications	3
CHEM 2600	Physical Chemistry 1	3
CHEM 3100	Organic Chemistry 3: Advanced Organic Synthesis	3
CHEM 3120	Advanced Organic Chemistry Laboratory Techniques	2
CHEM 3300	Inorganic Chemistry 2: Reactivity and Properties	3
CHEM 3320	Inorganic Chemistry Laboratory	2
CHEM 3500	Instrumental Analysis	3
CHEM 3520	Instrumental Analysis Laboratory	2
CHEM 3600	Physical Chemistry 2	3
CHEM 3620	Physical Chemistry Laboratory	2
CHEM 3820	Integrated Chemistry Laboratory 1	2

CHEM 3840	Integrated Chemistry Laboratory 2	3
CHEM 4100	Materials Chemistry	3
CHEM 4110	Introduction to Computational Chemistry	3
CHEM 4130	Elementary Quantum Chemistry and Molecular Bonding	3
CHEM 4150	Symmetry, Spectroscopy, and Structure	3
CHEM 4170	Introduction to Polymer Chemistry	3
CHEM 4360	Signalling and Regulation of Gene Expression	3
CHEM 4370	Glycobiology and Protein Activation	3
CHEM 4570	Topics in Inorganic Chemistry	3
CHEM 4580	Topics in Organic Chemistry	3
CHEM 4590	Bioanalytical Methods	3
CHEM 4610	Advanced Chemical Techniques	6
CHEM 4620	Biochemistry of Nucleic Acids	3
CHEM 4670	Drug Design and Drug Discovery	3
CHEM 4680	Organometallic Chemistry	3
CHEM 4800	Topics in Physical/Theoretical Chemistry	3
CHEM 4802	Topics in Analytical Chemistry	3
CHEM 4804	Topics in Biochemistry	3

### Microbiology

MBIO 3000	Applied Biological Safety	3
MBIO 3010	Mechanisms of Microbial Disease	3
MBIO 3032	Microbiology III: Physiology and Metabolism	3
MBIO 3282	Microbial Communities	3
MBIO 3430	Molecular Evolution	3
MBIO 3450	Regulation of Biochemical Processes	3
MBIO 3460	Membrane and Cellular Biochemistry	3
MBIO 3472	Microbial Systematics	3
MBIO 3600	Molecular Microbiology Techniques	3
MBIO 3700	Experimental Microbiology Laboratory	3
MBIO 4020	Immunology	3
MBIO 4030	Special Topics in Microbiology	3
MBIO 4032	Special Topics in Microbiology	3
MBIO 4410	Virology	3
MBIO 4440	Course no longer offered	
MBIO 4480	Microbes in our Environment	3
MBIO 4520	Industrial Bioprocesses	3
MBIO 4540	Biological Energy Transduction	3
MBIO 4602	Molecular Genetics of Prokaryotes - Lectures	3
MBIO 4612	Molecular Genetics of Eukaryotes - Lectures	3
MBIO 4672	Applied Molecular Biology	3

Optional courses no longer offered that may be used if taken prior to their deletion: CHEM 2260, CHEM 2290, CHEM 2400, CHEM 2470, CHEM 3260, CHEM 3360, CHEM 3370, CHEM 3380, CHEM 3390, CHEM 3400, CHEM 3490, CHEM 3580, CHEM 3590, CHEM 4600, CHEM 4640, CHEM 4650, CHEM 4690, MBIO 2280, MBIO 3030, MBIO 3280, MBIO 3440, MBIO 3470, MBIO 3480, MBIO 4010, MBIO 4320, MBIO 4470, MBIO 4510, MBIO 4570, MBIO 4580, MBIO 4600, MBIO 4610, and MBIO 4670. **Note:** Several of these courses may not be held with current course offerings found on the above optional course lists. Please refer to the course descriptions for more information about specific course restrictions.

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point

Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

#### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

#### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work

term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Biochemistry, B.Sc. Major

### Biochemistry Major Entrance, Continuation, and Graduation Requirements

**To enter** the joint four year Major program, a student must have completed a minimum of 24 credit hours with a minimum DGPA of 2.00, and also obtained a minimum grade of "C+" in CHEM 1110, and a minimum grade of "C" in CHEM 1120 and BIOL 1020. CHEM 1100, BIOL 1030, PHYS 1050 (or PHYS 1020), MATH 1500, STAT 1150 (or STAT 1000), and 6 credit hours from the Faculty of Arts, including a course that satisfies the "W" requirement are required courses in the program and students are strongly encouraged to complete these courses in first year.

**To continue** in the Bachelor of Science Major degree program, students must maintain a minimum DGPA of 2.00.

**To graduate** with the Bachelor of Science Major in Biochemistry, a student must complete 120 credit hours or more, with minimum grades of "C" on all Major Program Specific courses (see below), passing grades ("D" or better) on the remaining courses, and a minimum DGPA of 2.00.

### Major Program Specific Courses

#### Chemistry

Course	Title	Hours
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2510	Introduction to Analytical Chemistry	3

CHEM 2520	Introduction to Analytical Chemistry Techniques	2
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
CHEM 3700	Biophysical Chemistry	3
CHEM 3760	Advanced Methods for the Biochemistry Laboratory	4
CHEM 4360 or CHEM 4620	Signalling and Regulation of Gene Expression Biochemistry of Nucleic Acids	3
CHEM 4630	Biochemistry of Proteins	3

### MICROBIOLOGY

Course	Title	Hours
MBIO 1010	Microbiology I	3
MBIO 2020	Microbiology II	3
MBIO 3410	Molecular Biology	3
One of the following:		3
BIOL 2520	Cell Biology	
MBIO 3450	Regulation of Biochemical Processes	
MBIO 3460	Membrane and Cellular Biochemistry	
MBIO 4540	Biological Energy Transduction	
MBIO 4612	Molecular Genetics of Eukaryotes - Lectures	

Students in this program should note the following:

Students must satisfy any course prerequisites and co-requisites for courses selected. Care should be taken to select courses in their proper sequence, e.g. CHEM 2710 (MBIO 2710) and MBIO 2020 should be taken in Year 2 as they are prerequisite to a number of subsequent required or optional courses.

Normally 4000 level courses are available only to students in their fourth year. MBIO 4530 and MBIO 4670 are not available to Major students.

Students are encouraged to elect other courses pertinent to the study of biochemistry although this is not required for completion of the degree. The departments of Microbiology and Chemistry will be glad to suggest such supplementary courses upon request.

Students who may wish to transfer to the Honours program in Biochemistry following Year 2 should be sure to complete all courses recommended in Year 2 (see program chart (p. 814)).

## Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 820) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Students are encouraged, but not required, to take 15 credit hours in each academic term in the third and subsequent years. Students are required

to complete the first and second year requirements of the program and MBIO 3410 before beginning their first co-op work term.

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected)<sup>1,2</sup>

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques (C) <sup>3</sup>	3
BIOL 1020	Biology 1: Principles and Themes (C)	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
PHYS 1050 or PHYS 1020	Physics 1: Mechanics or General Physics 1	3
MATH 1500	Introduction to Calculus <sup>4</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>24</b>

#### Years 1-2

In Year 1 or Year 2 the following must be completed:		
6 credit hours from the Faculty of Arts including the University Written English "W" requirement <sup>5</sup>		6
<b>Hours</b>		<b>6</b>

#### Year 2

CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2520	Introduction to Analytical Chemistry Techniques	2
CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
MBIO 1010	Microbiology I <sup>6</sup>	3
MBIO 2020	Microbiology II	3
<b>Hours</b>		<b>29</b>

#### Year 3

CHEM 3700	Biophysical Chemistry	3
CHEM 3760	Advanced Methods for the Biochemistry Laboratory	4
MBIO 3410	Molecular Biology	3
<b>Hours</b>		<b>10</b>

#### Years 3-4

One of:		
BIOL 2520	Cell Biology	3

MBIO 3450	Regulation of Biochemical Processes	
MBIO 3460	Membrane and Cellular Biochemistry	
MBIO 4540	Biological Energy Transduction	
MBIO 4612	Molecular Genetics of Eukaryotes - Lectures	
CHEM 4360 or CHEM 4620	Signalling and Regulation of Gene Expression or Biochemistry of Nucleic Acids	3
21 credit hours of Chemistry and Microbiology (minimum of 6 credit hours from each department). Of these 21 credit hours, at least 12 hours must be 4000 level courses.		21
21 credit hours of electives <sup>7</sup>		21
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>48</b>
<b>Year 4</b>		
CHEM 4630	Biochemistry of Proteins	3
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> IMPORTANT: Students in the co-operative program must ensure that they are able to satisfy the prerequisites for all 3000 and 4000 level courses they plan to take.

<sup>2</sup> The four year Major program need not be completed in the manner prescribed above. This indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

<sup>3</sup> CHEM 1126 may be used in lieu of CHEM 1120.

<sup>4</sup> MATH 1230 or MATH 1510 or MATH 1520 or MATH 1690 may be taken in place of MATH 1500.

<sup>5</sup> As there are no electives in Year 2 of the program, students should complete the university written English requirement in Year 1. If not completed in Year 1, a "W" course must be completed prior to Year 3 in addition to the required Year 2 courses.

<sup>6</sup> MBIO 1010 can be taken in Year 1 after BIOL 1020.

<sup>7</sup> MATH 1010, MATH 1020, the former MATH 1190, the former COMP 1260, the former COMP 1270, COMP 1500 and COMP 1600 may not be chosen to satisfy this requirement.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Biological Sciences

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## Biological Sciences

Biology is one of the most rapidly evolving and diverse sciences in the modern world, exploring all aspects of life from biomolecules to ecosystems. The Department of Biological Sciences is committed to advancing our understanding of biological structure and function, and developing new tools and technologies to address current and emerging problems facing all living organisms. Connections will be forged between molecules, cells, tissues, organs, organisms, populations, communities, and ecosystems, highlighting the need to explore all levels of biological interactions. Programs emphasize the organism as the key element in studies of the development and evolution of form and function, and the role in adaptations to the environment. Based on a core of fundamental biological principles, our programs explore diverse areas such as organismal biology, environmental biology, genetics, cell biology and development, physiology, ecology, behaviour, and systematics and evolution. The Department focuses on the integration of research and teaching expertise to create opportunities for growth and novel synergisms in the training of future leaders in the field.

### Biological Sciences Theme Areas

#### Cell, Molecular and Developmental Biology

Students in the Department of Biological Sciences with an interest in the exciting field of cell and developmental biology can select the Cell, Molecular, and Developmental Biology theme for focus. This theme will provide students a selection of courses that highlight fundamental principles and many important advances in this rapidly growing area of contemporary biology. Students can concentrate on aspects that deal with the molecular structures and processes of cellular life and their roles in the function, reproduction, and development of living organisms. The theme is structured such that students can choose from a broad range of disciplines, including biochemistry, molecular biology, morphology, genetics, cell biology, and developmental biology. The organisms under study in this theme are equally diverse, ranging from microbes through to invertebrates, vertebrates, plants, and fungi. The Department collaborates with many other life sciences departments and this theme allows student to develop a highly flexible course portfolio that includes courses from the Departments of Biological Sciences, Chemistry, Microbiology, or Plant Science.

#### Specific courses required for the Cell, Molecular, and Developmental Biology Theme in addition to the core course requirements:

Course	Title	Hours
BIOL 3542	Developmental Biology	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
9 credit hours of Biochemistry - select A or B: <sup>1</sup>		9
A:		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	

CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways <sup>2</sup>
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory
B:	
CHEM/MBIO 2730	Elements of Biochemistry 1
CHEM 2740	Introduction to the Biochemistry Laboratory
CHEM/MBIO 2750	Elements of Biochemistry 2

<sup>1</sup> Students are strongly recommended to complete the biochemistry requirements in their second year.

<sup>2</sup> The CHEM 2710 or MBIO 2710 prerequisite of CHEM 2100 can be used to fulfill the additional course from the list in the program grid.

### Ecology and Environmental Biology

Ecology is the study of interactions between organisms and their environment, both in natural settings and human-influenced habitats. In our society ecology and environmental biology provides a scientific link to the living world. Ecologists study the lives of many organisms including animals, plants, fungi, protists, and bacteria. Interactions among these organisms are investigated at many scales ranging from the microscopic to the global. At the individual level, ecology investigates the impact of environmental factors on organisms through their physiology and behaviour. Ultimately, ecologists link these factors to survival and reproduction in variable environments. At the population level, ecology examines the causes of fluctuations in numbers and changes in distribution of a single species. This work is often the focus of agencies concerned with exploitation, extinction, and rehabilitation of both commercially and esthetically important species. At the community and ecosystem level, ecology considers many coexisting species. It examines the interactions between species within the communities (competition, predation, parasitism, mutualism, etc.) as well as broader investigations of community structure and composition. Ultimately, the skills developed within this theme prepare students for future careers in academia, government agencies, private consulting companies, or NGOs whose mandates encompass ecological and environmental concerns.

#### Specific courses required for the Ecology and Environmental Biology Theme in addition to the core course requirements:

Course	Title	Hours
BIOL 3310	Foundations of Population Ecology	3
BIOL 3312	Community Ecology	3
BIOL 3314	Field Ecology	3
STAT 2150 or STAT 2000	Statistics and Computing Basic Statistical Analysis 2	3

### Environmental and Integrative Physiology

The Environmental and Integrative Physiology theme will be of interest to a wide array of students interested in pursuing employment opportunities in the Environmental, Consulting, Pharmaceutical, Healthcare, and Professional job markets. Based on the suggested courses and sub themes within this program students will be able to graduate with an all inclusive degree or specialize in particular disciplines ranging from molecular physiology to whole organism physiology and eco/environmental physiology, a subject area that is at the interface between ecology and physiology. Students will be exposed to modern research techniques in lab classes and will be taught by instructors and faculty

with active research programs within the Department of Biological Sciences.

#### Specific courses required for the Environmental and Integrative Physiology Theme in addition to the core course requirements:

Course	Title	Hours
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
9 credit hours of Biochemistry - select A or B:		9
A:		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	
B:		
CHEM/MBIO 2730	Elements of Biochemistry 1	
CHEM 2740	Introduction to the Biochemistry Laboratory	
CHEM/MBIO 2750	Elements of Biochemistry 2	
Plus two additional courses from the following:		6
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
BIOL 3400	Plant Physiology	
BIOL 3452	Environmental Plant Physiology	

### Evolution and Biodiversity

Evolution is broadly defined as “descent with modification” and is the process that generates the earth’s biodiversity. The theory of evolution provides a unifying framework for biology because all organisms are descended from a common ancestor. As a result, evolutionary principles permeate research and teaching throughout biology.

Evolutionary biology addresses two overarching questions:

1. What was the history of life?
2. What processes account for adaptation and diversification?

Systematics reconstructs the history of life by studying relationships among species, and involves comparisons of physical appearance, development, biochemistry, genetics, behaviour, ecology and biogeography. Evolutionary Genetics investigates how processes such as natural selection, mutation, and migration interact to cause evolutionary change within populations. Evolutionary history, genetics, and ecological context are required to fully understand the evolution of traits, for example body size, wing shape or leaf structure. Thus evolution integrates knowledge from a wide spectrum of sub-disciplines within biology.

Evolutionary biology has wide-ranging practical applications. Principles of evolution are required to understand: the evolution of pathogens such as HIV and avian influenza; domestication of wild species and consequences of genetic modifications; the identification of natural products; long-term responses to environmental change; and human biology. Courses from this theme will prepare students for academia, medicine, and government agencies or NGO’s that emphasize the cataloguing and conservation of biological diversity.



**Specific courses required for the Evolution and Biodiversity Theme in addition to the core course requirements:**

Course	Title	Hours
STAT 2150 or STAT 2000	Statistics and Computing Basic Statistical Analysis 2	3
One of the following Evolutionary Processes courses:		3
BIOL 3360	Animal Behaviour	
BIOL 4300	Evolution and Adaptation	
BIOL 4362	Behavioural Ecology and Cognitive Ethology	
BIOL 4510	Evolutionary Genetics	
One of the following Biodiversity courses:		3
BIOL 3200	Advanced Invertebrate Biology	
BIOL 3242	Vascular Flora of Manitoba	
BIOL 3250	Lichens and Bryophytes	
BIOL 3270	Introductory Parasitology	
BIOL 3340	Biology of Primitive Fungi and Allies	
BIOL 4212	Systematics and Biogeography of Fishes	
BIOL 4214	Biology of Amphibians and Reptiles	
BIOL 4216	Biology of Birds	
BIOL 4218	Biology of Mammals	

**Integrative Biology**

The Integrative Biology theme will be of interest to students planning to pursue careers in the various biology sub disciplines and who wish an undergraduate degree that is “interdisciplinary” within the life science departments that cuts across the traditional boundaries. This program will suit students who are interested in the “after degree” program in Education or who are intending to apply to a professional program (e.g. Medicine, Dentistry, Pharmacy, Medical Rehabilitation) and who would like a broad background in the Life Sciences. With the appropriate choice of Biological Science courses it would be possible to indicate the Integrative Biology theme along with a second theme from the department.

**Specific courses required for the Integrative Biology Theme in addition to the core course requirements:**

Course	Title	Hours
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
MBIO 1010	Microbiology I	3
6 credit hours from A or B:		6
A:		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	
B:		
CHEM/MBIO 2730	Elements of Biochemistry 1	
CHEM 2740	Introduction to the Biochemistry Laboratory	
CHEM/MBIO 2750	Elements of Biochemistry 2	
12 credit hours of second-year program courses including:		12
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2420	Human Physiology 2	
BIOL 2600	Introduction to Computational Biology	
One of the following:		3
BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
24 credit hours in Biological Sciences (3000/4000 level courses)		24
6 credit hours in Microbiology (3000/4000 level courses)		6

**Programs**

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biological Sciences, B.Sc. Honours (p. 824)	4	120	Yes
Biological Sciences, B.Sc. Major (p. 832)	4	120	Yes
Biological Sciences Minor (p. 840)		18	

## Biological Sciences, B.Sc. Honours

### Biological Sciences Honours Entrance, Continuation, and Graduation Requirements

The Honours program is designed for students planning a professional career in Biological Sciences at the graduate level. Such students are strongly advised to enter the Honours program at the beginning of second year.

Appropriate courses will be arranged in consultation with the Theme Advisor who may be contacted through the Biological Sciences Office (212 Biological Sciences Building). Students must select a specific theme area of study as part of their Biological Sciences program. See the information outlining the different theme areas (p. 822) offered by the Department of Biological Sciences.

**To enter** the Biological Sciences Honours program a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and obtained a minimum grade of “B” in BIOL 1030, CHEM 1100, CHEM 1110 (if required for theme), CHEM 1120, STAT 1150 or STAT 1000, and the 3 credit hours of specified Mathematics or Physics are program

requirements and students are strongly urged to complete these courses in first year.

**To continue** in the Biological Sciences Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** with the B.Sc. Honours degree, a student must achieve a minimum DGPA of 3.00, and obtain a minimum grade of “C” on the courses that make up the 120 credit hours of the degree.

## Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 830) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Before starting the first co-op work term, the following courses must be completed:

Course	Title	Hours
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques	3
STAT 1150	Introduction to Statistics and Computing	3
or STAT 1000	Basic Statistical Analysis 1	
3 credit hours of specified Mathematics or Physics		3
BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
BIOL 3100	Skills in Biological Sciences	3

In addition, students must complete 9-12 credit hours from program 9-12 courses as **outlined in the specific theme grids**.

## Degree Requirements

### Honours: Cell, Molecular and Developmental Biology Theme (Including Co-operative Option if Selected)

Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (B)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
STAT 1150	Introduction to Statistics and Computing <sup>3</sup>	3
or STAT 1000	or Basic Statistical Analysis 1	
<b>Hours</b>		<b>18</b>

### Years 1-2

In Year 1 or Year 2 the following must be completed:		
3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020	General Physics 1	
or PHYS 1050	or Physics 1: Mechanics	
6 credit hours from the Faculty of Arts, including a required “W” course		6
6 credit hours of electives		6
<b>Hours</b>		<b>15</b>

### Year 2

BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
Select A or B:		9
A: <sup>5</sup>		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	
B: <sup>5</sup>		
CHEM/MBIO 2730	Elements of Biochemistry 1	
CHEM/MBIO 2750	Elements of Biochemistry 2	
CHEM 2740	Introduction to the Biochemistry Laboratory	
BIOL 2200	The Invertebrates	3
or BIOL 2210	or The Chordates	
One of:		3
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2420	Human Physiology 2	
BIOL 2600	Introduction to Computational Biology	
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry <sup>5</sup>	
<b>Hours</b>		<b>27</b>

### Year 3

BIOL 3100	Skills in Biological Sciences	3
BIOL 3300	Evolutionary Biology	3
BIOL 3542	Developmental Biology <sup>6</sup>	3
One of:		3

BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>12</b>
<b>Years 3-4</b>		
30 credit hours of 3000 or 4000 level Biology courses <sup>7</sup>		30
12 credit hours of electives		12
<b>Hours</b>		<b>42</b>
<b>Year 4</b>		
BIOL 4100	Honours Thesis	6
<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that makes up the degree and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100, CHEM 1110, and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is recommended over STAT 1000.

<sup>4</sup>

- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1200 may be used in place of MATH 1240.

<sup>5</sup> Students are strongly recommended to complete their biochemistry requirements in their second year. The former courses CHEM 2360 (MBIO 2360) and CHEM 2370 (MBIO 2370) may be used in place of CHEM 2700 (MBIO 2700), CHEM 2710 (MBIO 2710), and CHEM 2720. The former courses CHEM 2770 (MBIO 2770) and CHEM 2780 (MBIO 2780) may be used in place of CHEM 2730 (MBIO 2730), CHEM 2740, and CHEM 2750 (MBIO 2750). If the choice of biochemistry courses includes the requirement of CHEM 2100, CHEM 2100 can be used as the additional course listed above. The former CHEM 2210 may be used in place of CHEM 2100.

<sup>6</sup> The former BIOL 2540 may be used in place of BIOL 3542.

<sup>7</sup> Courses from other departments or faculties may be acceptable for use towards the 30 credit hours of 3000/4000 level Biological Sciences courses required in the Honours program. Please consult with the department theme advisor for permission to use alternate courses.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Honours: Ecology and Environmental Biology Theme (Including Co-operative Option if Selected)

Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (B)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing <sup>3</sup> or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>15</b>
<b>Years 1-2</b>		
In Year 1 or Year 2 the following must be completed:		
3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	
6 credit hours from the Faculty of Arts, including a required "W" course		6
15 credit hours of electives		15
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
BIOL 2200 or BIOL 2210	The Invertebrates or The Chordates	3
One of:		3
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2600	Introduction to Computational Biology	
STAT 2150 or STAT 2000	Statistics and Computing <sup>3,4</sup> or Basic Statistical Analysis 2	3
<b>Hours</b>		<b>21</b>
<b>Year 3</b>		
BIOL 3100	Skills in Biological Sciences	3
BIOL 3300	Evolutionary Biology	3
BIOL 3310	Foundations of Population Ecology	3

BIOL 3312	Community Ecology	3
BIOL 3314	Field Ecology <sup>5</sup>	3
One of:		3
BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>18</b>
<b>Years 3-4</b>		
21 credit hours of 3000 or 4000 level Biology courses <sup>6</sup>		21
15 credit hours of electives		15
<b>Hours</b>		<b>36</b>
<b>Year 4</b>		
BIOL 4100	Honours Thesis	6
<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that makes up the degree and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is strongly recommended over STAT 1000; and STAT 2150 is strongly recommended over STAT 2000.

<sup>4</sup>

- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1200 may be used in place of MATH 1240.
- Note that STAT 2150 has a prerequisite which requires one of MATH 1230, MATH 1500, MATH 1510, or MATH 1690.

<sup>5</sup> With departmental approval, other Field Ecology courses may be used in place of BIOL 3314. A list of possible courses can be found on the Departmental Website.

<sup>6</sup> Courses from other departments or faculties may be acceptable for use towards the 21 credit hours of 3000/4000 level Biological Sciences courses required in the Honours program. Please consult with the department theme advisor for permission to use alternate courses.

## Honours: Environmental and Integrative Physiology Theme (Including Co-operative Option if Selected)

Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (B)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing <sup>3</sup> or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>18</b>
<b>Years 1-2</b>		
In Year 1 or Year 2 the following must be completed:		
3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	
6 credit hours from the Faculty of Arts, including a required "W" course		6
3-6 credit hours of electives <sup>5</sup>		3-6
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
BIOL 2200 or BIOL 2210	The Invertebrates or The Chordates	3
One of:		3
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2420	Human Physiology 2	
BIOL 2600	Introduction to Computational Biology	
Select A or B:		9
A: <sup>5</sup>		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	
B: <sup>5</sup>		

CHEM/MBIO 2730	Elements of Biochemistry 1	
CHEM/MBIO 2750	Elements of Biochemistry 2	
CHEM 2740	Introduction to the Biochemistry Laboratory	
<b>Hours</b>		<b>27</b>
<b>Year 3</b>		
BIOL 3100	Skills in Biological Sciences	3
BIOL 3300	Evolutionary Biology	3
Three of:		9
BIOL 3400	Plant Physiology	
BIOL 3452	Environmental Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>15</b>
<b>Years 3-4</b>		
24 credit hours of 3000 or 4000 level Biology courses <sup>6</sup>		24
15 credit hours of electives		15
<b>Hours</b>		<b>39</b>
<b>Year 4</b>		
BIOL 4100	Honours Thesis	6
<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that makes up the degree and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100, CHEM 1110, and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is recommended over STAT 1000.

- <sup>4</sup>
- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
  - MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
  - MATH 1200 may be used in place of MATH 1240.

<sup>5</sup> The former courses CHEM 2360 (MBIO 2360) and CHEM 2370 (MBIO 2370) may be used in place of CHEM 2700 (MBIO 2700), CHEM 2710 (MBIO 2710), and CHEM 2720. The former courses CHEM 2770 (MBIO 2770) and CHEM 2780 (MBIO 2780) may be used in place of CHEM 2730 (MBIO 2730), CHEM 2740, and CHEM 2750 (MBIO 2750). Number of credit hours of electives depends on the choice of Biochemistry courses and the inclusion of CHEM 2100 (or the former CHEM 2210).

<sup>6</sup> Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Honours program. Please consult with the department for permission to use alternate courses.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Honours: Evolution and Biodiversity Theme (Including Co-operative Option if Selected)

Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (B)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing <sup>3</sup> or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>15</b>
<b>Years 1-2</b>		
In Year 1 or Year 2 the following must be completed:		
3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	
6 credit hours from the Faculty of Arts, including a required "W" course		6
15 credit hours of electives		15
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
BIOL 2200 or BIOL 2210	The Invertebrates or The Chordates	3
One of:		3
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	

STAT 2150 or STAT 2000	Statistics and Computing <sup>3,4</sup> or Basic Statistical Analysis 2	3
<b>Hours</b>		<b>21</b>

**Year 3**

BIOL 3100	Skills in Biological Sciences	3
BIOL 3300	Evolutionary Biology	3
One of:		3
BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	

**Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>9</b>

**Years 3-4**

One of:		3
BIOL 3360	Animal Behaviour	
BIOL 4300	Evolution and Adaptation	
BIOL 4362	Behavioural Ecology and Cognitive Ethology	
BIOL 4510	Evolutionary Genetics	

One of:		3
BIOL 3200	Advanced Invertebrate Biology	
BIOL 3242	Vascular Flora of Manitoba	
BIOL 3250	Lichens and Bryophytes	
BIOL 3270	Introductory Parasitology	
BIOL 3340	Biology of Primitive Fungi and Allies	
BIOL 4212	Systematics and Biogeography of Fishes	
BIOL 4214	Biology of Amphibians and Reptiles	
BIOL 4216	Biology of Birds	
BIOL 4218	Biology of Mammals	

24 credit hours of 3000 or 4000 level Biology courses<sup>5</sup> 24

15 credit hours of electives 15

**Hours** **45****Year 4**

BIOL 4100	Honours Thesis	6
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**Co-op Requirements (if selected):**

SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0

**Hours** **6****Total Hours** **120**

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that make up the degree and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is strongly recommended over STAT 1000; and STAT 2150 is strongly recommended over STAT 2000.

<sup>4</sup>

- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1200 may be used in place of MATH 1240.

Note that STAT 2150 has a prerequisite of one of MATH 1230, MATH 1500, or MATH 1690.

<sup>5</sup> Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Honours Degree program. Please consult with the theme advisor for permission to use alternate courses.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Honours: Integrative Biology Theme (Including Co-operative Option if Selected)

### Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (B)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
MBIO 1010	Microbiology I	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing <sup>3</sup> or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>21</b>

**Years 1-2**

In Year 1 or Year 2 the following must be completed:

3 credit hours of Mathematics or Physics chosen from:	3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>
MATH 1500	Introduction to Calculus <sup>4</sup>
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics

6 credit hours from the Faculty of Arts, including a required "W" course

0-3 credit hours of electives<sup>5</sup> 0-3

**Hours** **12****Year 2**

BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
Three of:		9
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	

One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2420	Human Physiology 2	
BIOL 2600	Introduction to Computational Biology	
Select A or B:		6
A - two of: <sup>5</sup>		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	
B - two of: <sup>5</sup>		
CHEM/MBIO 2730	Elements of Biochemistry 1	
CHEM/MBIO 2750	Elements of Biochemistry 2	
CHEM 2740	Introduction to the Biochemistry Laboratory	
<b>Hours</b>		<b>27</b>
<b>Year 3</b>		
BIOL 3100	Skills in Biological Sciences	3
BIOL 3300	Evolutionary Biology	3
One of:		3
BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>9</b>
<b>Years 3-4</b>		
24 credit hours of 3000 or 4000 level Biological Sciences courses <sup>6</sup>		24
6 credit hours of 3000 or 4000 level Microbiology courses <sup>7</sup>		6
15 credit hours of electives		15
<b>Hours</b>		<b>45</b>
<b>Year 4</b>		
BIOL 4100	Honours Thesis	6
<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that makes up the degree and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisor.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100, CHEM 1110, and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is recommended over STAT 1000.

<sup>4</sup>

- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1200 may be used in place of MATH 1240.

<sup>5</sup> The former courses CHEM 2360 (MBIO 2360) and CHEM 2370 (MBIO 2370) may be used in place of CHEM 2700 (MBIO 2700), CHEM 2710 (MBIO 2710), and CHEM 2720. The former courses CHEM 2770 (MBIO 2770) and CHEM 2780 (MBIO 2780) may be used in place of CHEM 2730 (MBIO 2730), CHEM 2740, and CHEM 2750 (MBIO 2750). Number of credit hours of electives depends on the choice of Biochemistry courses and the inclusion of CHEM 2100 (or the former CHEM 2210).

<sup>6</sup> Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Honours Degree program. Please consult with the theme advisor for permission to use alternate courses.

<sup>7</sup> Many MBIO courses have specific biochemistry requirements. Students are advised to plan ahead to take all required courses. If a student takes more than 6 credit hours of biochemistry, they will count as electives.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics

- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major



Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Biological Sciences, B.Sc. Major

### Biological Sciences Major Entrance, Continuation, and Graduation Requirements

The four year Major program is also designed for students planning a professional career in the Biological Sciences, but who may not be considering graduate training. It will provide intensive training in all areas of Biology comparable to that of the Honours program, but has less demanding performance requirements. Additionally, students may complete the Major degree requirements on a part-time basis if they so choose. Students who so wish, and have appropriate standing and course selection, may transfer to the Honours program at any time up to the commencement of Year 4.

Appropriate courses will be arranged in consultation with the Theme Advisor who may be contacted through the Biological Sciences Office, 212 Biological Sciences Building. Students must select a specific theme area of study as part of their Biological Sciences program. See the information below outlining the different theme areas offered by the Department of Biological Sciences.

Course BIOL 4100 is not available to students in this program.

**To enter** the Biological Sciences four-year Major program a student must have completed a minimum of 24 credit hours with a minimum DGPA of 2.00, and obtained a minimum grade of "C+" in BIOL 1030, CHEM 1100, CHEM 1110 (if required for theme), CHEM 1120, STAT 1150 or STAT 1000, and the 3 credit hours of specified Mathematics or Physics are program requirements and students are strongly encouraged to complete these courses in first year.

**To continue** in the Bachelor of Science Major degree, a student must maintain a minimum DGPA of 2.00.

**To graduate** with the Bachelor of Science (Major) in Biological Sciences, a student must obtain a minimum DGPA of 2.00 and a minimum grade of "C" or better in all required courses and required option courses.

## Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 838) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Before starting the first co-op work term, the following prerequisite courses must be completed:

Course	Title	Hours
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing Basic Statistical Analysis 1	3
3 credit hours of specified Mathematics or Physics		3
BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
In addition, students must complete 9-12 credit hours from program courses as outlined in the specific theme grids.		9-12

## Degree Requirements

### Four Year Major: Cell, Molecular and Developmental Biology Theme (Including Co-operative Option)

Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (C+)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing <sup>3</sup> or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>18</b>

#### Years 1-2

In Year 1 or Year 2 the following must be completed:		
3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	
6 credit hours from the Faculty of Arts, including a required "W" course		6
6 credit hours of electives		6
<b>Hours</b>		<b>15</b>

#### Year 2

BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
Select A or B:		9
A: <sup>5</sup>		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	

CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	
B: <sup>5</sup>		
CHEM/MBIO 2730	Elements of Biochemistry 1	
CHEM/MBIO 2750	Elements of Biochemistry 2	
CHEM 2740	Introduction to the Biochemistry Laboratory	
BIOL 2200 or BIOL 2210	The Invertebrates or The Chordates	3
One of:		3
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2420	Human Physiology 2	
BIOL 2600	Introduction to Computational Biology	
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry <sup>5</sup>	
<b>Hours</b>		<b>27</b>

#### Year 3

<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>0</b>

#### Years 3-4

BIOL 3300	Evolutionary Biology	3
BIOL 3542	Developmental Biology <sup>6</sup>	3
One of:		3
BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
30 credit hours of 3000 or 4000 level Biology courses <sup>7</sup>		30
21 credit hours of electives		21
<b>Hours</b>		<b>60</b>

#### Year 4

<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that makes up the degree and are meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100, CHEM 1110, and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is recommended over STAT 1000.

<sup>4</sup>

- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1200 may be used in place of MATH 1240.

<sup>5</sup> Students are strongly recommended to complete their biochemistry requirements in their second year. The former courses CHEM 2360 (MBIO 2360) and CHEM 2370 (MBIO 2370) may be used in place of CHEM 2700 (MBIO 2700), CHEM 2710 (MBIO 2710), and CHEM 2720. The former courses CHEM 2770 (MBIO 2770) and CHEM 2780 (MBIO 2780) may be used in place of CHEM 2730 (MBIO 2730), CHEM 2740, and CHEM 2750 (MBIO 2750). If the choice of Biochemistry courses includes the requirement of CHEM 2100, CHEM 2100 can be used as the additional course listed above. The former CHEM 2210 may be used in place of CHEM 2100.

<sup>6</sup> The former BIOL 2540 may be used in place of BIOL 3542.

<sup>7</sup> Courses from other departments or faculties may be acceptable for use towards the 30 credit hours of 3000/4000 level Biological Sciences courses required in the Major Degree program. Please consult with the theme advisor for permission to use alternate courses.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Four Year Major: Ecology and Environmental Biology Theme (Including Co-operative Option)

Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (C+)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing <sup>3</sup> or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>15</b>

### Years 1-2

In Year 1 or Year 2 the following must be completed:

3 credit hours of Mathematics or Physics chosen from:		
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	3
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	3
MATH 1500	Introduction to Calculus <sup>4</sup>	3

PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	6
6 credit hours from the Faculty of Arts, including a required "W" course		6
15 credit hours of electives		15
<b>Hours</b>		<b>24</b>

### Year 2

BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
BIOL 2200 or BIOL 2210	The Invertebrates or The Chordates	3
One of:		3
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2600	Introduction to Computational Biology	
STAT 2150 or STAT 2000	Statistics and Computing <sup>3,4</sup> or Basic Statistical Analysis 2	3

**Hours** **21**

### Year 3

#### Co-op Requirements (if selected):

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0

**Hours** **0**

### Years 3-4

BIOL 3300	Evolutionary Biology	3
BIOL 3310	Foundations of Population Ecology	3
BIOL 3312	Community Ecology	3
BIOL 3314	Field Ecology <sup>5</sup>	3
One of:		3
BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
21 credit hours of 3000 or 4000 level Biology courses <sup>6</sup>		21
24 credit hours of electives		24

**Hours** **60**

### Year 4

#### Co-op Requirements (if selected):

SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0

**Hours** **0**

**Total Hours** **120**

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that makes up the degree and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is strongly recommended over STAT 1000; and STAT 2150 is strongly recommended over STAT 2000.

<sup>4</sup>

- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1200 may be used in place of MATH 1240.

Note that STAT 2150 has a prerequisite which requires one of MATH 1230, MATH 1500, MATH 1510, or MATH 1690.

<sup>5</sup> With departmental approval, other Field Ecology courses may be used in place of BIOL 3314. A list of possible courses can be found on the Departmental Website (<http://sci.umanitoba.ca/biological-sciences/>).

<sup>6</sup> Courses from other departments or faculties may be acceptable for use towards the 21 credit hours of 3000/4000 level Biological Sciences courses required in the Major Degree program. Please consult with the theme advisor for permission to use alternate courses.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Four Year Major: Environmental and Integrative Physiology Theme (Including Co-operative Option)

Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (C+)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing <sup>3</sup> or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>18</b>
<b>Years 1-2</b>		
In Year 1 or Year 2 the following must be completed:		
3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	

6 credit hours from the Faculty of Arts, including a required "W" course	6
3-6 credit hour of electives <sup>5</sup>	3-6

<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
BIOL 2200 or BIOL 2210	The Invertebrates or The Chordates	3
One of:		3
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2420	Human Physiology 2	
BIOL 2600	Introduction to Computational Biology	
Select A or B:		9
A: <sup>5</sup>		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	
B: <sup>5</sup>		
CHEM/MBIO 2730	Elements of Biochemistry 1	
CHEM/MBIO 2750	Elements of Biochemistry 2	
CHEM 2740	Introduction to the Biochemistry Laboratory	
<b>Hours</b>		<b>27</b>
<b>Year 3</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
BIOL 3300	Evolutionary Biology	3
Three of:		9
BIOL 3400	Plant Physiology	
BIOL 3452	Environmental Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
24 credit hours of 3000 or 4000 level Biology courses <sup>6</sup>		24
24 credit hours of electives		24
<b>Hours</b>		<b>60</b>

**Year 4**

<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that make up the degree and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.
- <sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100, CHEM 1110, and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.
- <sup>3</sup> STAT 1150 is recommended over STAT 1000.
- <sup>4</sup>
- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
  - MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
  - MATH 1200 may be used in place of MATH 1240.
- <sup>5</sup> The former courses CHEM 2360 (MBIO 2360) and CHEM 2370 (MBIO 2370) may be used in place of CHEM 2700 (MBIO 2700), CHEM 2710 (MBIO 2710), and CHEM 2720. The former courses CHEM 2770 (MBIO 2770) and CHEM 2780 (MBIO 2780) may be used in place of CHEM 2730 (MBIO 2730), CHEM 2740, and CHEM 2750 (MBIO 2750). Number of credit hours of electives depends on the choice of Biochemistry courses and the inclusion of CHEM 2100 (or the former CHEM 2210).
- <sup>6</sup> Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Major Degree program. Please consult with the theme advisor for permission to use alternate courses.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Four Year Major: Evolution and Biodiversity Theme (Including Co-operative Option)

Important Note<sup>1</sup>

<b>Course</b>	<b>Title</b>	<b>Hours</b>
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (C+)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
STAT 1150 or STAT 1000	Introduction to Statistics and Computing <sup>3</sup> or Basic Statistical Analysis 1	3
<b>Hours</b>		<b>15</b>

**Years 1-2**

In Year 1 or Year 2 the following must be completed:

3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	
6 credit hours from the Faculty of Arts, including a required "W" course		6
15 credit hours of electives		15
<b>Hours</b>		<b>24</b>

**Year 2**

BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
BIOL 2200 or BIOL 2210	The Invertebrates or The Chordates	3
One of:		3
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
STAT 2150 or STAT 2000	Statistics and Computing <sup>3,4</sup> or Basic Statistical Analysis 2	3
<b>Hours</b>		<b>21</b>

**Year 3**

<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>0</b>

**Years 3-4**

BIOL 3300	Evolutionary Biology	3
One of:		3
BIOL 3360	Animal Behaviour	
BIOL 4300	Evolution and Adaptation	
BIOL 4362	Behavioural Ecology and Cognitive Ethology	
BIOL 4510	Evolutionary Genetics	
One of:		3
BIOL 3200	Advanced Invertebrate Biology	
BIOL 3242	Vascular Flora of Manitoba	
BIOL 3250	Lichens and Bryophytes	
BIOL 3270	Introductory Parasitology	
BIOL 3340	Biology of Primitive Fungi and Allies	
BIOL 4212	Systematics and Biogeography of Fishes	
BIOL 4214	Biology of Amphibians and Reptiles	
BIOL 4216	Biology of Birds	

BIOL 4218	Biology of Mammals	
One of:		3
BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
24 credit hours of 3000 or 4000 level Biology courses <sup>5</sup>		24
24 credit hours of electives		24
<b>Hours</b>		<b>60</b>
<b>Year 4</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that make up the degree and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100 and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is recommended over STAT 1000; and STAT 2150 is strongly recommended over STAT 2000.

<sup>4</sup>

- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1200 may be used in place of MATH 1240.

Note that STAT 2150 has a prerequisite of one of MATH 1230, MATH 1500, MATH 1510, or MATH 1690.

<sup>5</sup> Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Major Degree program. Please consult with the theme advisor for permission to use alternate courses.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Four Year Major: Integrative Biology Theme (Including Co-operative Option)

Important Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (C+)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3

CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
MBIO 1010	Microbiology I	3
STAT 1150	Introduction to Statistics and Computing <sup>3</sup>	3
or STAT 1000	or Basic Statistical Analysis 1	
<b>Hours</b>		<b>21</b>

### Years 1-2

In Year 1 or Year 2 the following must be completed:

3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020	General Physics 1	
or PHYS 1050	or Physics 1: Mechanics	
6 credit hours from the Faculty of Arts, including a required "W" course		6
0-3 credit hours of electives <sup>5</sup>		0-3
<b>Hours</b>		<b>12</b>

### Year 2

BIOL 2300	Principles of Ecology	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
Three of:		9
BIOL 2200	The Invertebrates (theme course)	
BIOL 2210	The Chordates (theme course)	
BIOL 2240	The Non-Flowering Plants (theme course)	
BIOL 2242	The Flowering Plants (theme course)	

One additional course from:		3
BIOL 2200	The Invertebrates	
BIOL 2210	The Chordates	
BIOL 2240	The Non-Flowering Plants	
BIOL 2242	The Flowering Plants	
BIOL 2260	Biology of Fungi and Lichens	
BIOL 2262	Biology of Algae	
BIOL 2420	Human Physiology 2	
BIOL 2600	Introduction to Computational Biology	

Select A or B:		6
A - two of: <sup>5</sup>		
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	
B - two of: <sup>5</sup>		
CHEM/MBIO 2730	Elements of Biochemistry 1	
CHEM/MBIO 2750	Elements of Biochemistry 2	
CHEM 2740	Introduction to the Biochemistry Laboratory	
<b>Hours</b>		<b>27</b>

### Year 3

**Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
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SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
BIOL 3300	Evolutionary Biology	3
One of:		3
BIOL 3400	Plant Physiology	
BIOL 3470	Environmental Physiology of Animals 1	
BIOL 3472	Environmental Physiology of Animals 2	
24 credit hours of 3000 or 4000 level Biology courses <sup>6</sup>		24
6 credit hours of 3000 or 4000 level Microbiology courses <sup>7</sup>		6
24 credit hours of electives		24
<b>Hours</b>		<b>60</b>
<b>Year 4</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the 120 credit hours that make up the degree and are meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the grid above and elective courses chosen by the student in consultation with the program advisors.

<sup>2</sup> The former courses CHEM 1300 and CHEM 1310 may be used in place of CHEM 1100, CHEM 1110, and CHEM 1120. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.

<sup>3</sup> STAT 1150 is recommended over STAT 1000.

<sup>4</sup>

- MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1200 may be used in place of MATH 1240.

<sup>5</sup> The former courses CHEM 2360 (MBIO 2360) and CHEM 2370 (MBIO 2370) may be used in place of CHEM 2700 (MBIO 2700), CHEM 2710 (MBIO 2710), and CHEM 2720. The former courses CHEM 2770 (MBIO 2770) and CHEM 2780 (MBIO 2780) may be used in place of CHEM 2730 (MBIO 2730), CHEM 2740, and CHEM 2750 (MBIO 2750). Number of credit hours of electives depends on the choice of Biochemistry courses and the inclusion of CHEM 2100 (or the former CHEM 2210).

<sup>6</sup> Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Major Degree program. Please consult with the theme advisor for permission to use alternate courses.

<sup>7</sup> Many MBIO courses have specific biochemistry requirements. Students are advised to plan ahead to take all required courses. If a student takes more than 6 credit hours of biochemistry, they will count as electives.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point

Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work



term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Biological Sciences Minor

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
<b>Hours</b>		<b>6</b>
<b>Years 2-4</b>		
12 credit hours of 2000, 3000, and/or 4000 level Biology courses		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biotechnology, B.Sc. Honours (p. 840)	4	120	Yes
Biotechnology, B.Sc. Major (p. 844)	4	120	Yes

## Biotechnology, B.Sc. Honours Biotechnology Honours Entrance, Continuation, and Graduation Requirements

**Note:** As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.

## Biotechnology

**Campus Address/General Office:** 418 Buller Building / 360 Parker Building  
**Telephone:** 204 474 9372 / 204 474 9321

**Email Address:**

Deborah.Court@umanitoba.ca  
Chemistry\_Dept@umanitoba.ca

**Website:** [sci.umanitoba.ca/micro](https://sci.umanitoba.ca/micro) (<https://sci.umanitoba.ca/micro/>) or [sci.umanitoba.ca/chemistry](https://sci.umanitoba.ca/chemistry) (<https://sci.umanitoba.ca/chemistry/>)

## Biotechnology

**Note:** As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.

Offered jointly by the Departments of Chemistry and Microbiology.

## Programs

**To enter** the Biotechnology Joint Honours program a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in CHEM 1110 and a minimum grade of "C+" in CHEM 1120 and BIOL 1020. CHEM 1100, BIOL 1030, MATH 1500, PHYS 1020 (or PHYS 1050), and STAT 1000 are required courses in the program and students are strongly encouraged to complete these courses in first year. Six credit hours of Arts electives, including the written English course should also be taken in Year 1.

Students will select one stream (Analytical or Molecular Biotechnology). All students must complete a common core of required courses plus

required stream specific courses. The remaining courses can be selected from the list of recommended electives. This list is meant to give students some idea of appropriate electives; however, students have the option to choose courses not on the list in consultation with the Program Advisors.

**To continue** in the Biotechnology Joint Honours program, students must maintain a minimum DGPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term. No more than 15 credit hours of F grades may be accumulated, regardless of whether any course has been repeated and a higher grade achieved. Research Project in Biotechnology (BTEC 4000) must be taken in the final year of the program.

**To graduate** from the Biotechnology Joint Honours program students must achieve a minimum DGPA of 3.00 and obtain minimum grade of "C" on the courses that contribute to the 120 credit hours that make up the degree.

Students who do not meet these minimum requirements will be required to withdraw from the program and may be eligible to enter the 4-Year Major degree program in Biotechnology. Depending on course selection students may also be eligible to enter other Major Programs (e.g. Biochemistry, Biological Sciences, Chemistry, or Microbiology) and/or the 3-year B.Sc. General Degree program.

## Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 842) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Students are required to complete the first and second year requirements of the program and MBIO 3410 before beginning their first co-op work term.

## Degree Requirements

### Joint Honours (Including Co-operative Option if Selected)

**Note: As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.**

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes (C+)	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (B)	3
CHEM 1120	Introduction to Chemistry Techniques (C+)	3
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	3
MATH 1500	Introduction to Calculus <sup>1</sup>	3

STAT 1000	Basic Statistical Analysis 1	3
<b>Hours</b>		<b>24</b>
<b>Years 1-2</b>		
6 credit hours from the Faculty of Arts including the required "W" course		6
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
CHEM 2510	Introduction to Analytical Chemistry	3
MBIO 1010	Microbiology I	3
MBIO 2020	Microbiology II	3
BIOL 2520	Cell Biology	3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
CHEM 2520	Introduction to Analytical Chemistry Techniques	2
CHEM 3500	Instrumental Analysis	3
MBIO 3000	Applied Biological Safety	3
MBIO 3032	Microbiology III: Physiology and Metabolism	3
MBIO 3410	Molecular Biology	3
MBIO 3700	Experimental Microbiology Laboratory	3
<b>Work Terms (if Co-op Selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>17</b>
<b>Years 3-4</b>		
CHEM 3760	Advanced Methods for the Biochemistry Laboratory	4
9 credit hours of Optional Courses <sup>3</sup>		9
15 credit hours of Required Program Stream Courses <sup>3</sup>		15
3 credit hours of electives <sup>4</sup>		3
<b>Hours</b>		<b>31</b>
<b>Year 4</b>		
CHEM 4630	Biochemistry of Proteins	3
MBIO 4520	Industrial Bioprocesses	3
BTEC 4000	Research Project in Biotechnology <sup>2</sup>	6
<b>Work Terms (if Co-op Selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> MATH 1230, MATH 1510 or MATH 1520 may be used in place of MATH 1500.
- <sup>2</sup> BTEC 4000 is required for students in the Honours program only. Students in the Honours Co-operative program will require 6 credit hours of approved electives.
- <sup>3</sup> Optional courses and program stream courses requirements can be found in course lists below.
- <sup>4</sup> Refer to list of recommended elective courses below prior to registration in your electives.

(Letters in brackets indicate minimum prerequisite standing for further study.)

#### Common Core Courses:

BIOL 2520, CHEM 2100, CHEM 2110, CHEM 2122, CHEM 2700/MBIO 2700, CHEM 2710/MBIO 2710, CHEM 2720, CHEM 2510, CHEM 2520, CHEM 3500, CHEM 3760, CHEM 4630, MBIO 1010, MBIO 2020, MBIO 3000, MBIO 3032, MBIO 3410, MBIO 3700, MBIO 4520

#### Optional Courses:

Appropriate prerequisites must be taken for all Optional courses.

CHEM 3520, CHEM 3700, CHEM 4360, CHEM 4670, MBIO 3430, MBIO 4020, MBIO 4410, MBIO 4440, BIOL 3300, BIOL 4554/BIOL 4556, BIOL 4540, BIOL 4560, PLNT 2530, PLNT 4610, COMP 3820

#### Program Stream Courses:

##### Analytical Biotechnology:

MATH 1700<sup>1</sup>, CHEM 4370, CHEM 4590, CHEM 4670, CHEM 4700

- <sup>1</sup> MATH 1232 or MATH 1710 may be used in place of MATH 1700.

##### Molecular Biotechnology:

BIOL 4544 or BIOL 4556, MBIO 3600, MBIO 4602, MBIO 4612, MBIO 4672

**Note:** In some instances prerequisites will be waived upon approval by the appropriate department.

#### Recommended General Electives if not required in Program stream:

Appropriate prerequisites must also be taken for all Electives.

BIOE 3200, BIOE 3530, BIOE 4510; BIOL 1300 (BOTN 1010), BIOL 2242 (BOTN 2010), BIOL 2380 (BOTN 2180/ZOOL 2180), BIOL 2260 (BOTN 2210), BIOL 2300 (BOTN 2370/ZOOL 2370), BIOL 3550 (BOTN 3190), BIOL 3290 (BOTN 3280), BIOL 3500 (BOTN 3460), BIOL 4500 (BOTN 4180), BIOL 3542 (BIOL 2540), BIOL 4540 (ZOOL 4150), BIOL 4544 (BIOL 3540); CHEM 4360, CHEM 4370, CHEM 4590, CHEM 4620, CHEM 4670, CHEM 4700; COMP 1010, COMP 1020, COMP 1260, COMP 1270; ENG 1420; ENTR 2020; MATH 1700<sup>1</sup>; MBIO 3282, MBIO 3010, MBIO 3430, MBIO 4440 (MBIO 3440), MBIO 3450, MBIO 3460, MBIO 3472, MBIO 4480 (MBIO 3480), MBIO 4010, MBIO 4410, MBIO 4470, MBIO 4602, MBIO 4612, MBIO 4672; PHAC 4030, PHAC 4040; PHIL 2740, PHIL 2830; PLNT 3140, PLNT 3500, PLNT 3520, PLNT 3570, PLNT 4310, PLNT 4330, PLNT 4550, PLNT 4560, PLNT 4570, PLNT 4580, PLNT 4590, PLNT 4600; STAT 2000

- <sup>1</sup> MATH 1232 or MATH 1710 may be used in place of MATH 1700.

Other suitable courses may be selected through consultation with the department heads

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point

Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work

term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Biotechnology, B.Sc. Major

### Biotechnology Major Entrance, Continuation and Graduation Requirements

**Note: As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.**

**To enter** the Biotechnology Joint Major program a student must have completed at least 24 credit hours with a minimum DGPA of 2.00 and also obtained a minimum grade of "C+" in CHEM 1110 and a minimum grade of "C" in CHEM 1120 and BIOL 1020. BIOL 1030, CHEM 1100, MATH 1500, PHYS 1020 or PHYS 1050, and STAT 1000 are required courses in the program and students are strongly urged to complete these courses in first year. Six credit hours of Arts electives, including the written English course should also be taken in Year 1.

Students will select one stream (Analytical or Molecular Biotechnology). All students must complete a common core of required courses plus required stream specific courses. The remaining courses can be selected from the list of recommended electives. This list is meant to give students some idea of appropriate electives; however, students have the option to choose courses not on the list in consultation with the Program Advisors.

**To continue** in the Major program a student must maintain a minimum DGPA of 2.00. No more than 18 credit hours of F grades can be accumulated regardless of whether any course has been repeated and a higher grade achieved.

**To graduate** from the Biotechnology Joint Major degree, students must maintain a minimum DGPA of 2.00. Students must also obtain a

minimum grade of "C" on all common core and stream specific courses outlined below. There is no term registration load requirement in the Major degree.

Students who do not meet these minimum requirements will be required to withdraw from the program and will normally be eligible to enter the 3-Year B.Sc. General degree program.

## Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 845) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Students are required to complete the first and second year requirements of the program and MBIO 3410 before beginning their first co-op work term.

## Degree Requirements

### Joint Four Year Major (Including Co-operative Option if Selected)

**Note: As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.**

Offered Jointly by the Departments of Chemistry and Microbiology

Course	Title	Hours
<b>Year 1</b>		
BIOL 1020	Biology 1: Principles and Themes (C)	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques (C)	3
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	3
MATH 1500	Introduction to Calculus <sup>1</sup>	3
STAT 1000	Basic Statistical Analysis 1	3
<b>Hours</b>		<b>24</b>
<b>Years 1-2</b>		
6 credit hours from the Faculty of Arts including the required "W" course		6
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3

CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
CHEM 2510	Introduction to Analytical Chemistry	3
MBIO 1010	Microbiology I	3
MBIO 2020	Microbiology II	3
BIOL 2520	Cell Biology	3
<b>Hours</b>		<b>30</b>

**Year 3**

CHEM 2520	Introduction to Analytical Chemistry Techniques	2
CHEM 3500	Instrumental Analysis	3
MBIO 3000	Applied Biological Safety	3
MBIO 3032	Microbiology III: Physiology and Metabolism	3
MBIO 3410	Molecular Biology	3
MBIO 3700	Experimental Microbiology Laboratory	3

**Work Terms (if Co-op Selected):**

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>17</b>

**Years 3-4**

CHEM 3760	Advanced Methods for the Biochemistry Laboratory	4
9 credit hours of Optional Courses <sup>2</sup>		9
15 credit hours of Required Program Stream Courses <sup>2</sup>		15
9 credit hours of electives <sup>3</sup>		9
<b>Hours</b>		<b>37</b>

**Year 4**

CHEM 4630	Biochemistry of Proteins	3
MBIO 4520	Industrial Bioprocesses	3

**Work Terms (if Co-op Selected):**

SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0

**Hours** 6**Total Hours** 120

<sup>1</sup> MATH 1230, MATH 1510 or MATH 1520 may be used in place of MATH 1500.

<sup>2</sup> Optional courses and program stream courses requirements can be found in course lists below.

<sup>3</sup> Refer to list of recommended elective courses below prior to registration in your electives.

(Letters in brackets indicate minimum prerequisite standing for further study.)

**Common Core Courses:**

BIOL 2520, CHEM 2100, CHEM 2110, CHEM 2122, CHEM 2700/MBIO 2700, CHEM 2710/MBIO 2710, CHEM 2720, CHEM 2510, CHEM 2520, CHEM 3500, CHEM 3760, CHEM 4630, MBIO 1010, MBIO 2020, MBIO 3000, MBIO 3032, MBIO 3410, MBIO 3700, MBIO 4520

**Optional Courses:**

Appropriate prerequisites must be taken for all Optional courses.

CHEM 3520, CHEM 3700, CHEM 4360, CHEM 4670, MBIO 3430, MBIO 4020, MBIO 4410, MBIO 4440, BIOL 3300, BIOL 4554/BIOL 4556, BIOL 4540, BIOL 4560, PLNT 2530, PLNT 4610, COMP 3820

**Program Stream Courses:****Analytical Biotechnology:**

MATH 1700<sup>1</sup>, CHEM 4370, CHEM 4590, CHEM 4670, CHEM 4700

<sup>1</sup> MATH 1232 or MATH 1710 may be used in place of MATH 1700.

**Molecular Biotechnology:**

BIOL 4544 or BIOL 4556, MBIO 3600, MBIO 4602, MBIO 4612, MBIO 4672

**Note:** In some instances prerequisites will be waived upon approval by the appropriate department.

**Recommended General Electives if not required in Program stream:**

Appropriate prerequisites must also be taken for all Electives.

BIOE 3200, BIOE 3530, BIOE 4510; BIOL 1300 (BOTN 1010), BIOL 2242 (BOTN 2010), BIOL 2380 (BOTN 2180/ZOOL 2180), BIOL 2260 (BOTN 2210), BIOL 2300 (BOTN 2370/ZOOL 2370), BIOL 3550 (BOTN 3190), BIOL 3290 (BOTN 3280), BIOL 3500 (BOTN 3460), BIOL 4500 (BOTN 4180), BIOL 3542 (BIOL 2540), BIOL 4540 (ZOOL 4150), BIOL 4544 (BIOL 3540); CHEM 4360, CHEM 4370, CHEM 4590, CHEM 4620, CHEM 4670, CHEM 4700; COMP 1010, COMP 1020, COMP 1260, COMP 1270; ENG 1420; ENTR 2020; MATH 1700<sup>1</sup>; MBIO 3282, MBIO 3010, MBIO 3430, MBIO 4440 (MBIO 3440), MBIO 3450, MBIO 3460, MBIO 3472, MBIO 4480 (MBIO 3480), MBIO 4010, MBIO 4410, MBIO 4470, MBIO 4602, MBIO 4612, MBIO 4672; PHAC 4030, PHAC 4040; PHIL 2740, PHIL 2830; PLNT 3140, PLNT 3500, PLNT 3520, PLNT 3570, PLNT 4310, PLNT 4330, PLNT 4550, PLNT 4560, PLNT 4570, PLNT 4580, PLNT 4590, PLNT 4600; STAT 2000

<sup>1</sup> MATH 1232 or MATH 1710 may be used in place of MATH 1700.

Other suitable courses may be selected through consultation with the department heads

**Co-operative Education****Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)**

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science

- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major

Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.



# Chemistry

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## Chemistry

Chemistry is the science concerned with the properties of atoms and molecules, of which all matter is composed. Chemistry is important for all aspects of the material world - food production; the manufacture of medicines, textiles, and plastics; energy production; identifying environmental problems and remedies; and understanding the workings of living

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Chemistry, B.Sc. Honours (p. 848)	4	120	Yes
Chemistry, B.Sc. Major (p. 851)	4	120	Yes
Chemistry - Physics Joint, B.Sc. Honours (p. 854)	4	120	
Chemistry Minor (p. 854)		18	

Biochemistry (p. 814)

Biotechnology (p. 840)

## Chemistry, B.Sc. Honours

### Chemistry Honours Entrance, Continuation, and Graduation Requirements

**To enter** the Honours program in Chemistry, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in CHEM 1110. CHEM 1100, CHEM 1120, MATH 1500, MATH 1700, PHYS 1020 (or PHYS 1050), and PHYS 1030 (or PHYS 1070) are required courses in this program and students are strongly encouraged to complete these courses in first year.

**To continue** in the Chemistry Honours program, students must maintain a minimum DGPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** from the Chemistry Honours program students must achieve a minimum DGPA of 3.00 and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

### Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 849) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

organisms. The department offers study in analytical, inorganic, organic and physical chemistry, and in biochemistry.

### Biochemistry and Biotechnology <sup>1</sup>

The Department of Chemistry, in conjunction with the Department of Microbiology, offers Joint Honours programs, Joint Honours Co-operative Options, Joint four year Major programs and a Joint four year Major Co-operative Options in Biochemistry and Biotechnology.<sup>1</sup> See Biochemistry Program (p. 814) and Biotechnology Program (p. 840)<sup>1</sup> for full details.

<sup>1</sup> As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.

## Programs

Students are required to complete 24 credit hours of Chemistry (including CHEM 2510, CHEM 2520, and CHEM 2600) before beginning their first co-op work term.

## Degree Requirements

### Honours (Including Co-operative Option if Selected)<sup>1,2</sup>

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (B)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	3
PHYS 1030 or PHYS 1070	General Physics 2 or Physics 2: Waves and Modern Physics	3
MATH 1500	Introduction to Calculus <sup>4</sup>	3
MATH 1700	Calculus 2 <sup>4</sup>	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
3 credit hours of electives <sup>2</sup>		3
		<b>Hours</b>
		<b>30</b>
<b>Year 2</b>		
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2300	Inorganic Chemistry 1: Structure and Applications	3

CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2520	Introduction to Analytical Chemistry Techniques	2
CHEM 2600	Physical Chemistry 1	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
6 credit hours of electives <sup>2</sup>		6
<b>Hours</b>		<b>29</b>

**Year 3**

CHEM 3100	Organic Chemistry 3: Advanced Organic Synthesis	3
CHEM 3120	Advanced Organic Chemistry Laboratory Techniques	2
CHEM 3300	Inorganic Chemistry 2: Reactivity and Properties	3
CHEM 3320	Inorganic Chemistry Laboratory	2
CHEM 3500	Instrumental Analysis	3
CHEM 3520	Instrumental Analysis Laboratory	2
CHEM 3600	Physical Chemistry 2	3
CHEM 3620	Physical Chemistry Laboratory	2
CHEM 3820	Integrated Chemistry Laboratory 1	2
CHEM 3840	Integrated Chemistry Laboratory 2	3
6 credit hours of electives <sup>2</sup>		6
<b>Work Terms (if Co-op selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>31</b>

**Year 4**

CHEM 4610	Advanced Chemical Techniques	6
CHEM 4710	Research Project in Chemistry or Biochemistry	6
12 credit hours of Chemistry courses of which at least 9 credit hours are at the 4000 level <sup>2</sup>		12
6 credit hours of electives <sup>2</sup>		6
<b>Work Terms (if Co-op selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> IMPORTANT: The Honours program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

<sup>2</sup> CHEM 1018, CHEM 2523, and CHEM 3331 may not count towards the 120 credit hours required for this degree.

<sup>3</sup> CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120. Note: CHEM 1122 is only available to Price Faculty of Engineering students.

<sup>4</sup>

- MATH 1230, MATH 1510 or MATH 1520 may be taken in place of MATH 1500;
- MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
- MATH 1690 may be taken in place of MATH 1500 and MATH 1700.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass"

for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by

the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Chemistry, B.Sc. Major

### Chemistry Major Entrance, Continuation, and Graduation Requirements

**To enter** the Chemistry Major program a student must have completed at least 24 credit hours with a minimum DGPA of 2.00 and also obtained a minimum grade of "C+" in CHEM 1110, CHEM 1100, CHEM 1120, MATH 1500, MATH 1700, PHYS 1020 (or PHYS 1050), and PHYS 1030 (or PHYS 1070) are required courses in this program and students are strongly encouraged to complete these courses in first year.

**To continue** in the Major program, a student must have a DGPA of 2.00 at each point of assessment.

**To graduate** with the Bachelor of Science (Major) in Chemistry, a student must obtain a minimum DGPA of 2.00, and a minimum grade of "C" or better in all required Chemistry courses.

Students who, at the end of Year 1, are undecided between the four year Major and Honours programs should note that the prescription for Honours Year 2 satisfies both the Honours and Major program requirements.

### Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 852) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Students are required to complete 24 credit hours of Chemistry (including CHEM 2510, CHEM 2520, and CHEM 2600) before beginning their first co-op work term.

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected) <sup>1,2</sup>

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	3
PHYS 1030 or PHYS 1070	General Physics 2 or Physics 2: Waves and Modern Physics	3
MATH 1500	Introduction to Calculus <sup>4</sup>	3
MATH 1700	Calculus 2 <sup>4</sup>	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
3 credit hours of electives <sup>2</sup>		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2300	Inorganic Chemistry 1: Structure and Applications	3
CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2520	Introduction to Analytical Chemistry Techniques	2
CHEM 2600	Physical Chemistry 1	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
6 credit hours of electives <sup>2</sup>		6
<b>Hours</b>		<b>29</b>
<b>Year 3</b>		
CHEM 3100	Organic Chemistry 3: Advanced Organic Synthesis	3
CHEM 3120	Advanced Organic Chemistry Laboratory Techniques	2
CHEM 3300	Inorganic Chemistry 2: Reactivity and Properties	3
CHEM 3320	Inorganic Chemistry Laboratory	2
CHEM 3500	Instrumental Analysis	3

CHEM 3520	Instrumental Analysis Laboratory	2
CHEM 3600	Physical Chemistry 2	3
CHEM 3620	Physical Chemistry Laboratory	2
CHEM 3820	Integrated Chemistry Laboratory 1	2
CHEM 3840	Integrated Chemistry Laboratory 2	3
6 credit hours of electives <sup>2</sup>		6
<b>Work Terms (if Co-op selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
<b>Hours</b>		<b>31</b>
<b>Year 4</b>		
CHEM 4610	Advanced Chemical Techniques	6
6 credit hours of Chemistry courses at the 4000 level		6
18 credit hours of electives <sup>2</sup>		18
<b>Work Terms (if Co-op selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> IMPORTANT: The four-year Major program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

<sup>2</sup> CHEM 1018, CHEM 2523, and CHEM 3331 may not count towards the 120 credit hours required for this degree.

<sup>3</sup> CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120. Note: CHEM 1122 is only available to Price Faculty of Engineering students.

<sup>4</sup>

- MATH 1230, MATH 1510 or MATH 1520 may be taken in place of MATH 1500;
- MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
- MATH 1690 may be taken in place of MATH 1500 and MATH 1700.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)

- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is

developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student

must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the

academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Chemistry Minor Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
<b>Hours</b>		<b>9</b>
<b>Years 2-4</b>		
Plus an additional 9 credit hours of Chemistry at the 2000 level or higher		9
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120. Note: CHEM 1122 is only available to Price Faculty of Engineering students.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Chemistry - Physics Joint, B.Sc. Honours

### Chemistry - Physics Joint Honours Entrance, Continuation, and Graduation Requirements

The departments of Chemistry and Physics and Astronomy offer a joint Honours program for in-depth study in both Chemistry and Physics & Astronomy.

**To enter** the Joint Honours Chemistry - Physics program a student must have a minimum grade of "B" in each of CHEM 1100, CHEM 1110, PHYS 1050 (or PHYS 1020 with a B+), PHYS 1070 (or PHYS 1030 with a B+), MATH 1500 (or any equivalent) and MATH 1700 (or any equivalent) and a minimum DGPA of 3.00. CHEM 1120 and MATH 1300 are not entry requirements, but it is recommended they be completed prior to entry.

**To continue** in the Joint Honours Chemistry - Physics program, a student must maintain a minimum DGPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** with the Joint Honours Chemistry - Physics degree, a student must obtain a minimum DGPA of 3.00 and present a minimum grade

of "C" in each course that contributes to the degree (except for those courses outlined in the above entry requirements).

## Degree Requirements

### Joint Honours <sup>1,2</sup>

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics (B)	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (B)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
Select one of the following: <sup>4</sup>		3
PHYS 1050	Physics 1: Mechanics (B)	
PHYS 1020	General Physics 1 (B+)	
Select one of the following: <sup>4</sup>		3
PHYS 1070	Physics 2: Waves and Modern Physics (B)	
PHYS 1030	General Physics 2 (B+)	
MATH 1300	Vector Geometry and Linear Algebra <sup>5</sup>	3
MATH 1500	Introduction to Calculus (B) <sup>5</sup>	3
MATH 1700	Calculus 2 (B) <sup>5</sup>	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
<b>Hours</b>		<b>30</b>

<b>Year 2</b>		
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2300	Inorganic Chemistry 1: Structure and Applications	3
CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2520	Introduction to Analytical Chemistry Techniques	2
MATH 2720	Multivariable Calculus	3
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2496	Mathematical Physics 1	3
PHYS 2650	Classical Mechanics 1	3
3 credit hours of electives <sup>2</sup>		3
<b>Hours</b>		<b>29</b>

<b>Year 3</b>		
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2600	Physical Chemistry 1	3
CHEM 3300	Inorganic Chemistry 2: Reactivity and Properties	3
CHEM 3500	Instrumental Analysis	3
PHYS 2260 or PHYS 2610	Optics or Circuit Theory and Introductory Electronics	3
PHYS 2600	Electromagnetic Field Theory	3
PHYS 3386	Quantum Mechanics 2	3
PHYS 3630	Electro - and Magnetostatic Theory	3
PHYS 3670	Classical Thermodynamics	3

PHYS 3496	Mathematical Physics 2	3
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
CHEM 3320	Inorganic Chemistry Laboratory	2
CHEM 3520	Instrumental Analysis Laboratory	2
CHEM 4610	Advanced Chemical Techniques	6
Select one of the following:		6
CHEM 4710	Research Project in Chemistry or Biochemistry	
PHYS 4676 & PHYS 4678	Honours Thesis - Proposal and Preparation and Honours Thesis - Dissertation	
PHYS 4386	Quantum Mechanics 3	3
PHYS 4680	Statistical Mechanics	3
3 credit hours of 3000/4000 level Physics courses		3
6 credit hours of electives <sup>2</sup>		6
<b>Hours</b>		<b>31</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> IMPORTANT: The joint Honours program need not be completed in the manner prescribed in the grid above. The grid indicates the recommended arrangement of the required courses and is meant to be a guide around which students can plan their program.

<sup>2</sup> CHEM 1018, CHEM 2523, CHEM 3331, and PHYS 1018 may not count towards the 120 credit hours required for this degree.

<sup>3</sup> CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120. Note: CHEM 1122 is only available to Price Faculty of Engineering students.

<sup>4</sup> Students are advised to take PHYS 1050 and PHYS 1070.

- <sup>5</sup>
- MATH 1220 may be taken in place of MATH 1300;
  - MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500;
  - MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
  - MATH 1690 may be taken in place of MATH 1500 and MATH 1700.

(Letters in brackets indicate minimum prerequisite standing for further study.)

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Computer Science, B.C.Sc., Honours (p. 856)	4	120	Yes
Computer Science, B.Sc. Major (p. 858)	4	120	Yes
Computer Science - Mathematics Joint, B.Sc. Honours (p. 862)	4	120	Yes
Computer Science - Physics & Astronomy Joint, B.Sc. Honours (p. 865)	4	120	Yes
Computer Science - Statistics Joint, B.Sc. Honours (p. 868)	4	120	Yes
Computer Science Minor (p. 862)		18	

## Computer Science

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## Computer Science

Computer technology continues to advance and computer applications are found in all fields and disciplines. As new applications proliferate, opportunities for careers in computing will continue to be strong. Both the Major and the Honours programs offer a co-op option so students may combine education with paid employment experience. The co-operative (co-op) option in Computer Science is well established with the first class graduating in October 1983.

## Programs



## Computer Science, B.C.Sc., Honours

### Computer Science Honours Entrance, Continuation, and Graduation Requirements

The Honours program in Computer Science at the University of Manitoba was the first Honours program in Canada to be given professional accreditation by the Canadian Information Processing Society. The program provides an opportunity to study the subject in greater depth than the other programs in Computer Science and leads to an Honours Bachelor of Computer Science degree (B.C.Sc.). In addition, this program gives professional preparation for careers in areas such as software engineering, system design or project management.

**To enter** the Honours program in Computer Science, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in COMP 1020, "C+" in both MATH 1220 (or MATH 1300) and MATH 1230 (or MATH 1500) (or their equivalents) and "C" in MATH 1700 (or equivalents).

**To continue** in the Computer Science Honours program, students must maintain a minimum DGPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** from the Computer Science Honours program students must achieve a minimum DGPA of 3.00 and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

Outside of computer science and mathematics courses, students are encouraged to select courses such that their programs include at least 15 credit hours of study in science, engineering, or business, and at least 9 credit hours of study in the humanities or social sciences.

### Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 857) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Students are required to complete all the first and second year courses in the program grid before their first co-op work term.

### Degree Requirements

#### Honours (Including Co-operative Option if Selected) <sup>1,2,3</sup>

Course	Title	Hours
<b>Year 1</b>		
COMP 1010	Introductory Computer Science 1 <sup>4</sup>	3
COMP 1020	Introductory Computer Science 2 (B)	3
One of:		3
MATH 1220	Linear Algebra 1 (C+) <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra (C+) <sup>4</sup>	
One of:		3
MATH 1230	Differential Calculus (C+) <sup>4</sup>	
MATH 1500	Introduction to Calculus (C+) <sup>4</sup>	

MATH 1700	Calculus 2 (C) <sup>4</sup>	3
<b>Hours</b>		<b>15</b>
<b>Years 1-2</b>		
One of:		3
STAT 1000	Basic Statistical Analysis 1 (C)	
STAT 1150	Introduction to Statistics and Computing (C)	
6 credit hours from the Faculty of Arts, which should include the required 3 credit hour "W" course		6
18 credit hours of electives <sup>2,3</sup>		18
<b>Hours</b>		<b>27</b>
<b>Year 2</b>		
COMP 2080	Analysis of Algorithms	3
COMP 2140	Data Structures and Algorithms	3
COMP 2150	Object Orientation	3
COMP 2160	Programming Practices	3
COMP 2280	Introduction to Computer Systems	3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
COMP 3030	Automata Theory and Formal Languages	3
COMP 3170	Analysis of Algorithms and Data Structures	3
COMP 3350	Software Engineering 1	3
COMP 3370	Computer Organization	3
COMP 3430	Operating Systems	3
<b>Hours</b>		<b>15</b>
<b>Years 3-4</b>		
21 credit hours of electives <sup>2</sup>		21
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>21</b>
<b>Year 4</b>		
COMP 4620	Professional Practice in Computer Science	3
21 credit hours of 4000 level Computer Science courses		21
<b>Hours</b>		<b>24</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Entry to the Honours Co-operative Option is at the end of second year. Employment terms follow 3A (September-December), 3B (May-August) and 4A (January-April). Students in the Co-operative Option must complete three employment terms and receive a passing grade in SCI 3980, SCI 3990, SCI 4980, and SCI 4990 (if selected) prior to the last academic term.

<sup>2</sup> Additional information on how students may select their courses can be found in the program Overview (p. 856).

<sup>3</sup> IMPORTANT: The Honours degree need not be completed in the order prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. Students in the Co-operative Option should be aware that while other arrangements are possible, they may jeopardize their chances of obtaining employment by selecting such arrangements. Students should discuss their planned sequence of courses with the department prior to making adjustments to the sequence above.

- <sup>4</sup>
- COMP 1012 may be taken in place of COMP 1010.
  - MATH 1210, MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
  - MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
  - MATH 1232, MATH 1710 or MATH 1690 may be taken in place of MATH 1700.
  - Honours students are encouraged to take MATH 1220 instead of MATH 1300 and to take MATH 1230 instead of MATH 1500 to better prepare them for later, higher-level studies.
  - Students who have previously completed COMP 2130 may use it in lieu of MATH 1240.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)

- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

#### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op

Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Computer Science, B.Sc. Major Computer Science Major Entrance, Continuation, and Graduation Requirements

To enter the Major Degree program in Computer Science, a student must have completed at least 24 credit hours with a minimum DGPA of 2.00, and also obtained a minimum grade of "C+" in COMP 1020, "C

+" in both MATH 1300 and MATH 1500 (or their equivalents) and "C" in MATH 1700 (or equivalents).

To continue in the Major program a student must maintain a minimum DGPA of 2.00.

To graduate with the Computer Science Major degree, a student must present a minimum grade of "C+" in: MATH 1300 (or equivalent), MATH 1500 (or equivalent), and a minimum grade of "C" in MATH 1240, MATH 1700 (or equivalent), (STAT 1000 or STAT 1150), COMP 2080, COMP 2140, COMP 2150, COMP 2160, COMP 2280, COMP 3350, (COMP 3010 or COMP 3430), COMP 4620 and in each of the 18 credit hours of 3000 and 4000 level Computer Science courses that apply to the Computer Science component of their degree program. Additionally, students must achieve a minimum DGPA of 2.00.

This program is suitable for those students interested in combining a fairly extensive program in Computer Science with broad coverage of another subject or subjects of their choice (Science or non-Science). The program offers greater scheduling flexibility, more relaxed entrance requirements, and a wider range for the inclusion of electives from other disciplines than the Honours program, but it is not considered to offer the same professional training as the Honours program. Admission to graduate programs may be conditional upon completion of additional courses. Students intending to proceed to a master's degree from the four year Major program should consult with the department at the beginning of their second year of undergraduate study and in each subsequent year.

The student will be able to transfer to the Honours program, provided that departmental and faculty requirements for the Honours program are satisfied.

Outside of computer science and mathematics courses, students are encouraged to select courses such that their programs include at least 15 credit hours of study in science, engineering, or business, and at least nine (9) credit hours of study in the humanities or social sciences. In addition to the faculty maximum, students may be allowed to take up to an additional 12 credit hours of courses outside of the Faculty of Science, with departmental permission. The permission would typically be granted if a student is completing a minor outside of Science and may have completed a variety of electives outside the Faculty prior to declaring a minor in one department.

## Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 860) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Students are required to complete all the first and second year courses in the program grid before their first co-op work term.

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected)<sup>1,2,3</sup>

Course	Title	Hours
<b>Year 1</b>		
COMP 1010	Introductory Computer Science 1 <sup>4</sup>	3
COMP 1020	Introductory Computer Science 2 (C+)	3
MATH 1300	Vector Geometry and Linear Algebra (C+) <sup>4</sup>	3
MATH 1500	Introduction to Calculus (C+) <sup>4</sup>	3
MATH 1700	Calculus 2 (C) <sup>4</sup>	3
<b>Hours</b>		<b>15</b>
<b>Years 1-2</b>		
One of:		3
STAT 1000	Basic Statistical Analysis 1 (C)	
STAT 1150	Introduction to Statistics and Computing (C)	
6 credit hours from the Faculty of Arts, which should include the required 3 credit hour "W" course		6
18 credit hours of electives <sup>2,3</sup>		18
<b>Hours</b>		<b>27</b>
<b>Year 2</b>		
COMP 2080	Analysis of Algorithms	3
COMP 2140	Data Structures and Algorithms	3
COMP 2150	Object Orientation	3
COMP 2160	Programming Practices	3
COMP 2280	Introduction to Computer Systems	3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 3-4</b>		
COMP 3350	Software Engineering 1	3
One of:		3
COMP 3010	Distributed Computing	
COMP 3430	Operating Systems	
COMP 4620	Professional Practice in Computer Science	3
18 credit hours of 3000 or 4000 level Computer Science courses of which 6 credit hours must be at the 4000 level		18
33 credit hours of electives <sup>2</sup>		33
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Entry to the four-year Major Co-operative Option is at the end of second year. Employment terms follow 3A (September-December), 3B (May-August) and 4A (January-April). Students in the Co-operative Option must complete three employment terms and receive a passing grade in SCI 3980, SCI 3990, SCI 4980, and SCI 4990 (if selected) prior to the last academic term.

- <sup>2</sup> Additional information on how students may select their courses can be found in the program Overview (p. 859).
- <sup>3</sup> IMPORTANT: The four-year Major degree need not be completed in the order prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. Students in the Co-operative Option should be aware that while other arrangements are possible, they may jeopardize their chances of obtaining employment by selecting such arrangements. Students should discuss their planned sequence of courses with the department prior to making adjustments to the sequence above.
- <sup>4</sup>
- COMP 1012 may be taken in place of COMP 1010.
  - MATH 1210, MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
  - MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500;
  - MATH 1232, MATH 1710 or MATH 1690 may be taken in place of MATH 1700.
  - Honours students are encouraged to take MATH 1220 instead of MATH 1300 and to take MATH 1230 instead of MATH 1500 to better prepare them for later, higher-level studies.
  - Students who have previously completed COMP 2130 may use it in lieu of MATH 1240.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences

- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

#### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option

is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Computer Science Minor Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
COMP 1010	Introductory Computer Science 1 <sup>1</sup>	3
COMP 1020	Introductory Computer Science 2	3
<b>Hours</b>		<b>6</b>
<b>Years 2-4</b>		
COMP 2140	Data Structures and Algorithms	3
Minimum 9 credit hours from 2000 and (or) 3000 level Computer Science courses		9
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> COMP 1012 may be taken in place of COMP 1010.

## Computer Science - Mathematics Joint, B.Sc. Honours

### Computer Science - Mathematics Joint Honours Entrance, Continuation, and Graduation Requirements

The departments of Computer Science and Mathematics offer a joint Honours program for in-depth study in both Computer Science and Mathematics.

To **enter** the Joint Honours Computer Science - Mathematics program, the student must have a minimum grade of "B" in each of COMP 1020, either MATH 1232 or MATH 1690 (or a minimum grade of "A" in MATH 1700), and have satisfied the Faculty of Science requirements for entry to the honours program. It is recommended that STAT 2150 be completed in Year 1 as an elective.

To **continue in, and graduate from** the program, the student must meet the Faculty of Science requirements for continuation and graduation from the Honours or Honours Co-op program.

### Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 863) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Students are required to complete all the first and second year courses in the program grid before their first co-op work term.

## Degree Requirements

### Joint Honours (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
COMP 1010	Introductory Computer Science 1	3
COMP 1020	Introductory Computer Science 2 (B)	3
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (B) <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
6 credit hours from the Faculty of Arts, which should include the required 3 credit hour "W" course		6
3 credit hours of electives <sup>2</sup>		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
COMP 2080	Analysis of Algorithms	3
COMP 2140	Data Structures and Algorithms	3
COMP 2160	Programming Practices	3
COMP 2280	Introduction to Computer Systems	3
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
3 credit hours of electives <sup>2</sup>		3
<b>Hours</b>		<b>30</b>
<b>Summer</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1 <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
<b>Summer</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3990	Co-operative Education Work Term 2 <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
COMP 3030	Automata Theory and Formal Languages	3
COMP 3170	Analysis of Algorithms and Data Structures	3
COMP 3370	Computer Organization	3
COMP 3430	Operating Systems	3
15 credit hours of 3000 or 4000 level Computer Science courses, of which at least 6 credit hours must be 4000 level		15
MATH 2030	Combinatorics 1	3
MATH 2160	Numerical Analysis 1	3
MATH 3320	Algebra 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3472	Real Analysis 3	3
9 credit hours from:		9
MATH 2070	Graph Theory 1	

MATH 2170	Number Theory 1	
Any 3000 or 4000 level Mathematics courses, of which at least 3 credit hours must be 4000 level		
6 credit hours of electives <sup>2</sup>		6
<b>Hours</b>		<b>60</b>

**Year 4****Summer****Co-op Requirements (if selected):**

SCI 4980	Co-operative Education Work Term 3 <sup>3</sup>	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected) <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (A) or MATH 1300 (A) in place of MATH 1220,
- MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230,
- MATH 1700 (A) or MATH 1710 (A) in place of MATH 1232,
- MATH 1690 (B) in place of MATH 1230 and MATH 1232.

With permission from the department, students may be able to substitute STAT 1000 and STAT 2000 in place of STAT 1150.

<sup>2</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

<sup>3</sup> When chosen, the Co-operative Option work terms (SCI 3980, SCI 3990, SCI 4980, and SCI 4990 [if selected]) will normally be completed during the Summer Terms following years 2, 3, and 4 respectively.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics

- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.



### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major

Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Computer Science - Physics & Astronomy Joint, B.Sc. Honours

### Computer Science - Physics & Astronomy Joint Honours Entrance, Continuation and Graduation Requirements

The departments of Computer Science and Physics & Astronomy offer a joint Honours program for in-depth study in both Computer Science and Physics & Astronomy.

**To enter** the Joint Honours Computer Science - Physics and Astronomy program, the student must have a minimum grade of "B" in each of PHYS 1050 (or "B+" in PHYS 1020), PHYS 1070 (or B+ in PHYS 1030), MATH 1300, MATH 1500, MATH 1700 (or any equivalent), COMP 1010 (or COMP 1012) and COMP 1020 and a minimum DGPA of 3.00. Students must complete a minimum of 9 credit hours per term in each Fall and Winter term.

**To continue** in the Honours program, students must maintain a minimum DGPA of 3.00, complete a minimum of 9 credit hours during each Fall and Winter term (or equivalent for students in the Co-operative option).

**To graduate** with the Honours degree, a student must obtain a minimum DGPA of 3.00 and present a minimum grade of "C" in each course that contributes to the degree.

### Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 866) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Students are required to complete all the first and second year courses in the program grid before their first co-op work term.

### Degree Requirements

#### Joint Honours (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
One of:		3
PHYS 1050	Physics 1: Mechanics (B) <sup>1</sup>	
PHYS 1020	General Physics 1 (B+)	
One of:		3
PHYS 1070	Physics 2: Waves and Modern Physics (B) <sup>1</sup>	
PHYS 1030	General Physics 2 (B+)	
One of:		3

COMP 1010	Introductory Computer Science 1 (B)	
COMP 1012	Computer Programming for Scientists and Engineers (B)	
COMP 1020	Introductory Computer Science 2 (B)	3
MATH 1300	Vector Geometry and Linear Algebra (B) <sup>2</sup>	3
MATH 1500	Introduction to Calculus (B) <sup>2</sup>	3
MATH 1700	Calculus 2 (B) <sup>2</sup>	3
6 credit hours from the Faculty of Arts, which should include the required 3 credit hour "W" course <sup>3</sup>		6
3 credit hours of electives <sup>4</sup>		3
<b>Hours</b>		<b>30</b>

<b>Year 2</b>		
One of: <sup>4,5</sup>		3
PHYS 2260	Optics	
Physics elective <sup>4</sup>		
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2496	Mathematical Physics 1	3
PHYS 2650	Classical Mechanics 1	3
MATH 1240	Elementary Discrete Mathematics <sup>2</sup>	3
MATH 2720	Multivariable Calculus	3
COMP 2080	Analysis of Algorithms	3
COMP 2140	Data Structures and Algorithms	3
COMP 2160	Programming Practices	3
COMP 2280	Introduction to Computer Systems	3
<b>Hours</b>		<b>30</b>

<b>Summer</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1 <sup>6</sup>	0
<b>Hours</b>		<b>0</b>

<b>Year 3</b>		
PHYS 2600	Electromagnetic Field Theory	3
One of: <sup>4,5</sup>		3
PHYS 2610	Circuit Theory and Introductory Electronics	
Physics elective <sup>4</sup>		
PHYS 3386	Quantum Mechanics 2	3
PHYS 3670	Classical Thermodynamics	3
PHYS 3496	Mathematical Physics 2	3
COMP 3170	Analysis of Algorithms and Data Structures	3
COMP 3430	Operating Systems	3
6 credit hours of 3000 and/or 4000 level Computer Science courses		6
3 credit hours of electives <sup>4</sup>		3
<b>Hours</b>		<b>30</b>

<b>Summer</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3990	Co-operative Education Work Term 2 <sup>6</sup>	0
<b>Hours</b>		<b>0</b>

<b>Year 4</b>		
PHYS 4680	Statistical Mechanics	3
12 credit hours of 3000 and 4000 level Honours Physics courses, with at least 6 credit hours at the 4000 level		12

12 credit hours of 3000 or 4000 level courses from Computer Science, with at least 9 credit hours at the 4000 level by the end of Year 4	12
3 credit hours of electives <sup>4</sup>	3
<b>Hours</b>	<b>30</b>
<b>Summer</b>	
<b>Co-op Requirements (if selected):</b>	
SCI 4980 Co-operative Education Work Term 3 <sup>6</sup>	0
SCI 4990 Co-operative Education Work Term 4 (if a 4th work term is selected) <sup>6</sup>	0
<b>Hours</b>	<b>0</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> PHYS 1050 and PHYS 1070 are recommended.

<sup>2</sup>

- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1230, MATH 1510 or MATH 1520 may be taken in place of MATH 1500;
- MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
- MATH 1690 may be taken in place of MATH 1500 and MATH 1700.
- Students who have previously completed COMP 2130 may use it in lieu of MATH 1240.

<sup>3</sup> As there are no open electives in Year 2 of the program, students should complete the University written English requirement in Year 1. If not completed in Year 1, a "W" course must be completed prior to Year 3 in addition to the required Year 2 courses.

<sup>4</sup> PHYS 1018 may not count towards the 120 credit hours required for this degree.

<sup>5</sup> Students are required to take at least one of PHYS 2260 or PHYS 2610.

<sup>6</sup> When chosen, the Co-operative Option work terms (SCI 3980, SCI 3990, SCI 4980, and SCI 4990 [if selected]) will normally be completed during the Summer Terms following years 2, 3, and 4 respectively.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science

- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

## Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

## Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

## Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major

Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Computer Science - Statistics Joint, B.Sc. Honours

### Computer Science - Statistics Joint Honours Entrance, Continuation, and Graduation Requirements

The departments of Computer Science and Statistics offer a joint Honours program for in-depth study in both Computer Science and Statistics.

**To enter** the Joint Honours Computer Science - Statistics Program, the student must have a "B" or better in COMP 1020 and in STAT 2150 and a DGPA of 3.00. Note that MATH 1220<sup>1</sup>, MATH 1230<sup>1</sup> and MATH 1232<sup>1</sup> and MATH 1240 are not required to enter the program, however, it is recommended that they be completed in Year 1 as they are prerequisites to Year 2 courses.

<sup>1</sup>The following substitutions are allowed:

- MATH 1500 (B) or MATH 1510 (B) may be taken in place of MATH 1230;
- MATH 1300 (B) may be taken in place of MATH 1220;
- MATH 1700 (B) or MATH 1710 (B) may be taken in place of MATH 1232.

**To continue** in the Joint Honours Computer Science - Statistics Program, students must maintain a DGPA of 3.00.

**To graduate** with the Honours degree a student must present a minimum grade of "C" in each course that contributes to the degree. In addition, the student must achieve a minimum DGPA of 3.00.

#### Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 869) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Students are required to complete all the first and second year courses in the program grid before their first co-op work term.

## Degree Requirements

### Joint Honours (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
COMP 1010	Introductory Computer Science 1	3

COMP 1020	Introductory Computer Science 2 (B)	3
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
STAT 2150	Statistics and Computing (B)	3
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
6 credit hours from the Faculty of Arts, which could include the required 3 credit hour "W" course		6

**Hours 30**

<b>Year 2</b>		
COMP 2080	Analysis of Algorithms	3
COMP 2140	Data Structures and Algorithms	3
COMP 2150	Object Orientation	3
COMP 2160	Programming Practices	3
STAT 2300	Principles of Data Collection	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
MATH 2080	Introduction to Analysis	3
MATH 2150	Multivariable Calculus <sup>1</sup>	3
3 credit hours of electives		3

**Hours 30**

<b>Summer</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0

**Hours 0**

<b>Year 3</b>		
COMP 3170	Analysis of Algorithms and Data Structures	3
COMP 3380	Databases Concepts and Usage	3
STAT 3030	Introduction to Stochastic Processes	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3
12 credit hours of electives <sup>3</sup>		12

**Hours 30**

<b>Summer</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3990	Co-operative Education Work Term 2	0

**Hours 0**

<b>Year 4</b>		
STAT 4100	Statistical Inference	3
27 credit hours of electives <sup>4</sup>		27

**Hours 30**

<b>Summer</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0

**Hours 0**

**Total Hours 120**

- <sup>1</sup> The following substitutions are allowed:
- MATH 1500 (B) or MATH 1510 (B) may be taken in place of MATH 1230;
  - MATH 1300 (B) may be taken in place of MATH 1220;
  - MATH 1700 (B) or MATH 1710 (B) may be taken in place of MATH 1232;
  - MATH 2720 may be taken in place of MATH 2150;
  - STAT 1000 and STAT 2000 (B) may be taken in place of STAT 1150.
- <sup>2</sup> The work terms SCI 3980, SCI 3990 and SCI 4980 will normally be completed in the summers following Year 2, Year 3 and Year 4, respectively and must be completed by the last academic term.
- <sup>3</sup> These must include 3 credit hours of COMP courses at the 3000 level. The following courses are suggested: COMP 3020, COMP 3350, COMP 3490, STAT 3490, STAT 3550, STAT 3690.
- <sup>4</sup> These must include 3 credit hours of COMP courses at the 3000 or 4000 level, 6 credit hours of COMP courses at the 4000 level, and 9 credit hours of STAT courses at the 4000 level. The following courses are suggested: COMP 4380, COMP 4710, STAT 4150, STAT 4250, STAT 4630.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science

- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty

of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.

- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Data Science

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### Data Science, B.Sc. Major

### Data Science Major Entrance, Continuation, and Graduation Requirements

**To enter** the Major Degree program in Data Science, a student must have completed at least 24 credit hours with a minimum DGPA of 2.00, and also obtained a minimum grade of "C+" in each of COMP 1020, MATH 1232 (or MATH 1700 or MATH 1710), and [(STAT 1150 or STAT 2220) (or a minimum grade of "B" in STAT 2000)].

**To continue** in the Data Science Major Degree program, students must maintain a minimum DGPA of 2.00.

**To graduate** with the Bachelor of Science (Major) in Data Science, a student must obtain passing grades on all courses, obtain a minimum DGPA of 2.00, and a minimum grade of "C" in all required and optional courses that contribute to the Major.

### Major Co-operative Option

A co-operative education option is available. Students should refer to the Co-operative Education (p. 872) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Before beginning their first co-op work term, students are required to complete the first and second year requirements of the program.

### Degree Requirements

#### Four Year Major (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
COMP 1012	Computer Programming for Scientists and Engineers <sup>1</sup>	3
COMP 1020	Introductory Computer Science 2 (C+)	3
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (C+) <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics <sup>1</sup>	3

## Data Science

The Faculty of Science offers an interdisciplinary 4-year Major program in Data Science. Data Science is an emerging field of study that combines computer science, mathematics and statistics to collect, analyze, visualize and interpret data.

### Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option																																																																																																																										
Data Science, B.Sc. Major (p. 871)	4	120	Yes																																																																																																																										
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STAT 4150	Bayesian Analysis and Computing	
STAT 4250	Statistical Learning	
3 additional credit hours from the Faculty of Science <sup>3</sup>		3
21 credit hours of electives <sup>3</sup>		21
The above 33 credit hours must include at least 12 credit hours of Faculty of Science courses taken at the 3000 or 4000 level.		
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The following substitutions are allowed:

- COMP 1010 in place of COMP 1012;
- [STAT 1000 and STAT 2000 (B)] or STAT 2220 in place of STAT 1150;
- MATH 1210 (B) or MATH 1300 in place of MATH 1220;
- MATH 1500 or MATH 1510 in place of MATH 1230;
- MATH 1700 (C+) or MATH 1710 (C+) in place of MATH 1232;
- COMP 2130 in place of MATH 1240;
- MATH 2150 in place of MATH 2720.

<sup>2</sup> Should be taken in graduating year.

<sup>3</sup> Courses may be chosen from COMP, MATH, or STAT courses included in the course lists in the program grid provided the courses have not been used toward another program requirement.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy

- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

#### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course

prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## General B.Sc. B.Sc. General Degree

The three-year General program is intended to provide diversified training in Science. The program provides students with broad exposure to the major areas of Science at the introductory level with a requirement for more advanced studies in one or more areas of Science.

This program is not intended for students who desire to practice in some field of specialization in the Sciences. Students with that intent are recommended to pursue the Honours or the four-year Major program.

Students are required to have the equivalent of high school Mathematics 40S (either pre-calculus or applied mathematics) and at least one of high school Chemistry 40S or Physics 40S.

Students having difficulty with the interpretation of the following regulations or the way in which they are applied, are urged to contact a Science Academic Advisor in the general office. Students are responsible for their own degree progress and completion.

Students admitted into the B.Sc. General degree program prior to September 2021 should consult with a Science Academic Advisor about their degree requirements.

Students anticipating a transfer to either a four-year Major or Honours program at the end of the second or third year should consult with a Science Academic Advisor before registering.

Students must complete 90 credit hours with passing grades ("D" or better) in each course. Please note higher grades are usually required for prerequisite purposes. See course descriptions for details. A student must obtain a minimum grade point average of 2.00 on the 90 credit hours, which constitute the degree to qualify for the degree of Bachelor of Science (General).

Students must complete:

### Introductory Level Faculty of Science Courses (21 credit hours)<sup>1</sup>

- **9 credit hours from the Computational and Mathematical Sciences:**
  - COMP 1010 (or COMP 1012<sup>2</sup>), COMP 1020,
  - [(MATH 1220 or MATH 1300 (or equivalent)) or (MATH 1210<sup>3</sup>), [MATH 1230 or MATH 1500 (or equivalent)], [MATH 1232 or MATH 1700 (or equivalent)], MATH 1240,
  - [STAT 1000<sup>4,5</sup> (or STAT 2220<sup>4</sup>) or STAT 1150<sup>5</sup>], STAT 2000<sup>5</sup>, STAT 2150
- **6 credit hours from the Physical Sciences<sup>6</sup>:**
  - ASTR 1810, ASTR 1830,
  - CHEM 1100, CHEM 1110, [CHEM 1120 or (CHEM 1122 and CHEM 1126)<sup>7</sup>],
  - (PHYS 1020 or PHYS 1050), [PHYS 1030 or (PHYS 1070 or PHYS 2152)]<sup>8</sup>
- **6 credit hours from the Life Sciences:**
  - BIOL 1020, BIOL 1030, BIOL 1410, BIOL 1412,
  - MBIO 1010, MBIO 1220<sup>9</sup>

- <sup>1</sup> When selecting courses to fulfill the Introductory Faculty of Science requirement, a student should consider the subject areas in which they wish to select Advanced Level Faculty of Science courses, and select courses that will fulfill the prerequisite requirements of the Advanced Level courses. A student is encouraged to consult course descriptions and an academic advisor for guidance. Students must satisfy the W requirement, within the first 60 credit hours.
- <sup>2</sup> COMP 1012 is primarily intended for Engineering students and may not be held for credit with COMP 1010.
- <sup>3</sup> MATH 1210 is intended for Engineering students and may not be held for credit with MATH 1220 or MATH 1300 (or equivalent).
- <sup>4</sup> STAT 2220 is intended for Engineering students and may not be held for credit with STAT 1000 or STAT 1150.
- <sup>5</sup> STAT 1150 may not be held for credit with STAT 1000 or STAT 2000.
- <sup>6</sup> Students must have at least one of High School Chemistry 40S or Physics 40S. Students who do not have either of these high school courses will not be able to satisfy this requirement without taking CHEM 1018, PHYS 1018, or another equivalent. CHEM 1018 or PHYS 1018 may be used to fulfill the Faculty of Science requirement, or an elective requirement.
- <sup>7</sup> CHEM 1122 and CHEM 1126 are intended for Engineering students and may not be held for credit with CHEM 1120.
- <sup>8</sup> PHYS 2152 is intended for Engineering students and may not be held for credit with PHYS 1070.
- <sup>9</sup> MBIO 1220 is primarily intended for students planning to enter the College of Nursing or other health care or related programs. It will not act as a prerequisite to higher level Microbiology courses.

### Advanced Level Science Courses (36 credit hours)

To satisfy the advanced level requirements of the 3-year General Degree program, thirty-six (36) credit hours at the 2000, 3000, and (or) 4000 level must be chosen from courses offered by the Faculty of Science. Courses offered by the Faculty of Science include courses from the departments of Biological Sciences, Chemistry, Computer Science, Mathematics, Microbiology, Physics & Astronomy, and Statistics. Courses with the prefix DATA, FORS, and SCI, are also courses taught by the Faculty of Science and may be used to fulfill this requirement.

Of these 36 credit hours, at least 9 credit hours must be chosen from 3000 or 4000 level courses.

Students should note prerequisite requirements for upper level courses when planning their program.

PHYS 2152, SCI 3980, SCI 3990, SCI 4980, SCI 4990, STAT 2000, and STAT 2220 may not be used to fulfill this requirement.

### Other Course Requirements (33 credit hours)

- **Faculty of Science Elective Course (3 credit hours)** - In addition to the 57 credit hours of Faculty of Science courses stated above, students must take an additional 3 credit hours from the Faculty of Science. This course must be at the 1000-level or higher.
- **Other Faculty Courses (12 credit hours)** - Students must take a minimum of 12 credit hours of courses from outside the Faculty of Science, **of which at least six credit hours must be from the Faculty of Arts**. Students may take up to 30 credit hours of courses from outside of the Faculty of Science using the 18 credit hours of electives below.
- **Elective Courses (18 credit hours)** - Students must take 18 credit hours of electives in this program. Elective courses may include

courses from within the Faculty of Science, or courses from other faculties.

## Degree Requirements

### General <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
9 credit hours from COMP, MATH or STAT <sup>2</sup>		9
6 credit hours from ASTR, CHEM or PHYS <sup>3,4</sup>		6
6 credit hours from BIOL or MBIO <sup>5</sup>		6
<b>Hours</b>		<b>21</b>
<b>Years 1-3</b>		
3 credit hours of Faculty of Science courses		3
12 credit hours from outside of the Faculty of Science, of which at least 6 credit hours must be from the Faculty of Arts		12
18 credit hours of electives		18
<b>Hours</b>		<b>33</b>
<b>Years 2-3</b>		
27 credit hours at the 2000 level or higher from the Faculty of Science <sup>6</sup>		27
9 credit hours at the 3000 level or higher from the Faculty of Science		9
<b>Hours</b>		<b>36</b>
<b>Total Hours</b>		<b>90</b>

<sup>1</sup> Student must satisfy the W requirement in their first 60 credit hours.

<sup>2</sup> Chosen from:

- (COMP 1010 or COMP 1012), COMP 1020,
- [MATH 1220 or MATH 1300 (or equivalent), or MATH 1210], [MATH 1230 or MATH 1500 (or equivalent)], [MATH 1232 or MATH 1700 (or equivalent)], MATH 1240,
- (STAT 1000 or STAT 2220 or STAT 1150), STAT 2000, STAT 2150.

<sup>3</sup> Chosen from:

- ASTR 1810, ASTR 1830,
- CHEM 1100, CHEM 1110, [CHEM 1120 or (CHEM 1122 and CHEM 1126)],
- (PHYS 1020 or PHYS 1050), [PHYS 1030 or (PHYS 1070 or PHYS 2152)].

<sup>4</sup> Students must have at least one high school Chemistry 40S or Physics 40S, or equivalent.

<sup>5</sup> Chosen from:

- BIOL 1020, BIOL 1030, BIOL 1410, BIOL 1412,
- MBIO 1010, MBIO 1220.

<sup>6</sup> PHYS 2152, SCI 3980, SCI 3990, SCI 4980, SCI 4990, STAT 2000, STAT 2220 cannot be used to satisfy this requirement.

## Genetics

**Campus Address/General Office:** 212 Biological Sciences Building

**Telephone:** 204 474 9245

**Email Address:** Georg.Hausner@umanitoba.ca

**Website:** [sci.umanitoba.ca/biological-sciences](http://sci.umanitoba.ca/biological-sciences) (<http://sci.umanitoba.ca/biological-sciences/>)

## Genetics

The Faculty of Science offers an interdisciplinary program leading to a B.Sc. (Honours) degree or B.Sc. Major in Genetics. Genetics is the science of heredity dealing with the mechanisms of inheritance and has generated concepts basic to modern biology. Three areas are represented in this program: classical genetics, population genetics, and molecular genetics. Courses from Arts, Agricultural and Food Sciences, and Medicine are included in this program.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Genetics, B.Sc. Honours (p. 876)	4	120	Yes
Genetics, B.Sc. Major (p. 880)	4	120	Yes

## Genetics, B.Sc. Honours

### Genetics Honours Entry, Continuation, and Graduation Requirements

To enter the Honours program in Genetics, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in BIOL 1030, and a minimum grade of "C+" in CHEM 1110, CHEM 1120, STAT 1150 or STAT 1000, MATH 1500 and the additional 3 credit hours of specified Mathematics courses are program requirements and students are strongly encouraged to complete these courses in first year.

\* Students interested in studying Genetics should note that Grade 12 mathematics and chemistry are prerequisite to CHEM 1100. Effective 2009-2010, students will also require Biology 40S (or equivalent) and any Grade 12 mathematics course (or equivalent) for entry to BIOL 1020 (the required prerequisite for BIOL 1030).

To continue in the Genetics Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B.Sc. Honours degree, a student must maintain a minimum 3.00 DGPA and achieve a minimum grade of "C" on all courses that make up the 120 credit hours of the degree.

### Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 878) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Students are required to complete the first and second year requirements of the program and MBIO 3410 before beginning their first co-op work term.

## Degree Requirements

### Honours

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (B)	3
One of:		3
STAT 1150	Introduction to Statistics and Computing <sup>2</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>2</sup>	
MATH 1500	Introduction to Calculus <sup>3</sup>	3
One of:		3
MATH 1200	Elements of Discrete Mathematics <sup>3</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>3</sup>	

MATH 1700	Calculus 2 <sup>3</sup>	
<b>Hours</b>		<b>24</b>
<b>Years 1-2</b>		
3 credit hours from the Faculty of Arts		3
3 credit hour "W" course		3
3 credit hours of electives		3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
MBIO 1010	Microbiology I	3
MBIO 2020	Microbiology II	3
One of:		3
STAT 2150	Statistics and Computing <sup>2</sup>	
STAT 2000	Basic Statistical Analysis 2 <sup>2</sup>	
<b>Hours</b>		<b>27</b>
<b>Years 3-4</b>		
BIOL 3500	Genetics 2	3
MBIO 3410	Molecular Biology	3
PLNT 3140	Introductory Cytogenetics	3
BGEN 3022	Introduction to Human Genetics A	3
BGEN 3024	Introduction to Human Genetics B	3
One of:		6
BGEN 4010	Project Course in Human Genetics <sup>4</sup>	
MBIO 4530	Project in Microbiology <sup>4</sup>	
One of:		3
ANTH 2240	Plagues and People	
ANTH 2560	Anthropology of Illness	
ANTH 2860	Evolution and Human Diversity	
ANTH 2890	Human Population Biology	
33 credit hours from list of optional courses (a minimum of 12 of these credit hours must be 4000 level)		33
3 credit hours of electives		3
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> CHEM 1126 may be used in lieu of CHEM 1120.

<sup>2</sup> STAT 1150 is recommended over STAT 1000; STAT 2150 is recommended over STAT 2000.

<sup>3</sup>

- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1230, MATH 1510, or MATH 1520 may be taken in place of MATH 1500;
- MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
- MATH 1690 may be taken in place of MATH 1500 and MATH 1700;
- MATH 1240 may be taken in place of MATH 1200.

<sup>4</sup> BGEN 4010 or MBIO 4530 are required courses for students in the Genetics Honours, but are not available to students in the Co-operative Option, and require department consent for students in the Genetics Major.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Honours Co-operative Option

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (B)	3
One of:		3
STAT 1150	Introduction to Statistics and Computing <sup>2</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>2</sup>	
MATH 1500	Introduction to Calculus <sup>3</sup>	3
One of:		3
MATH 1200	Elements of Discrete Mathematics <sup>3</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>3</sup>	
MATH 1700	Calculus 2 <sup>3</sup>	
<b>Hours</b>		<b>24</b>
<b>Years 1-2</b>		
3 credit hours from the Faculty of Arts		3
3 credit hour "W" course		3
3 credit hours of electives		3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
MBIO 1010	Microbiology I	3
MBIO 2020	Microbiology II	3
One of:		3
STAT 2150	Statistics and Computing <sup>2</sup>	
STAT 2000	Basic Statistical Analysis 2 <sup>2</sup>	
<b>Hours</b>		<b>27</b>
<b>Years 3-4</b>		
BIOL 3500	Genetics 2	3
MBIO 3410	Molecular Biology	3
PLNT 3140	Introductory Cytogenetics	3

BGEN 3022	Introduction to Human Genetics A	3
BGEN 3024	Introduction to Human Genetics B	3
One of:		3
ANTH 2240	Plagues and People	
ANTH 2560	Anthropology of Illness	
ANTH 2860	Evolution and Human Diversity	
ANTH 2890	Human Population Biology	
39 credit hours from list of optional courses (a minimum of 18 of these credit hours must be 4000 level)		39
3 credit hours of electives		3
<b>Co-op Requirements:</b> <sup>4</sup>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> CHEM 1126 may be used in lieu of CHEM 1120.

<sup>2</sup> STAT 1150 is recommended over STAT 1000; STAT 2150 is recommended over STAT 2000.

<sup>3</sup>

- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1230, MATH 1510, or MATH 1520 may be taken in place of MATH 1500;
- MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
- MATH 1690 may be taken in place of MATH 1500 and MATH 1700;
- MATH 1240 may be taken in place of MATH 1200.

<sup>4</sup> Students in the Co-operative Option are advised to ensure that they are able to satisfy the prerequisites for all 3000 and 4000 level courses they plan to take.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Optional Courses for the Genetics Honours and Major Programs (Including Co-operative Options)

### Biochemistry and Medical Genetics

Course	Title	Hours
BGEN 4010	Project Course in Human Genetics <sup>1</sup>	6

<sup>1</sup> MBIO 4530 and BGEN 4010 are project courses. A research project is chosen in consultation with the Microbiology department (MBIO 4530) or Biochemistry and Medical Genetics (BGEN 4010) and the Genetics program committee, and is supervised by a staff member. Only one of MBIO 4530 or BGEN 4010 may be selected in this program. These are required courses for students registered in the Genetics Honours program and may be available to students registered in the Genetics Major program by departmental consent.

### Biological Sciences

Course	Title	Hours
BIOL 2410	Human Physiology 1	3
BIOL 2420	Human Physiology 2	3
BIOL 3290	Medicinal and Hallucinogenic Plants	3
BIOL 3300	Evolutionary Biology	3
BIOL/PLNT 3400	Plant Physiology	3

BIOL 3542	Developmental Biology	3
BIOL 3560	Comparative Animal Histology	3
BIOL 4500	Molecular Genetics of Plant Development	3
BIOL 4510	Evolutionary Genetics	3
BIOL 4540	Developmental Molecular Biology	3
BIOL 4542	Genes and Development	3
BIOL 4560	Microtechnique	3
BIOL 4650	Biology and Society	3

### Chemistry

Course	Title	Hours
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
One of:		3
CHEM 2600	Physical Chemistry 1	
CHEM 2260	Course no longer offered	
One of:		3
CHEM 3600	Physical Chemistry 2	
CHEM 2290	Course no longer offered	
CHEM 4360	Signalling and Regulation of Gene Expression	3
CHEM 4370	Glycobiology and Protein Activation	3
CHEM 4620	Biochemistry of Nucleic Acids	3
CHEM 4630	Biochemistry of Proteins	3

### Microbiology

Course	Title	Hours
MBIO 2420	Introductory Virology	3
MBIO 3000	Applied Biological Safety	3
MBIO 3010	Mechanisms of Microbial Disease	3
One of:		3
MBIO 3032	Microbiology III: Physiology and Metabolism	
MBIO 3030	Course no longer offered	
MBIO 3430	Molecular Evolution	3
MBIO 3450	Regulation of Biochemical Processes	3
MBIO 3460	Membrane and Cellular Biochemistry	3
One of:		3
MBIO 4020	Immunology	
MBIO 4010	Course no longer offered	
MBIO 4410	Virology	3
MBIO 4530	Project in Microbiology <sup>1</sup>	6
MBIO 4540	Biological Energy Transduction	3
One of:		3
MBIO 4670	Course no longer offered	
MBIO 4570	Course no longer offered	
MBIO 4672	Applied Molecular Biology	3
One of:		3
MBIO 4602	Molecular Genetics of Prokaryotes - Lectures	
MBIO 4600	Course no longer offered	
One of:		3
MBIO 4612	Molecular Genetics of Eukaryotes - Lectures	
MBIO 4610	Course no longer offered	

<sup>1</sup> MBIO 4530 and BGEN 4010 are project courses. A research project is chosen in consultation with the Microbiology department (MBIO 4530) or Biochemistry and Medical Genetics (BGEN 4010) and the Genetics program committee, and is supervised by a staff member. Only one of MBIO 4530 or BGEN 4010 may be selected in this program. These are required courses for students registered in the Genetics Honours program and may be available to students registered in the Genetics Major program by departmental consent.

### Computer Science

Course	Title	Hours
COMP 1010	Introductory Computer Science 1	3
COMP 1020	Introductory Computer Science 2	3
COMP 1500	Computing: Ideas and Innovation	3
COMP 1600	Navigating Your Digital World	3

### Physics

Course	Title	Hours
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PHYS 1050	Physics 1: Mechanics	3
PHYS 1070	Physics 2: Waves and Modern Physics	3

### Animal Science

Course	Title	Hours
ANSC 3500	Principles of Animal Genetics	3
ANSC 4280	Applied Animal Genetics	3

### Pharmacology

Course	Title	Hours
PHAC 4030	Drugs in Human Disease I	3
PHAC 4040	Drugs in Human Disease II	3

### Plant Science

Course	Title	Hours
PLNT 2530	Plant Biotechnology	3
PLNT/BIOL 3400	Plant Physiology	3
PLNT 3520	Principles of Plant Improvement	3
PLNT 4330	Intermediate Plant Genetics	3
PLNT 4610	Bioinformatics	3

By an appropriate selection of courses from this list, students can obtain particular program emphasis in either plant, human or molecular genetics.

The Honours Co-op program must contain a minimum of 18 credit hours of 4000 level courses as options in Years 3 and 4.

Other suitable optional courses may be arranged through consultation with the Genetics program committee.

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills

to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate

departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the



coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw

from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Genetics, B.Sc. Major

### Genetics Major Entrance, Continuation, and Graduation Requirements

**To enter** the Major Degree program in Genetics, a student must have completed at least 24 credit hours with a minimum DGPA of 2.00, and also obtained a minimum grade of "C+" in BIOL 1030 and CHEM 1110. CHEM 1120, STAT 1150 or STAT 1000, MATH 1500 and the additional 3 credit hours of specified Mathematics courses are program requirements and students are strongly encouraged to complete these courses in first year.

\* Students interested in studying Genetics should note that Grade 12 mathematics and chemistry are prerequisite to CHEM 1100. Effective 2009-2010, students will also require Biology 40S (or equivalent) and any Grade 12 mathematics course (or equivalent) for entry to BIOL 1020 (the required prerequisite for BIOL 1030).

**To continue** in the Genetics Major Degree program, students must maintain a minimum DGPA of 2.00.

**To graduate** with the Bachelor of Science (Major) in Genetics, a student must obtain passing grades on all courses, obtain a minimum DGPA of 2.00, and a minimum grade of C in all required and optional courses that contribute to the Major.

### Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 882) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Students are required to complete the first and second year requirements of the program and MBIO 3410 before beginning their first co-op work term.

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>1</sup>	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (C+)	3
One of:		3
STAT 1150	Introduction to Statistics and Computing <sup>2</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>2</sup>	
MATH 1500	Introduction to Calculus <sup>3</sup>	3
One of:		3
MATH 1200	Elements of Discrete Mathematics <sup>3</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>3</sup>	
MATH 1700	Calculus 2 <sup>3</sup>	
<b>Hours</b>		<b>24</b>
<b>Years 1-2</b>		
3 credit hours from the Faculty of Arts		3
3 credit hour "W" course		3
3 credit hours of electives		3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM/MBIO 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
CHEM/MBIO 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
MBIO 1010	Microbiology I	3
MBIO 2020	Microbiology II	3
One of:		3
STAT 2150	Statistics and Computing <sup>2</sup>	
STAT 2000	Basic Statistical Analysis 2 <sup>2</sup>	
<b>Hours</b>		<b>27</b>
<b>Years 3-4</b>		
BIOL 3500	Genetics 2	3
MBIO 3410	Molecular Biology	3
PLNT 3140	Introductory Cytogenetics	3
BGEN 3022	Introduction to Human Genetics A	3
BGEN 3024	Introduction to Human Genetics B	3
One of:		3
ANTH 2240	Plagues and People	

ANTH 2560	Anthropology of Illness	
ANTH 2860	Evolution and Human Diversity	
ANTH 2890	Human Population Biology	
30 credit hours from list of optional courses (a minimum of 15 of these credit hours must be 4000 level)		30
12 credit hours of electives		12
<b>Co-op Requirements (if selected): <sup>4</sup></b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4	0
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> CHEM 1126 may be used in lieu of CHEM 1120.

<sup>2</sup> STAT 1150 is recommended over STAT 1000; STAT 2150 is recommended over STAT 2000.

<sup>3</sup>

- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
- MATH 1230, MATH 1510, or MATH 1520 may be taken in place of MATH 1500;
- MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
- MATH 1690 may be taken in place of MATH 1500 and MATH 1700;
- MATH 1240 may be taken in place of MATH 1200.

<sup>4</sup> Students in the Co-operative Option are advised to ensure that they are able to satisfy the prerequisites for all 3000 and 4000 level courses they plan to take.

(Letters in brackets indicate minimum prerequisite standing for further study.)

### Optional Courses for the Genetics Honours and Major Programs (Including Co-operative Options)

#### Biochemistry and Medical Genetics

Course	Title	Hours
BGEN 4010	Project Course in Human Genetics <sup>1</sup>	6

<sup>1</sup> MBIO 4530 and BGEN 4010 are project courses. A research project is chosen in consultation with the Microbiology department (MBIO 4530) or Biochemistry and Medical Genetics (BGEN 4010) and the Genetics program committee, and is supervised by a staff member. Only one of MBIO 4530 or BGEN 4010 may be selected in this program. These are required courses for students registered in the Genetics Honours program and may be available to students registered in the Genetics Major program by departmental consent.

#### Biological Sciences

Course	Title	Hours
BIOL 2410	Human Physiology 1	3
BIOL 2420	Human Physiology 2	3
BIOL 3290	Medicinal and Hallucinogenic Plants	3
BIOL 3300	Evolutionary Biology	3
BIOL/PLNT 3400	Plant Physiology	3
BIOL 3542	Developmental Biology	3
BIOL 3560	Comparative Animal Histology	3
BIOL 4500	Molecular Genetics of Plant Development	3
BIOL 4510	Evolutionary Genetics	3
BIOL 4540	Developmental Molecular Biology	3

BIOL 4542	Genes and Development	3
BIOL 4560	Microtechnique	3
BIOL 4650	Biology and Society	3

### Chemistry

Course	Title	Hours
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
One of:		3
CHEM 2600	Physical Chemistry 1	
CHEM 2260	Course no longer offered	
One of:		3
CHEM 3600	Physical Chemistry 2	
CHEM 2290	Course no longer offered	
CHEM 4360	Signalling and Regulation of Gene Expression	3
CHEM 4370	Glycobiology and Protein Activation	3
CHEM 4620	Biochemistry of Nucleic Acids	3
CHEM 4630	Biochemistry of Proteins	3

### Microbiology

Course	Title	Hours
MBIO 2420	Introductory Virology	3
MBIO 3000	Applied Biological Safety	3
MBIO 3010	Mechanisms of Microbial Disease	3
One of:		3
MBIO 3032	Microbiology III: Physiology and Metabolism	
MBIO 3030	Course no longer offered	
MBIO 3430	Molecular Evolution	3
MBIO 3450	Regulation of Biochemical Processes	3
MBIO 3460	Membrane and Cellular Biochemistry	3
One of:		3
MBIO 4020	Immunology	
MBIO 4010	Course no longer offered	
MBIO 4410	Virology	3
MBIO 4530	Project in Microbiology <sup>1</sup>	6
MBIO 4540	Biological Energy Transduction	3
One of:		3
MBIO 4670	Course no longer offered	
MBIO 4570	Course no longer offered	
MBIO 4672	Applied Molecular Biology	3
One of:		3
MBIO 4602	Molecular Genetics of Prokaryotes - Lectures	
MBIO 4600	Course no longer offered	
One of:		3
MBIO 4612	Molecular Genetics of Eukaryotes - Lectures	
MBIO 4610	Course no longer offered	

<sup>1</sup> MBIO 4530 and BGEN 4010 are project courses. A research project is chosen in consultation with the Microbiology department (MBIO 4530) or Biochemistry and Medical Genetics (BGEN 4010) and the Genetics program committee, and is supervised by a staff member. Only one of MBIO 4530 or BGEN 4010 may be selected in this program. These are required courses for students registered in the Genetics Honours program and may be available to students registered in the Genetics Major program by departmental consent.

### Computer Science

Course	Title	Hours
COMP 1010	Introductory Computer Science 1	3
COMP 1020	Introductory Computer Science 2	3
COMP 1500	Computing: Ideas and Innovation	3
COMP 1600	Navigating Your Digital World	3

### Physics

Course	Title	Hours
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PHYS 1050	Physics 1: Mechanics	3
PHYS 1070	Physics 2: Waves and Modern Physics	3

### Animal Science

Course	Title	Hours
ANSC 3500	Principles of Animal Genetics	3
ANSC 4280	Applied Animal Genetics	3

### Pharmacology

Course	Title	Hours
PHAC 4030	Drugs in Human Disease I	3
PHAC 4040	Drugs in Human Disease II	3

### Plant Science

Course	Title	Hours
PLNT 2530	Plant Biotechnology	3
PLNT/BIOL 3400	Plant Physiology	3
PLNT 3520	Principles of Plant Improvement	3
PLNT 4330	Intermediate Plant Genetics	3
PLNT 4610	Bioinformatics	3

By an appropriate selection of courses from this list, students can obtain particular program emphasis in either plant, human or molecular genetics.

The Honours Co-op program must contain a minimum of 18 credit hours of 4000 level courses as options in Years 3 and 4.

Other suitable optional courses may be arranged through consultation with the Genetics program committee.

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills

to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate

departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the

coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw

from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Interdisciplinary Science Courses

## Mathematics

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### Mathematics

Mathematics provides the language, reasoning and analytic tools that many other disciplines use to investigate their areas. These include all the physical sciences, computer and engineering sciences, social sciences, and the biological and health sciences. A wide range of business, industrial, and government programs rely on mathematics to provide insight and analysis. Students may specialize in mathematics alone or in combinations with physics, computer science, economics, or statistics.

**Note:** Students entering either the Faculty of Arts or Science, and intending to take courses from the department, are strongly advised to speak to a Science Academic Advisor or a faculty advisor in the department concerning an appropriate choice of mathematics courses. They may also consult the Department of Mathematics website (<https://sci.umanitoba.ca/mathematics/>).

### Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Applied Mathematics with Computer Science Option, B.Sc. Major (p. 894)	4	120	Yes
Applied Mathematics with Economics Option, B.Sc. Major (p. 898)	4	120	Yes
Applied Mathematics with Statistics Option, B.Sc. Major (p. 901)	4	120	Yes
Mathematics, B.Sc. Double Honours (p. 889)	4	120	Yes
Mathematics, B.Sc. Honours (p. 885)	4	120	Yes
Mathematics, B.Sc. Major (p. 891)	4	120	Yes
Mathematics - Economics Joint, B.Sc. Honours (p. 904)	4	120	
Mathematics - Physics and Astronomy Joint, B.Sc. Honours (p. 907)	4	120	Yes
Mathematics Minor (p. 904)		18	
Computer Science - Mathematics Joint, B.Sc. Honours (p. 862)			
Statistics - Mathematics Joint, B.Sc. Honours (p. 942)			

## Mathematics, B.Sc. Honours Mathematics Honours Entrance, Continuation, and Graduation Requirements

To enter the Honours program in Mathematics, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in

either MATH 1232 or MATH 1690, or a minimum grade of "A" in MATH 1700

**To continue** in the Mathematics Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** with the B.Sc. Honours degree, a student must achieve a minimum 3.00 DGPA and achieve a minimum grade of "C" on all courses that make up the 120 credit hours of the degree.

Students are encouraged to discuss potential electives with a departmental advisor.

## Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 887) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Students will need to have completed MATH 2020, MATH 2080, MATH 2090, MATH 2150 and MATH 2180 (or their equivalents as approved by the department of Mathematics) before entrance into the Co-op Program. Students who plan on, or are required to, take MATH 3470 and MATH 3472 are recommended to take these in the Fall and Winter (respectively) of Year 3 (similarly with MATH 3320 and MATH 3322).

## Degree Requirements

### Honours (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (B) <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
<b>Hours</b>		<b>12</b>
<b>Years 1-2</b>		
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
COMP 1010	Introductory Computer Science 1 <sup>1</sup>	3
The following must be completed in Year 1 or Year 2:		
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
15 credit hours of electives <sup>2</sup>		15
<b>Hours</b>		<b>27</b>
<b>Year 2</b>		
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
6 credit hours from the following list:		6
MATH 2030	Combinatorics 1	
MATH 2040	Curves and Surfaces	

MATH 2070	Graph Theory 1	
MATH 2160	Numerical Analysis 1 <sup>3</sup>	
MATH 2170	Number Theory 1	
<b>Hours</b>		<b>21</b>
<b>Years 3-4</b>		
MATH 3320	Algebra 2	3
MATH 3340	Complex Analysis 1	3
MATH 3390	Introduction to Topology	3
MATH 3440	Ordinary Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3472	Real Analysis 3	3
One of the two concentrations listed below (see Concentration tab for course requirements)		18
Applied and Computational Mathematics		
Pure Mathematics		
12 credit hours of Mathematics courses from the following (if not already taken in 2nd year):		12
MATH 2030	Combinatorics 1	
MATH 2070	Graph Theory 1	
MATH 2160	Numerical Analysis 1	
MATH 2170	Number Theory 1	
All Year 3 and 4 Mathematics courses		
12 credit hours of electives <sup>2</sup>		12
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (A) or MATH 1300 (A) in place of MATH 1220,
- MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230,
- MATH 1700 (A) or MATH 1710 (A) in place of MATH 1232,
- MATH 1690 (B) in place of MATH 1230 and MATH 1232.

With permission from the department, students may be able to substitute STAT 1000 and STAT 2000 in place of STAT 1150. COMP 1012 may be used in lieu of COMP 1010.

<sup>2</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

<sup>3</sup> Department strongly recommends choosing MATH 2160 in Year 2.

(Letters in brackets indicate minimum prerequisite standing for further study.)

### Applied and Computational Mathematics Concentration

Course	Title	Hours
MATH 3420	Numerical Analysis 2	3
MATH 3460	Partial Differential Equations	3

MATH 4370	Linear Algebra and Matrix Analysis	3
9 additional credit hours to be chosen from:		9
MATH 3322	Algebra 3	
MATH 3330	Computational Algebra	
MATH 4280	Basic Functional Analysis	
MATH 4320	Dynamical Systems <sup>1</sup>	
MATH 4330	Fundamentals of Approximation Theory <sup>1</sup>	
MATH 4380	Mathematical Biology <sup>1</sup>	
MATH 4390	Numerical Approximation Theory <sup>1</sup>	
MATH 4440	Numerical Analysis of Partial Differential Equations	
MATH 4460	Partial Differential Equations 2 <sup>1</sup>	

<sup>1</sup> These courses may not be offered every year, but are usually offered once every second year. Please refer to Aurora Student (<https://aurora.umanitoba.ca>) for courses offered in the current year and to the website of the Department of Mathematics (<https://www.sci.umanitoba.ca/mathematics/>) for the planned schedule of future course offerings.

## Pure Mathematics Concentration

Course	Title	Hours
MATH 3322	Algebra 3	3
MATH 4260	Abstract Measure Theory	3
One of:		3
MATH 3410	Introduction to Mathematical Logic <sup>1</sup>	
MATH 3480	Set Theory <sup>1</sup>	
One of:		3
MATH 4300	Combinatorial Geometry <sup>1</sup>	
MATH 4340	Introduction to Algebraic Geometry <sup>1</sup>	
MATH 4360	Introduction to Differential Geometry <sup>1</sup>	
6 additional credit hours to be chosen from:		6
MATH 3360	Combinatorics 2	
MATH 4240	Advanced Group Theory <sup>1</sup>	
MATH 4270	Algebraic Topology	
MATH 4280	Basic Functional Analysis	
MATH 4290	Complex Analysis 2	
MATH 4450	Number Theory 2	
MATH 4470	Rings and Modules <sup>1</sup>	

<sup>1</sup> These courses may not be offered every year, but are usually offered once every second year. Please refer to Aurora Student (<https://aurora.umanitoba.ca>) for courses offered in the current year and to the website of the Department of Mathematics (<https://www.sci.umanitoba.ca/mathematics/>) for the planned schedule of future course offerings.

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills

to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate



departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the

coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw

from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Mathematics, B.Sc. Double Honours

### Mathematics Double Honours

A student may elect Honours in Mathematics (including Co-operative Option) and one other field, subject to the approval of both departments.

**To enter** the Double Honours program in the Mathematics field, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in either MATH 1232 or MATH 1690, or a minimum grade of "A" in MATH 1700. Students should consult the other participating department to identify entry requirements for that field.

**To continue** in the Mathematics Double Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** with the B.Sc. Honours degree, a student must achieve a minimum 3.00 DGPA and achieve a minimum grade of "C" on all courses that make up the degree. Students must complete a minimum of 120 credit hours to graduate, depending on requirements for other participating department, students may need to complete more than 120 credit hours to graduate.

## Degree Requirements

### Double Honours (Including Co-operative Option if Selected)<sup>1</sup>

A student may elect Honours in Mathematics (including Co-operative Option) and one other field, subject to the approval of both departments. The Mathematics prescription for a Double Honours program is as indicated below. It is a minimum of 120 credit hours, comprising of courses listed below, and the required courses from the other department.

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>2</sup>	3
MATH 1230	Differential Calculus <sup>2</sup>	3
MATH 1232	Integral Calculus (B) <sup>2</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
STAT 1150	Introduction to Statistics and Computing <sup>2</sup>	3

COMP 1010	Introductory Computer Science 1 <sup>2</sup>	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6

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**Hours** **24**

<b>Year 2</b>		
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
6 credit hours from the following list:		6

MATH 2030	Combinatorics 1	
MATH 2040	Curves and Surfaces	
MATH 2070	Graph Theory 1	
MATH 2160	Numerical Analysis 1	
MATH 2170	Number Theory 1	

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**Hours** **21**

<b>Year 3</b>		
MATH 3320	Algebra 2	3
MATH 3340	Complex Analysis 1	3
MATH 3390	Introduction to Topology	3
MATH 3440	Ordinary Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3472	Real Analysis 3	3

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**Hours** **18**

<b>Years 3-4</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0

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**Hours** **0**

<b>Year 4</b>		
15 credit hours from the following (if not already taken in 2nd year):		15

MATH 2030	Combinatorics 1	
MATH 2070	Graph Theory 1	
MATH 2160	Numerical Analysis 1	
MATH 2170	Number Theory 1	

All Year 3 and 4 mathematics courses of which at least 9 credit hours must be 4000 level

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**Hours** **15**

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**Total Hours** **78**

<sup>1</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

<sup>2</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (A) or MATH 1300 (A) in place of MATH 1220,
- MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230,
- MATH 1700 (A) or MATH 1710 (A) in place of MATH 1232,
- MATH 1690 (B) in place of MATH 1230 and MATH 1232.

With permission of the department, students may be able to substitute STAT 1000 and STAT 2000 in place of STAT 1150. COMP 1012 may be used in lieu of COMP 1010.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics

- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

#### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.

- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Mathematics, B.Sc. Major Mathematics Major Entrance, Continuation, and Graduation Requirements

**To enter** the four year Major in Mathematics, a student must have a "C+" in either MATH 1232 or MATH 1690 or a minimum grade of "B" in MATH 1700, and have satisfied all Faculty requirements for entry to the program.

**To continue** in the Mathematics Major degree program students must maintain a minimum DGPA of 2.00.

To graduate with the B.Sc. Major degree, a student must achieve a minimum DGPA of 2.00, and a minimum grade of “C” in each of the Major Program Specific Courses.

## Major Program Specific Courses

Course	Title	Hours
MATH 1220	Linear Algebra 1	3
MATH 1230	Differential Calculus	3
MATH 1232	Integral Calculus	3
MATH 1240	Elementary Discrete Mathematics	3
MATH 2020	Algebra 1	3
MATH 2030	Combinatorics 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
MATH 3320	Algebra 2	3
MATH 3340	Complex Analysis 1	3
MATH 3360	Combinatorics 2	3
MATH 3390	Introduction to Topology	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
and 6 credit hours from the Year 2 Mathematics electives:		
MATH 2040	Curves and Surfaces	3
MATH 2070	Graph Theory 1	3
MATH 2170	Number Theory 1	3
A student may substitute any 3000/4000 level MATH course for either of the above two electives.		

## Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 893) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Students will need to have completed MATH 2020, MATH 2080, MATH 2090, MATH 2150 and MATH 2180 (or their equivalents as approved by the department of Mathematics) before entrance into the Co-op Program. Students who plan on, or are required to, take MATH 3470 and MATH 3472 are recommended to take these in the Fall and Winter (respectively) of Year 3 (similarly with MATH 3320 and MATH 3322).

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (C+) <sup>1</sup>	3

MATH 1240	Elementary Discrete Mathematics	3
<b>Hours</b>		<b>12</b>
<b>Years 1-2</b>		
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
COMP 1010	Introductory Computer Science 1 <sup>1</sup>	3
15 credit hours of approved electives <sup>2</sup>		15
The following must be completed in Year 1 or Year 2:		
6 credit hours from the Faculty of Arts, which should include the required “W” course		6
<b>Hours</b>		<b>27</b>
<b>Year 2</b>		
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
<b>Hours</b>		<b>15</b>
<b>Years 2-4</b>		
MATH 2030	Combinatorics 1	3
MATH 2160	Numerical Analysis 1	3
MATH 3320	Algebra 2	3
MATH 3340	Complex Analysis 1	3
MATH 3360	Combinatorics 2	3
MATH 3390	Introduction to Topology	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
30 credit hours from the following:		30
MATH 2040	Curves and Surfaces	
MATH 2070	Graph Theory 1	
MATH 2170	Number Theory 1	
and any 3000/4000 level Mathematics courses.		
12 credit hours of approved electives <sup>2</sup>		12
<b>Hours</b>		<b>66</b>
<b>Years 3-4</b>		
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (B) or MATH 1300 (C+) in place of MATH 1220,
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230,
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232,
- MATH 1690 (C+) in place of MATH 1230 and MATH 1232.

With permission from the department, students may be able to substitute STAT 1000 and STAT 2000 in place of STAT 1150. COMP 1012 may be used in lieu of COMP 1010.

<sup>2</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular

Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

#### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

#### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Applied Mathematics with Computer Science Option, B.Sc. Major

### Four Year Major in Applied Mathematics with Option (Computer Science, Economics, Statistics) Entrance, Continuation and Graduation Requirements

These programs provide a sound general knowledge of applied mathematics together with a significant number of courses in the option area. Courses in the Computer Science option provide training in aspects of computer science which are most useful to the practicing mathematician. Courses in the Computer Sciences, Economics, and Statistics options are fundamental to each area and provide a strong, mathematical basis for further study.

**To enter** the four year Major in Applied Mathematics with one of the above three options, a student must have a "C+" in either MATH 1232 or MATH 1690 or a minimum grade of "B" in MATH 1700, and have satisfied all faculty requirements for entry to the program.

To **continue** in the Applied Mathematics Major degree programs, students must maintain a minimum DGPA of 2.00.

To **graduate** with the B.Sc. Major degree, a student must achieve a minimum DGPA of 2.00, and a minimum grade of "C" in each of the Major Program Specific courses.

## Applied Mathematics Major Program Specific Courses

Course	Title	Hours
MATH 1220	Linear Algebra 1	3
MATH 1230	Differential Calculus	3
MATH 1232	Integral Calculus	3
MATH 1240	Elementary Discrete Mathematics	3
MATH 2070	Graph Theory 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
MATH 3340	Complex Analysis 1	3
MATH 3420	Numerical Analysis 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3610	Introduction to Mathematical Modelling	3

It is recommended that students take all 12 credit hours of 1000 level mathematics courses in their initial 30 credit hours; however, students should take at least MATH 1230, MATH 1232 and MATH 1220. See program grids for additional requirements for each option.

## Options List

Course	Title	Hours
MATH 2030	Combinatorics 1	3
MATH 2040	Curves and Surfaces	3
MATH 2170	Number Theory 1	3
Any 3000/4000 level MATH course		

## Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 896) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (C+) <sup>1</sup>	3

MATH 1240	Elementary Discrete Mathematics	3
COMP 1010	Introductory Computer Science 1 <sup>1</sup>	3
COMP 1020	Introductory Computer Science 2	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
6 credit hours of approved electives <sup>2</sup>		6

**Hours 30**

### Year 2

MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
COMP 2140	Data Structures and Algorithms	3

**Hours 18**

### Years 2-4

STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
STAT 2150	Statistics and Computing	3

9 credit hours from:

MATH 2030	Combinatorics 1	
MATH 2040	Curves and Surfaces	
MATH 2170	Number Theory 1	
Any 3000/4000 level MATH course		

One of the following patterns: 9

### Graphics

COMP 2190	Introduction to Scientific Computing
COMP 3490	Computer Graphics 1
COMP 4490	Computer Graphics 2

### Software

COMP 2150	Object Orientation
COMP 2160	Programming Practices
and one of:	
COMP 3380	Databases Concepts and Usage
COMP 3440	Programming Language Concepts
COMP 3020	Human-Computer Interaction 1

### Theoretical Computer Science

COMP 2080	Analysis of Algorithms
and two of:	
COMP 3030	Automata Theory and Formal Languages
COMP 3170	Analysis of Algorithms and Data Structures
COMP 3820	Introduction to Bioinformatics Algorithms
COMP 4420	Advanced Design and Analysis of Algorithms

### Hardware

COMP 2160	Programming Practices
COMP 2280	Introduction to Computer Systems
and one of:	
COMP 3370	Computer Organization
COMP 3430	Operating Systems

### Artificial Intelligence

COMP 3190	Introduction to Artificial Intelligence
and two of:	



COMP 4180	Intelligent Mobile Robotics	
COMP 4190	Artificial Intelligence	
COMP 4200	Expert Systems	
COMP 4360	Machine Learning	
27 credit hours of electives <sup>2</sup>		27
<b>Hours</b>		<b>51</b>
<b>Years 3-4</b>		
MATH 2070	Graph Theory 1	3
MATH 3340	Complex Analysis 1	3
MATH 3420	Numerical Analysis 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3610	Introduction to Mathematical Modelling	3
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>21</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (B) or MATH 1300 (C+) in place of MATH 1220;
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230;
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232;
- MATH 1690 (C+) in place of MATH 1230 and MATH 1232;
- STAT 1000 (C) and STAT 2000 (B) in place of STAT 1150.

COMP 1012 may be used in lieu of COMP 1010.

<sup>2</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences

- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment;

except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program

or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Applied Mathematics with Economics Option, B.Sc. Major

### Four Year Major in Applied Mathematics with Option (Computer Science, Economics, Statistics) Entrance, Continuation and Graduation Requirements

These programs provide a sound general knowledge of applied mathematics together with a significant number of courses in the option area. Courses in the Computer Science option provide training in aspects of computer science which are most useful to the practicing mathematician. Courses in the Computer Sciences, Economics, and Statistics options are fundamental to each area and provide a strong, mathematical basis for further study.

**To enter** the four year Major in Applied Mathematics with one of the above three options, a student must have a "C+" in either MATH 1232 or MATH 1690 or a minimum grade of "B" in MATH 1700, and have satisfied all faculty requirements for entry to the program.

**To continue** in the Applied Mathematics Major degree programs, students must maintain a minimum DGPA of 2.00.

**To graduate** with the B.Sc. Major degree, a student must achieve a minimum DGPA of 2.00, and a minimum grade of "C" in each of the Major Program Specific courses.

### Applied Mathematics Major Program Specific Courses

Course	Title	Hours
MATH 1220	Linear Algebra 1	3
MATH 1230	Differential Calculus	3
MATH 1232	Integral Calculus	3
MATH 1240	Elementary Discrete Mathematics	3
MATH 2070	Graph Theory 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
MATH 3340	Complex Analysis 1	3
MATH 3420	Numerical Analysis 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3

MATH 3470	Real Analysis 2	3
MATH 3610	Introduction to Mathematical Modelling	3

It is recommended that students take all 12 credit hours of 1000 level mathematics courses in their initial 30 credit hours; however, students should take at least MATH 1230, MATH 1232 and MATH 1220. See program grids for additional requirements for each option.

### Options List

Course	Title	Hours
MATH 2030	Combinatorics 1	3
MATH 2040	Curves and Surfaces	3
MATH 2170	Number Theory 1	3
Any 3000/4000 level MATH course		

### Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 896) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

### Degree Requirements

#### Four Year Major (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (C+) <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
One of the following:		6
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
9 credit hours of electives <sup>2</sup>		9
<b>Hours</b>		<b>27</b>
<b>Years 1-2</b>		
3 credit hour "W" course must be taken in Year 1 or Year 2		3
<b>Hours</b>		<b>3</b>
<b>Year 2</b>		
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
<b>Hours</b>		<b>15</b>

**Years 2-4**

STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
STAT 2150	Statistics and Computing	3
COMP 1010	Introductory Computer Science 1 <sup>1</sup>	3
ECON 2030	Mathematical Economics 1	3
ECON 3030	Mathematical Economics 2	3
6 credit hours from:		6
MATH 2030	Combinatorics 1	
MATH 2040	Curves and Surfaces	
MATH 2170	Number Theory 1	
Any 3000/4000 level MATH course		
6 credit hours from:		6
ECON 2010	Microeconomic Theory 1	
ECON 2020	Macroeconomic Theory 1	
ECON 3010	Microeconomic Theory 2	
ECON 3020	Macroeconomic Theory 2	
24 credit hours of approved electives <sup>2</sup>		24
<b>Hours</b>		<b>51</b>

**Years 3-4**

MATH 2070	Graph Theory 1	3
MATH 3340	Complex Analysis 1	3
MATH 3420	Numerical Analysis 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3610	Introduction to Mathematical Modelling	3
MATH 4370	Linear Algebra and Matrix Analysis	3

**Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>24</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (B) or MATH 1300 (C+) in place of MATH 1220;
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230;
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232;
- MATH 1690 (C+) in place of MATH 1230 and MATH 1232;
- STAT 1000 (C) and STAT 2000 (B) in place of STAT 1150.

COMP 1012 may be used in place of COMP 1010.

<sup>2</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point

Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work

term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Applied Mathematics with Statistics Option, B.Sc. Major

### Four Year Major in Applied Mathematics with Option (Computer Science, Economics, Statistics) Entrance, Continuation and Graduation Requirements

These programs provide a sound general knowledge of applied mathematics together with a significant number of courses in the option area. Courses in the Computer Science option provide training in aspects of computer science which are most useful to the practicing mathematician. Courses in the Computer Sciences, Economics, and Statistics options are fundamental to each area and provide a strong, mathematical basis for further study.

**To enter** the four year Major in Applied Mathematics with one of the above three options, a student must have a "C+" in either MATH 1232 or MATH 1690 or a minimum grade of "B" in MATH 1700, and have satisfied all faculty requirements for entry to the program.

**To continue** in the Applied Mathematics Major degree programs, students must maintain a minimum DGPA of 2.00.

**To graduate** with the B.Sc. Major degree, a student must achieve a minimum DGPA of 2.00, and a minimum grade of "C" in each of the Major Program Specific courses.

## Applied Mathematics Major Program Specific Courses

Course	Title	Hours
MATH 1220	Linear Algebra 1	3
MATH 1230	Differential Calculus	3
MATH 1232	Integral Calculus	3
MATH 1240	Elementary Discrete Mathematics	3
MATH 2070	Graph Theory 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
MATH 3340	Complex Analysis 1	3
MATH 3420	Numerical Analysis 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3610	Introduction to Mathematical Modelling	3

It is recommended that students take all 12 credit hours of 1000 level mathematics courses in their initial 30 credit hours; however, students should take at least MATH 1230, MATH 1232 and MATH 1220. See program grids for additional requirements for each option.

## Options List

Course	Title	Hours
MATH 2030	Combinatorics 1	3
MATH 2040	Curves and Surfaces	3
MATH 2170	Number Theory 1	3
Any 3000/4000 level MATH course		

## Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 896) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (C+) <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6

9 credit hours of electives <sup>2</sup>		9
	<b>Hours</b>	<b>30</b>
<b>Year 2</b>		
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
STAT 2150	Statistics and Computing	3
STAT 2400	Introduction to Probability 1	3
	<b>Hours</b>	<b>21</b>
<b>Years 2-4</b>		
COMP 1010	Introductory Computer Science 1 <sup>1</sup>	3
9 credit hours from:		9
MATH 2030	Combinatorics 1	
MATH 2040	Curves and Surfaces	
MATH 2170	Number Theory 1	
Any 3000/4000 level MATH course		
9 credit hours of 3000 or 4000 level Statistics courses		9
18 credit hours of approved electives <sup>2</sup>		18
	<b>Hours</b>	<b>39</b>
<b>Years 3-4</b>		
MATH 2070	Graph Theory 1	3
MATH 3340	Complex Analysis 1	3
MATH 3420	Numerical Analysis 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3610	Introduction to Mathematical Modelling	3
STAT 2800	Introduction to Probability 2	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3450	Linear Models	3
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
	<b>Hours</b>	<b>30</b>
	<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (B) or MATH 1300 (C+) in place of MATH 1220;
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230;
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232;
- MATH 1690 (C+) in place of MATH 1230 and MATH 1232;
- STAT 1000 (C) and STAT 2000 (B) in place of STAT 1150.

COMP 1012 may be used in place of COMP 1010.

<sup>2</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular

Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.



Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Mathematics Minor

### Minor Requirements

Course	Title	Hours
<b>Years 1-4</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus <sup>1</sup>	3
A minimum of 9 credit hours from:		9
MATH 1240	Elementary Discrete Mathematics <sup>1</sup>	
2000 and (or) 3000 level Mathematics courses		
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>18</b>

- <sup>1</sup>
- MATH 1500 or MATH 1510 may be taken in place of MATH 1230;
  - MATH 1210 (B) or MATH 1300 may be taken in place of MATH 1220;
  - MATH 1700 or MATH 1710 may be taken in place of MATH 1232.
  - MATH 1200 may be taken in place of MATH 1240, but these courses are not equivalent. i.e. students should note that MATH 1240 is a prerequisite to some 2nd year mathematics courses of which MATH 1200 is not a prerequisite.

## Mathematics - Economics Joint, B.Sc. Honours

### Mathematics - Economics Joint Honours Entrance, Continuation, and Graduation Requirements

The Department of Mathematics along with the Department of Economics (Faculty of Arts) offer a joint Honours program for students wishing in depth study in Mathematics and Economics. Refer to the Faculty of Arts for Economics course listings (p. ).

**To enter** the Joint Honours Mathematics - Economics program, the student must have a minimum grade of "B" in: ECON 1010 and ECON 1020 (or ECON 1210 and ECON 1220), either MATH 1232 or MATH 1690 (or a minimum grade of "A" in MATH 1700) and have satisfied the Faculty of Science requirements for entry to the honours program.

**To continue** in the Joint Honours Mathematics - Economics program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** with the B.Sc. Honours degree, a student must achieve a minimum 3.00 DGPA and achieve a minimum grade of "C" on all courses that make up the 120 credit hours of the degree.

## Degree Requirements

### Joint Honours

Course	Title	Hours
<b>Year 1</b>		
One of A or B:		6
A:		
ECON 1010	Introduction to Microeconomic Principles (B)	
ECON 1020	Introduction to Macroeconomic Principles (B)	
B:		
ECON 1210	Introduction to Canadian Economic Issues and Policies (B)	
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies (B)	
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (B) <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
STAT 1150	Introduction to Statistics and Computing <sup>1, 2</sup>	3
COMP 1010	Introductory Computer Science <sup>1, 2</sup>	3
6 credit hours of electives, including the required "W" course <sup>3</sup>		6
<b>Hours</b>		<b>30</b>

### Year 2

ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3

MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
9 credit hours of approved electives <sup>3</sup>		9
<b>Hours</b>		<b>30</b>
<b>Years 3-4</b>		
ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
ECON 3040	Introduction to Econometrics <sup>2</sup>	3
MATH 2030	Combinatorics 1	3
MATH 2160	Numerical Analysis 1	3
MATH 3320	Algebra 2	3
MATH 3340	Complex Analysis 1	3
MATH 3440	Ordinary Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3472	Real Analysis 3	3
24 credit hours of approved Economics courses <sup>4</sup>		24
3 credit hours from:		3
MATH 3420	Numerical Analysis 2	
MATH 3460	Partial Differential Equations	
MATH 3610	Introduction to Mathematical Modelling	
MATH 4370	Linear Algebra and Matrix Analysis	
Any Mathematics course at the 4000 level		
3 credit hours of Mathematics courses at the 3000 or 4000 level		3
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (A) or MATH 1300 (A) in place of MATH 1220,
- MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230,
- MATH 1700 (A) or MATH 1710 (A) in place of MATH 1232,
- MATH 1690 (B) in place of MATH 1230 and MATH 1232.

With permission from the department, students may be able to substitute STAT 1000 and STAT 2000 in place of STAT 1150.

<sup>2</sup> Some courses may be taken in a different year than indicated; STAT 1150, COMP 1010, ECON 3040 may be taken in Year 2. The normal prerequisite for ECON 3040 is ECON 2040 (or the former ECON 3170), which will be waived for students in this program who have completed Year 1.

<sup>3</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

<sup>4</sup> Of the 24 credit hours in electives in Economics in Years 3 and 4, no more than 6 credit hours may be at the 2000 level or below and at least 6 credit hours must be at the 4000 level. Students are encouraged to take ECON 4010, ECON 4020 and ECON 4040.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point

Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work

term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Mathematics - Physics and Astronomy Joint, B.Sc. Honours

### Mathematics - Physics and Astronomy Joint Honours Entrance, Continuation, and Graduation Requirements (Including Co-operative Option)

**To enter** the Joint Honours Mathematics - Physics Honours program the student must have a minimum grade of "B" in: MATH 1232 or MATH 1690 (or a minimum grade of "A" in MATH 1700), PHYS 1050 (or "B+" in PHYS 1020) and PHYS 1070 (or "B+" in PHYS 1030).

**To continue** in the Honours program, students must maintain a minimum DGPA of 3.00, complete a minimum of 9 credit hours each Fall and Winter Term.

**To graduate** with the B.Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and a minimum grade of "C+" in each of the Honours Program Specific courses<sup>1</sup>, and a minimum grade of "C" on all remaining courses that contribute to the 120 credit hours of the degree.

<sup>1</sup> The Honours Program Specific courses consist of all the Physics and Astronomy courses listed in the program grid (p. 907), with the exception of PHYS 1020, PHYS 1050, PHYS 1030 and PHYS 1070.

## Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 908) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

## Degree Requirements

### Joint Honours (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (B) <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
One of: <sup>2</sup>		3
PHYS 1050	Physics 1: Mechanics (B)	
PHYS 1020	General Physics 1 (B+)	
One of:		3
PHYS 1070	Physics 2: Waves and Modern Physics (B) <sup>2</sup>	
PHYS 1030	General Physics 2 (B+)	
STAT 1150	Introduction to Statistics and Computing <sup>3</sup>	3
COMP 1012	Computer Programming for Scientists and Engineers	3
6 credit hours from the Faculty of Arts, which should include the required "W" course <sup>4</sup>		6
	<b>Hours</b>	<b>30</b>
<b>Year 2</b>		
PHYS 2260 or PHYS 2610	Optics or Circuit Theory and Introductory Electronics	3
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2600	Electromagnetic Field Theory	3
PHYS 2650	Classical Mechanics 1 <sup>5</sup>	3
3 credit hours of Physics <sup>6</sup>		3
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
	<b>Hours</b>	<b>30</b>
<b>Year 3</b>		
MATH 3340	Complex Analysis 1	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3472	Real Analysis 3	3
PHYS 3670	Classical Thermodynamics <sup>5</sup>	3
PHYS 3650	Classical Mechanics 2 <sup>5,7</sup>	3
PHYS 3630	Electro - and Magnetostatic Theory <sup>5</sup>	3
PHYS 3386	Quantum Mechanics 2 <sup>5</sup>	3
3 credit hours from 3000 and 4000 level Physics Honours courses		3
	<b>Hours</b>	<b>30</b>

**Years 3-4****Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>

**Year 4**

MATH 3320	Algebra 2	3
MATH 3322	Algebra 3	3
3 credit hours of 4000 level Math		3
PHYS 3430	Honours Physics Laboratory	6
PHYS 4680	Statistical Mechanics <sup>7</sup>	3
6 credit hours from the Department of Mathematics or the Department of Physics & Astronomy:		6
MATH 2030	Combinatorics 1	
MATH 2070	Graph Theory 1	
MATH 2160	Numerical Analysis 1	
MATH 2170	Number Theory 1	
Any 3000 or 4000 level Mathematics or Physics courses		
6 credit hours of electives <sup>6</sup>		6
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (A) or MATH 1300 (A) in place of MATH 1220,
- MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230,
- MATH 1700 (A) or MATH 1710 (A) in place of MATH 1232,
- MATH 1690 (B) in place of MATH 1230 and MATH 1232.

<sup>2</sup> Students are advised to take PHYS 1050 and PHYS 1070.

<sup>3</sup> Students may take STAT 1000 and STAT 2000 in lieu of STAT 1150.

<sup>4</sup> As there are no electives in Year 2 of the program, students should complete the university written English requirement in Year 1. If not completed in Year 1, a "W" course must be completed prior to Year 3 in addition to the required Year 2 courses.

<sup>5</sup> The corequisite or prerequisite of PHYS 2496 is waived for students in this program. It is recommended that students audit PHYS 2496 in second year and PHYS 3496 in third year.

<sup>6</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090, and PHYS 1018 may not count towards the 120 credit hours required for this degree.

<sup>7</sup> The pre- or corequisite of PHYS 3496 is waived for students in this program. It is recommended that students audit PHYS 2496 in second year and PHYS 3496 in third year.

**IMPORTANT:** The joint Honours program need not be completed in the manner prescribed in the grid above. The grid indicates the recommended arrangement of the required courses and is meant to be a guide around which students can plan their program.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

## Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

## Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

## Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass"

for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

## Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by

the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Microbiology

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## Microbiology

Microbiology is the study of microorganisms such as bacteria, viruses, fungi, protozoa, and algae, and their interactions with the environment. It is also an area of study that plays a pivotal role in understanding other life science disciplines, such as medicine, agriculture, ecology, and pharmacy. Molecular and systems microbiology are part of the program, which spans applied, environmental and medical microbiology.

### Microbiology Prerequisite Information

Students are advised to take courses in the year suggested in the program grids; otherwise difficulties may arise with timetabling and prerequisite requirements. Students are responsible for all prerequisites and corequisites of the courses required or selected in all programs. Since Chemistry courses form an integral part of all Microbiology programs, students should note that Grade 12 mathematics and chemistry are prerequisite to CHEM 1100. Students will also require Biology 40S (or equivalent) and any Grade 12 mathematics course (or equivalent) for entry to BIOL 1020 (the prerequisite for BIOL 1030 and MBIO 1010).

### Biochemistry and Biotechnology <sup>1</sup> Programs

The Department of Microbiology, in conjunction with the Department of Chemistry, offers Joint Honours programs, Joint Honours Co-operative Option programs, Joint four year Major programs and Joint four year Major Co-operative Option programs in Biochemistry and Biotechnology<sup>1</sup>. See Biochemistry Program (p. 814) and Biotechnology Program (p. 840)<sup>1</sup> for full details.

<sup>1</sup> As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Microbiology, B.Sc. Honours (p. 910)	4	120	Yes
Microbiology, B.Sc. Major (p. 915)	4	120	Yes
Microbiology Minor (p. 919)		30	

### BIOCHEMISTRY

Joint Microbiology and Chemistry Programs: See Biochemistry (p. 814)

### BIOTECHNOLOGY <sup>1</sup>

Joint Microbiology and Chemistry Programs: See Biotechnology (p. 840)

<sup>1</sup> As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.

## Microbiology, B.Sc. Honours Microbiology Honours Entrance, Continuation, and Graduation Requirements

To enter the Honours program in Microbiology, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in MBIO 1010, and a minimum grade of "C+" in CHEM 1110. CHEM 1120, BIOL 1020, BIOL 1030, STAT 1150 (or STAT 1000), and the 3 credit hours of specified

Mathematics or Physics are program requirements and students are strongly encouraged to complete these courses in first year.

**To continue** in the Microbiology Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** from the Microbiology Honours program students must achieve a minimum DGPA of 3.00 and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

Students who wish to elect CHEM 2600, CHEM 3600 or CHEM 2510 as options should note the prerequisites in making a choice of mathematics courses.

CHEM 2100 must be taken before MBIO 2710 (CHEM 2710). Courses (MBIO 2700 and CHEM 2700) and (MBIO 2710 and CHEM 2710) are the same and credit cannot be held for both. Microbiology students will normally register in MBIO 2700 and MBIO 2710, but CHEM 2700 and CHEM 2710 will be regarded as equivalents.

By careful choice of electives, programs may be selected giving emphasis to various areas of Microbiology, e.g., Biochemistry and Molecular Biology or Environmental and Ecological Microbiology. In choosing optional courses, students should be aware of any prerequisite requirements.

## Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 913) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

Before beginning their first co-op work term, students are required to complete the first and second year requirements of the program, in addition to MBIO 2710 (CHEM 2710) and CHEM 2720, MBIO 3010 and MBIO 3410.

## Degree Requirements

### Honours

Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
MBIO 1010	Microbiology I (B) <sup>2</sup>	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
<b>Hours</b>		<b>18</b>

#### Years 1-2

In Year 1 or Year 2 the following must be completed:

3 credit hours of Mathematics or Physics chosen from:	3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>

MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	
<b>One of:</b>		<b>3</b>
STAT 1150	Introduction to Statistics and Computing <sup>5</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>5</sup>	
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
6 credit hours of electives		6
3 credit hours from Microbiology courses or from the Option List (see below)		3

**Hours** **21**

#### Year 2

MBIO 2020	Microbiology II	3
MBIO/CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
MBIO/CHEM 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways <sup>6</sup>	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3

**Hours** **21**

#### Year 3

MBIO 3010	Mechanisms of Microbial Disease	3
MBIO 3032	Microbiology III: Physiology and Metabolism	3
MBIO 3410	Molecular Biology	3
MBIO 3600	Molecular Microbiology Techniques	3
MBIO 3700	Experimental Microbiology Laboratory	3

**Hours** **15**

#### Years 3-4

24 credit hours of Microbiology courses including (a single course may meet more than one of these requirements):

- One course from each of Lists A, B, C, D, and E (see below); <sup>7</sup>	
- 12 credit hours at the 4000-level;	
- 3 credit hour course with a laboratory or tutorial (List F) <sup>7</sup>	

12 credit hours from the Option List (see below)	12
3 credit hours of electives	3

**Hours** **39**

#### Year 4

MBIO 4530	Project in Microbiology	6
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**Hours** **6**

**Total Hours** **120**

<sup>1</sup> MBIO 1220 and MBIO 1410 cannot be used to satisfy course requirements in a Major or Honours program.

<sup>2</sup> MBIO 1010 may be completed in either year 1 or year 2. It is recommended that it be completed in first year.

<sup>3</sup> CHEM 1126 may be taken in place of CHEM 1120.



- <sup>4</sup>
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
  - MATH 1230, MATH 1510, MATH 1520 or MATH 1690 may be taken in place of MATH 1500.
  - MATH 1200 may be used in place of MATH 1240.

<sup>5</sup> STAT 1150 is recommended over STAT 1000.

<sup>6</sup> It is strongly recommended that MBIO 2710 (or CHEM 2710) and CHEM 2720 be completed prior to Year 3 as they are prerequisite to many upper level MBIO courses.

- <sup>7</sup>
- **List A:** MBIO 2230, MBIO 3282, MBIO 3472, MBIO 4480, MBIO 4520;
  - **List B:** MBIO 2420, MBIO 3000, MBIO 4020, MBIO 4300, MBIO 4410, MBIO 4520;
  - **List C:** MBIO 3430, MBIO 4442, MBIO 4700;
  - **List D:** MBIO 4602, MBIO 4612, MBIO 4672;
  - **List E:** MBIO 3450, MBIO 3460, MBIO 4540;
  - **List F:** MBIO 3460, MBIO 4442, MBIO 4480, MBIO 4520.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Honours Co-operative Option

Note<sup>1,8</sup>

Course	Title	Hours
<b>Year 1</b>		
MBIO 1010	Microbiology I (B) <sup>2</sup>	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 1-2</b>		
In Year 1 or Year 2 the following must be completed:		
3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020	General Physics 1	
or PHYS 1050	or Physics 1: Mechanics	
One of:		3
STAT 1150	Introduction to Statistics and Computing <sup>5</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>5</sup>	
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
6 credit hours of electives		6
3 credit hours from Microbiology courses or from the Option List (see below)		3
<b>Hours</b>		<b>21</b>
<b>Year 2</b>		
MBIO 2020	Microbiology II	3
MBIO/CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3

MBIO/CHEM 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways <sup>6</sup>	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
<b>Hours</b>		<b>21</b>

### Year 3

MBIO 3010	Mechanisms of Microbial Disease <sup>8</sup>	3
MBIO 3032	Microbiology III: Physiology and Metabolism	3
MBIO 3410	Molecular Biology <sup>8</sup>	3
MBIO 3600	Molecular Microbiology Techniques	3
MBIO 3700	Experimental Microbiology Laboratory	3
<b>Hours</b>		<b>15</b>

### Years 3-4

27 credit hours of Microbiology courses including (a single course may meet more than one of these requirements):

- One course from each of Lists A, B, C, D, and E (see below); <sup>7</sup>	
- 15 credit hours at the 4000-level;	
- 3 credit hour course with a laboratory or tutorial (List F). <sup>7</sup>	
15 credit hours from the Option List (see below)	15
3 credit hours of electives	3

### Co-op Requirements:

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>45</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> MBIO 1220 and MBIO 1410 cannot be used to satisfy course requirements in a Major or Honours program.

<sup>2</sup> MBIO 1010 may be completed in either year 1 or year 2. It is recommended that it be completed in first year.

<sup>3</sup> CHEM 1126 may be taken in place of CHEM 1120.

- <sup>4</sup>
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
  - MATH 1230, MATH 1510, MATH 1520 or MATH 1690 may be taken in place of MATH 1500.
  - MATH 1200 may be used in place of MATH 1240.

<sup>5</sup> STAT 1150 is recommended over STAT 1000.

<sup>6</sup> It is strongly recommended that MBIO 2710 (or CHEM 2710) and CHEM 2720 be completed prior to Year 3 as they are prerequisite to many upper level MBIO courses.

- <sup>7</sup>
- **List A:** MBIO 2230, MBIO 3282, MBIO 3472, MBIO 4480, MBIO 4520;
  - **List B:** MBIO 2420, MBIO 3000, MBIO 4020, MBIO 4300, MBIO 4410, MBIO 4520;
  - **List C:** MBIO 3430, MBIO 4442, MBIO 4700;
  - **List D:** MBIO 4602, MBIO 4612, MBIO 4672;
  - **List E:** MBIO 3450, MBIO 3460, MBIO 4540;
  - **List F:** MBIO 3460, MBIO 4442, MBIO 4480, MBIO 4520.

<sup>8</sup> Students in the Co-operative Option must complete MBI0 3010 and MBI0 3410 before their first employment term.

(Letters in brackets indicate minimum prerequisite standing for further study.)

### Option List for All Microbiology Programs

#### Agroecology

Course	Title	Hours
AGEC 2370	Principles of Ecology	3

#### Biological Sciences

Course	Title	Hours
BIOL 2242	The Flowering Plants	3
BIOL 2260	Biology of Fungi and Lichens	3
BIOL 2300	Principles of Ecology	3
BIOL 2380	Introductory Toxicology	3
BIOL 2410	Human Physiology 1	3
BIOL 2420	Human Physiology 2	3
BIOL 3290	Medicinal and Hallucinogenic Plants	3
BIOL 3370	Limnology	3
BIOL 3400	Plant Physiology	3
BIOL 3452	Environmental Plant Physiology	3
BIOL 3470	Environmental Physiology of Animals 1	3
BIOL 3472	Environmental Physiology of Animals 2	3
BIOL 3500	Genetics 2	3
BIOL 3542	Developmental Biology	3
BIOL 3560	Comparative Animal Histology	3
BIOL 4480	Comparative Endocrinology	3
BIOL 4540	Developmental Molecular Biology	3
BIOL 4542	Genes and Development	3
BIOL 4544	Advanced Developmental and Cellular Biology	3
BIOL 4554	Molecular Biology Techniques for Eukaryotes - DNA	3
BIOL 4556	Molecular Biology Techniques for Eukaryotes - RNA	3
BIOL 4560	Microtechnique	3

#### Chemistry

Course	Title	Hours
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2300	Inorganic Chemistry 1: Structure and Applications	3
CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2600	Physical Chemistry 1	3
CHEM 3100	Organic Chemistry 3: Advanced Organic Synthesis	3
CHEM 3500	Instrumental Analysis	3
CHEM 3600	Physical Chemistry 2	3
CHEM 3700	Biophysical Chemistry	3
CHEM 4590	Bioanalytical Methods	3
CHEM 4360	Signalling and Regulation of Gene Expression	3
CHEM 4370	Glycobiology and Protein Activation	3
CHEM 4620	Biochemistry of Nucleic Acids	3

CHEM 4630	Biochemistry of Proteins	3
CHEM 4670	Drug Design and Drug Discovery	3

#### Environmental Science

Course	Title	Hours
ENVR 2180	Introductory Toxicology	3

#### Food Sciences

Course	Title	Hours
FOOD 4150	Food Microbiology 1	3

#### General Agriculture

Course	Title	Hours
AGRI 2180	Introductory Toxicology	3

#### Pharmacology

Course	Title	Hours
PHAC 4030	Drugs in Human Disease I	3
PHAC 4040	Drugs in Human Disease II	3

#### Plant Science

Course	Title	Hours
PLNT 3400	Plant Physiology	3

#### Statistics

Course	Title	Hours
STAT 2000	Basic Statistical Analysis 2	3
or STAT 2150	Statistics and Computing	

**Note:** Other suitable options may be selected with permission of the department.

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy

- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course

prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Microbiology, B.Sc. Major

### Microbiology Major Entrance, Continuation, and Graduation Requirements

**To enter** the Major Degree program in Microbiology, a student must have completed at least 24 credit hours with a minimum DGPA of 2.00, and also obtained a minimum grade of "C+" in MBIO 1010 and in CHEM 1110. BIOL 1020, BIOL 1030, STAT 1150 (or STAT 1000) and the 3 credit hours of specified Mathematics or Physics are program requirements and students are strongly urged to complete these courses in first year.

\* Students interested in studying Microbiology should note that Grade 12 mathematics and chemistry are prerequisite to CHEM 1100. Students will also require Biology 40S (or equivalent) and any Grade 12 mathematics course (or equivalent) for entry to BIOL 1020 (the prerequisite for BIOL 1030 and MBIO 1010).

**To continue** in the Microbiology Major Degree, students must maintain a minimum DGPA of 2.00.

**To graduate** from, the 4-year Major degree program in Microbiology, students are required to obtain a minimum DGPA of 2.00.

Potential entrants to this program should also note the following:

- Students who wish to elect CHEM 2600, CHEM 3600 or CHEM 2510 as options should note the prerequisites in making a choice of mathematics courses.
- CHEM 2100 must be taken before MBIO 2710 (CHEM 2710). Courses (MBIO 2700 and CHEM 2700) and (MBIO 2710 and CHEM 2710) are the same and credit cannot be held for both. Microbiology students will normally register in MBIO 2700 and MBIO 2710, but CHEM 2700 and CHEM 2710 will be regarded as equivalents in the four year Major program.
- Students must note course and grade prerequisites when selecting 3000 and 4000 level Microbiology courses.
- Microbiology MBIO 4530 is not available in this program without special permission.

By careful choice of electives, programs may be selected giving emphasis to various areas of Microbiology, e.g., Biochemistry and Molecular Biology or Environmental and Ecological Microbiology. In choosing optional courses, students should be aware of any prerequisite requirements.

The listed requirements are minimum requirements. Students are reminded that should they wish to take further courses in Microbiology, they are at liberty to do so within the degree regulations.

### Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 917) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Before beginning their first co-op work term, students are required to complete the first and second year requirements of the program, in addition to MBIO 2710 (CHEM 2710) and CHEM 2720, MBIO 3010 and MBIO 3410.

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected)<sup>1,7,8</sup>

Course	Title	Hours
<b>Year 1</b>		
MBIO 1010	Microbiology I (C+) <sup>2</sup>	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques <sup>3</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 1-2</b>		
In Year 1 or Year 2 the following must be completed:		
3 credit hours of Mathematics or Physics chosen from:		3
MATH 1240	Elementary Discrete Mathematics <sup>4</sup>	
MATH 1300	Vector Geometry and Linear Algebra <sup>4</sup>	
MATH 1500	Introduction to Calculus <sup>4</sup>	
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	
One of:		3
STAT 1150	Introduction to Statistics and Computing <sup>5</sup>	
STAT 1000	Basic Statistical Analysis 1 <sup>5</sup>	
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
9 credit hours of electives		9
<b>Hours</b>		<b>21</b>
<b>Year 2</b>		
MBIO 2020	Microbiology II	3
MBIO/CHEM 2700	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
MBIO/CHEM 2710	Biochemistry 2: Catabolism, Synthesis, and Information Pathways <sup>6</sup>	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
<b>Hours</b>		<b>21</b>
<b>Years 3-4</b>		
MBIO 3010	Mechanisms of Microbial Disease <sup>7</sup>	3
MBIO 3032	Microbiology III: Physiology and Metabolism	3
MBIO 3410	Molecular Biology <sup>7</sup>	3
MBIO 3600	Molecular Microbiology Techniques	3

MBIO 3700	Experimental Microbiology Laboratory	3
24 credit hours of Microbiology courses including 15 credit hours at the 4000 level		24
9 credit hours of Microbiology courses or courses chosen from the Option List (see below) <sup>9</sup>		9
12 credit hours of electives		12
<b>Co-op Requirements (if selected):<sup>7</sup></b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>60</b>
<b>Total Hours</b>		<b>120</b>

- MBIO 1220 and MBIO 1410 cannot be used to satisfy course requirements in a Major or Honours program.
- MBIO 1010 may be completed in either Year 1 or Year 2. It is recommended that it be completed in the first year.
- CHEM 1126 may be taken in place of CHEM 1120.
- MATH 1220 or MATH 1310 may be taken in place of MATH 1300;
  - MATH 1230, MATH 1510, MATH 1520 or MATH 1690 may be taken in place of MATH 1500.
  - MATH 1200 may be used in place of MATH 1240.
- STAT 1150 is recommended over STAT 1000.
- It is strongly recommended that MBIO 2710 (or CHEM 2710) and CHEM 2720 be completed prior to Year 3 as they are prerequisite to many upper level MBIO courses.
- Students in the Co-operative Option must completed MBIO 3010 and MBIO 3410 before their first employment term.
- IMPORTANT: The four year Major program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.
- MBIO 4530 may be selected only by special permission.

(Letters in brackets indicate minimum prerequisite standing for further study.)

### Option List for All Microbiology Programs

#### Agroecology

Course	Title	Hours
AGEC 2370	Principles of Ecology	3

#### Biological Sciences

Course	Title	Hours
BIOL 2242	The Flowering Plants	3
BIOL 2260	Biology of Fungi and Lichens	3
BIOL 2300	Principles of Ecology	3
BIOL 2380	Introductory Toxicology	3
BIOL 2410	Human Physiology 1	3
BIOL 2420	Human Physiology 2	3
BIOL 3290	Medicinal and Hallucinogenic Plants	3
BIOL 3370	Limnology	3
BIOL 3400	Plant Physiology	3
BIOL 3452	Environmental Plant Physiology	3

BIOL 3470	Environmental Physiology of Animals 1	3
BIOL 3472	Environmental Physiology of Animals 2	3
BIOL 3500	Genetics 2	3
BIOL 3542	Developmental Biology	3
BIOL 3560	Comparative Animal Histology	3
BIOL 4480	Comparative Endocrinology	3
BIOL 4540	Developmental Molecular Biology	3
BIOL 4542	Genes and Development	3
BIOL 4544	Advanced Developmental and Cellular Biology	3
BIOL 4554	Molecular Biology Techniques for Eukaryotes - DNA	3
BIOL 4556	Molecular Biology Techniques for Eukaryotes - RNA	3
BIOL 4560	Microtechnique	3

### Chemistry

Course	Title	Hours
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2300	Inorganic Chemistry 1: Structure and Applications	3
CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2600	Physical Chemistry 1	3
CHEM 3100	Organic Chemistry 3: Advanced Organic Synthesis	3
CHEM 3500	Instrumental Analysis	3
CHEM 3600	Physical Chemistry 2	3
CHEM 3700	Biophysical Chemistry	3
CHEM 4590	Bioanalytical Methods	3
CHEM 4360	Signalling and Regulation of Gene Expression	3
CHEM 4370	Glycobiology and Protein Activation	3
CHEM 4620	Biochemistry of Nucleic Acids	3
CHEM 4630	Biochemistry of Proteins	3
CHEM 4670	Drug Design and Drug Discovery	3

### Environmental Science

Course	Title	Hours
ENVR 2180	Introductory Toxicology	3

### Food Sciences

Course	Title	Hours
FOOD 4150	Food Microbiology 1	3

### General Agriculture

Course	Title	Hours
AGRI 2180	Introductory Toxicology	3

### Pharmacology

Course	Title	Hours
PHAC 4030	Drugs in Human Disease I	3
PHAC 4040	Drugs in Human Disease II	3

### Plant Science

Course	Title	Hours
PLNT 3400	Plant Physiology	3

### Statistics

Course	Title	Hours
STAT 2000	Basic Statistical Analysis 2	3
or STAT 2150	Statistics and Computing	

**Note:** Other suitable options may be selected with permission of the department.

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess

sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Microbiology Minor

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
MBIO 1010	Microbiology I (C)	3
BIOL 1020	Biology 1: Principles and Themes (C)	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (C)	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	3
CHEM 1120	Introduction to Chemistry Techniques (C) <sup>1</sup>	3
<b>Hours</b>		<b>18</b>

### Years 2-4

12 credit hours of Microbiology at the 2000 and (or) 3000 level	12
<b>Hours</b>	<b>12</b>
<b>Total Hours</b>	<b>30</b>

<sup>1</sup> CHEM 1126 may be taken in place of CHEM 1120.

(Letters in brackets indicate minimum prerequisite standing for further study.)



## Physics and Astronomy

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## Physics and Astronomy

Physics is the discipline that by experiment and logical analysis examines the laws of nature that form the basis for all relationships and interactions between matter and energy. Knowledge of physics is also essential in other natural sciences, such as chemistry and geology, and to professions such as engineering, medicine and dentistry. Astronomy, the other focus of this department, examines the universe, the earth and the planets, as well as phenomena such as quasars, pulsars, comets, and asteroids; a planetarium and an astronomical observatory are part of this program. In both Physics and Astronomy mathematical skills are developed simultaneously.

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Physics and Astronomy, B.Sc. Honours (p. 920)	4	120	Yes
Physics and Astronomy, B.Sc. Major (p. 925)	4	120	Yes
Physics and Astronomy Minor (p. 928)		18	

Chemistry - Physics Joint, B.Sc. Honours (p. 854)

Computer Science - Physics & Astronomy Joint, B.Sc. Honours (p. 865)

Mathematics - Physics & Astronomy Joint, B.Sc. Honours (p. 907)

## Physics and Astronomy, B.Sc. Honours

### Physics and Astronomy Honours Entrance, Continuation, and Graduation Requirements

**To enter** the Honours programs in Physics and Astronomy, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in PHYS 1070, or a "B+" in PHYS 1030. Students are strongly encouraged to complete MATH 1300, MATH 1500 and MATH 1700 in Year 1. Not only are these courses required in the Physics and Astronomy programs, they are required prerequisites to several second year Physics and Astronomy required courses.

**To continue** in the Physics and Astronomy Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and minimum grade of "C" in each course that contributes to the 120 credit hours of the degree.

The Department of Physics and Astronomy and the Department of Electrical and Computer Engineering have defined focus areas of study within their own programs. Students taking the courses recommended for these focus areas will find it easier to transfer between programs in Physics and Astronomy and Electrical and Computer Engineering programs. Students interested in obtaining more information about transferring to a Physics program from Electrical Engineering should consult with the Head of the Physics department.

Variations in any of the Physics and Astronomy programs may be possible, but must be approved by the head of the department and the Science general office.

### Joint Honours

The Department of Physics and Astronomy offers joint Honours programs in conjunction with the Departments of Mathematics, Computer Science, and Chemistry.

## Programs

There are a number of awards — the Coish, the C.P. Loewen, the Neamtan, the Roulston, and the Sen Scholarships — available in this program.

### Double Honours

The Department of Physics and Astronomy offers a double honours degree in conjunction with the Biochemistry program.

### Honours Co-operative Option

A co-operative education option is available to Honours students. Students should refer to the Co-operative Education (p. 923) for further information on the Co-op programs.

The course, grade requirements and the minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for the regular Honours program.

## Degree Requirements

### Honours: Astronomy and Astrophysics (Including Co-operative Option if Selected)

Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
One of: <sup>2</sup>		3
PHYS 1050	Physics 1: Mechanics	
PHYS 1020	General Physics 1	
One of: <sup>2</sup>		3
PHYS 1070	Physics 2: Waves and Modern Physics (B)	

PHYS 1030	General Physics 2 (B+)	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
MATH 1700	Calculus 2 <sup>2</sup>	3
ASTR 1810	Introduction to Astronomy: The Magnificent Universe	3
COMP 1012	Computer Programming for Scientists and Engineers <sup>3</sup>	3
6 credit hours from the Faculty of Arts including the "W" requirement		6
3 credit hours of electives <sup>4,5</sup>		3
<b>Hours</b>		<b>30</b>

**Year 2**

PHYS 2600	Electromagnetic Field Theory	3
PHYS 2650	Classical Mechanics 1	3
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2496	Mathematical Physics 1	3
PHYS 2260	Optics	3
or PHYS 2610	or Circuit Theory and Introductory Electronics	
ASTR 2000	Foundations of Astrophysics	3
ASTR 2070	Observational Astronomy Techniques	3
MATH 2090	Linear Algebra 2	3
MATH 2720	Multivariable Calculus	3
3 credit hours of electives <sup>5,6</sup>		3
<b>Hours</b>		<b>30</b>

**Year 3**

PHYS 3386	Quantum Mechanics 2	3
PHYS 3430	Honours Physics Laboratory	6
PHYS 3496	Mathematical Physics 2	3
PHYS 3630	Electro - and Magnetostatic Theory	3
PHYS 3650	Classical Mechanics 2	3
PHYS 3670	Classical Thermodynamics	3
ASTR 3180	Stars	3
ASTR 3230	The Phenomenology of Galaxies	3
3 credit hours of electives <sup>5,6,7</sup>		3
<b>Hours</b>		<b>30</b>

**Years 3-4****Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>

**Year 4**

PHYS 4386	Quantum Mechanics 3	3
PHYS 4646	Electro - and Magnetodynamics and Special Relativity	3
PHYS 4676	Honours Thesis - Proposal and Preparation	3
PHYS 4678	Honours Thesis - Dissertation	3
PHYS 4680	Statistical Mechanics	3

One of: 3

PHYS 4010	General Relativity and Gravitation	
PHYS 4250	Computational Physics	
PHYS 4516	Introduction to Nuclear and Particle Physics	

Two of: 6

ASTR 4020	Cosmology and Black Holes	
ASTR 4100	High-Energy Astrophysics	
ASTR 4200	Radio Astronomy	
ASTR 4400	Magnetohydrodynamics, Astrophysical Plasmas, and the Interstellar Medium	

6 credit hours of electives<sup>5,6</sup> 6

<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students must achieve a minimum grade of "C" in all courses contributing to the Honours program.

- <sup>2</sup>
- PHYS 1050 and PHYS 1070 are recommended.
  - MATH 1220 may be taken in place of MATH 1300;
  - MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500;
  - MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
  - MATH 1690 may be taken in place of MATH 1500 and MATH 1700.

<sup>3</sup> Students who have already taken COMP 1010 before joining the program may count COMP 1010 in lieu of COMP 1012. However, students who have not taken COMP 1010 before entering the program must then take COMP 1012.

<sup>4</sup> ASTR 1830 is recommended.

<sup>5</sup> PHYS 1018 may not count towards the 120 credit hours required for this degree.

<sup>6</sup> Although they are not required courses in the Physics programs, MATH 2080, MATH 2180, and MATH 3340 are recommended electives for the Physics Honours and Four Year Major degrees.

<sup>7</sup> ASTR 3070 is recommended.

IMPORTANT: The Honours program need not be completed in the manner prescribed in the grid above. The grid indicates the recommended arrangement of the required courses and is meant to be a guide around which students can plan their program.

(Letters in brackets refer to minimum prerequisite standing required for further study.)

## Honours: Physics (Including Co-operative Option if Selected)

Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
One of: <sup>2</sup>		3
PHYS 1050	Physics 1: Mechanics	
PHYS 1020	General Physics 1	
One of: <sup>2</sup>		3
PHYS 1070	Physics 2: Waves and Modern Physics (B)	
PHYS 1030	General Physics 2 (B+)	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	3

MATH 1500	Introduction to Calculus <sup>2</sup>	3
MATH 1700	Calculus 2 <sup>2</sup>	3
COMP 1012	Computer Programming for Scientists and Engineers <sup>3</sup>	3
6 credit hours from the Faculty of Arts including the "W" requirement		6
6 credit hours of electives <sup>4</sup>		6
<b>Hours</b>		<b>30</b>

**Year 2**

PHYS 2260 or PHYS 2610	Optics or Circuit Theory and Introductory Electronics	3
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2496	Mathematical Physics 1	3
PHYS 2600	Electromagnetic Field Theory	3
PHYS 2650	Classical Mechanics 1	3
MATH 2090	Linear Algebra 2	3
MATH 2720	Multivariable Calculus	3
9 credit hours of electives <sup>4,5</sup>		9
<b>Hours</b>		<b>30</b>

**Year 3**

PHYS 3386	Quantum Mechanics 2	3
PHYS 3430	Honours Physics Laboratory	6
PHYS 3650	Classical Mechanics 2	3
PHYS 3670	Classical Thermodynamics	3
PHYS 3496	Mathematical Physics 2	3
PHYS 3630	Electro - and Magnetostatic Theory	3
9 credit hours of electives <sup>4,5</sup>		9
<b>Hours</b>		<b>30</b>

**Years 3-4****Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>

**Year 4**

PHYS 4676	Honours Thesis - Proposal and Preparation	3
PHYS 4678	Honours Thesis - Dissertation	3
PHYS 4386	Quantum Mechanics 3	3
PHYS 4646	Electro - and Magnetodynamics and Special Relativity	3
PHYS 4680	Statistical Mechanics	3
6 credit hours of 4000-level Physics		6
9 credit hours of electives <sup>4,5</sup>		9
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students must achieve a minimum grade of "C" in all courses contributing to the Honours program.

- <sup>2</sup>
- PHYS 1050 and PHYS 1070 are recommended.
  - MATH 1220 may be taken in place of MATH 1300;
  - MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500;
  - MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
  - MATH 1690 may be taken in place of MATH 1500 and MATH 1700.

<sup>3</sup> Students who have already taken COMP 1010 before joining the program may count COMP 1010 in lieu of COMP 1012. However, students who have not taken COMP 1010 before entering the program must then take COMP 1012.

<sup>4</sup> PHYS 1018 may not count towards the 120 credit hours required for this degree.

<sup>5</sup> Although they are not required courses in the Physics programs, MATH 2080, MATH 2180, and MATH 3340 are recommended electives for the Physics Honours and Four Year Major degrees.

IMPORTANT: The Honours program need not be completed in the manner prescribed in the grid above. The grid indicates the recommended arrangement of the required courses and is meant to be a guide around which students can plan their program.

(Letters in brackets refer to minimum prerequisite standing required for further study.)

## Honours: Medical and Biological (Including Co-operative Option if Selected)

Note<sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
One of: <sup>2</sup>		3
PHYS 1050	Physics 1: Mechanics	
PHYS 1020	General Physics 1	
One of: <sup>2</sup>		3
PHYS 1070	Physics 2: Waves and Modern Physics (B)	
PHYS 1030	General Physics 2 (B+)	
MATH 1300	Vector Geometry and Linear Algebra <sup>2</sup>	3
MATH 1500	Introduction to Calculus <sup>2</sup>	3
MATH 1700	Calculus 2 <sup>2</sup>	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions	3
COMP 1012	Computer Programming for Scientists and Engineers <sup>3</sup>	3
6 credit hours from the Faculty of Arts including the "W" requirement		6
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2496	Mathematical Physics 1	3
PHYS 2600	Electromagnetic Field Theory	3
PHYS 2610	Circuit Theory and Introductory Electronics	3
PHYS 2650	Classical Mechanics 1	3
PHYS 2270 or PHYS 2272	Introductory Physics for Life Sciences: Fundamentals and Applications or Physics for Medicine & Biology	3

MATH 2090	Linear Algebra 2	3
MATH 2720	Multivariable Calculus	3
6 credit hours of electives <sup>4</sup>		6
<b>Hours</b>		<b>30</b>

**Year 3**

PHYS 3220	Medical Physics and Physiological Measurement	3
PHYS 3386	Quantum Mechanics 2	3
PHYS 3430	Honours Physics Laboratory	6
PHYS 3496	Mathematical Physics 2	3
PHYS 3630	Electro - and Magnetostatic Theory	3
PHYS 3670	Classical Thermodynamics	3
STAT 1150	Introduction to Statistics and Computing <sup>5</sup>	3
6 credit hours of electives <sup>4</sup>		6
<b>Hours</b>		<b>30</b>

**Years 3-4****Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>

**Year 4**

PHYS 4250	Computational Physics	3
PHYS 4360 or PHYS 4400	Medical Radiation Physics or Linear Systems for Imaging	3
PHYS 4516	Introduction to Nuclear and Particle Physics	3
PHYS 4646	Electro - and Magnetodynamics and Special Relativity	3
PHYS 4676	Honours Thesis - Proposal and Preparation	3
PHYS 4678	Honours Thesis - Dissertation	3
PHYS 4680	Statistical Mechanics	3
9 credit hours of electives <sup>4</sup>		9
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Students must achieve a minimum grade of "C" in all courses contributing to the Honours program.

<sup>2</sup>

- PHYS 1050 and PHYS 1070 are recommended.
- MATH 1220 may be taken in place of MATH 1300;
- MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500;
- MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
- MATH 1690 may be taken in place of MATH 1500 and MATH 1700.

<sup>3</sup> Students who have already taken COMP 1010 before joining the program may count COMP 1010 in lieu of COMP 1012. However, students who have not taken COMP 1010 before entering the program must then take COMP 1012.

<sup>4</sup> PHYS 1018 may not count towards the 120 credit hours required for this degree.

<sup>5</sup> Students may take STAT 1000 and STAT 2000 in lieu of STAT 1150.

IMPORTANT: The Honours program need not be completed in the manner prescribed in the grid above. The grid indicates the recommended arrangement of the required courses and is meant to be a guide around which students can plan their program.

(Letters in brackets refer to minimum prerequisite standing required for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular

Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Physics and Astronomy, B.Sc. Major Physics and Astronomy Four Year Major Entrance, Continuation and Graduation Requirements

The program is intended for students who wish to learn Physics as part of a general education, or combine Physics with other disciplines. There are many options with this degree which might include a career in education, high technology, business, or science journalism. The large number of electives will allow the students to obtain significant background in another field such as Chemistry, Life Sciences, Computer Science, Mathematics, Physical Geography, Geophysics or Geology. In some cases, these can be recognized formally as a minor or part of a double major program.

**To enter** the four year Major program in Physics and Astronomy, a student must have PHYS 1050 (C+) or PHYS 1020 (B). In addition, students must have satisfied the faculty requirements for entry to the four year Major program. Students are strongly encouraged to complete PHYS 1070 or PHYS 1030 as well as MATH 1300, MATH 1500, and MATH 1700 in Year 1. Not only are they required courses in the Physics and Astronomy programs, these courses are required prerequisites to several required second year Physics and Astronomy courses.

**To continue** in the Bachelor of Science Major degree, a student must maintain a minimum DGPA of 2.00.

**To graduate** with a Bachelor of Science (Major) in Physics and Astronomy, a student must obtain a minimum DGPA of 2.00.

## Major Co-operative Option

A co-operative education option is available to Major students. Students should refer to the Co-operative Education (p. 926) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

## Degree Requirements

### Four Year Major (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
One of: <sup>1</sup>		3
PHYS 1050	Physics 1: Mechanics (C+)	
PHYS 1020	General Physics 1 (B)	
One of: <sup>1,2</sup>		3
PHYS 1070	Physics 2: Waves and Modern Physics (C+)	
PHYS 1030	General Physics 2 (B)	
MATH 1300	Vector Geometry and Linear Algebra <sup>1</sup>	3
MATH 1500	Introduction to Calculus <sup>1</sup>	3
MATH 1700	Calculus 2 <sup>1</sup>	3
COMP 1012	Computer Programming for Scientists and Engineers <sup>3</sup>	3
6 credit hours from the Faculty of Arts including the "W" requirement		6
6 credit hours of electives <sup>4</sup>		6
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
One of: <sup>2</sup>		3
PHYS 2260	Optics	
PHYS 2610	Circuit Theory and Introductory Electronics	
PHYS 2386	Introduction to Quantum Mechanics and Special Relativity	3
PHYS 2496	Mathematical Physics 1	3
PHYS 2600	Electromagnetic Field Theory	3
MATH 2720	Multivariable Calculus	3
15 credit hours of electives <sup>4,5</sup>		15
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
PHYS 2650	Classical Mechanics 1 <sup>2</sup>	3
PHYS 3670	Classical Thermodynamics	3
PHYS 3496	Mathematical Physics 2	3
MATH 2090	Linear Algebra 2	3
<b>Hours</b>		<b>12</b>

**Years 3-4**

12 credit hours of 3000 and/or 4000 level Physics and Astronomy courses, with at least 3 credit hours at the 4000 level	12
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24 credit hours of electives <sup>4, 5</sup>	24
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**Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
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SCI 3990	Co-operative Education Work Term 2	0
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SCI 4980	Co-operative Education Work Term 3	0
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SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
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<b>Hours</b>	<b>36</b>
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**Year 4**

PHYS 3386	Quantum Mechanics 2	3
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PHYS 3430	Honours Physics Laboratory	6
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PHYS 3630	Electro - and Magnetostatic Theory	3
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<b>Hours</b>	<b>12</b>
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<b>Total Hours</b>	<b>120</b>
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- <sup>1</sup>
- PHYS 1050 and PHYS 1070 are recommended.
  - MATH 1220 may be taken in place of MATH 1300;
  - MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500;
  - MATH 1232 or MATH 1710 may be taken in place of MATH 1700;
  - MATH 1690 may be taken in place of MATH 1500 and MATH 1700.

- <sup>2</sup>
- Students who do not take PHYS 1070 or PHYS 1030 in Year 1 must postpone PHYS 2600 until Year 3. PHYS 2260, PHYS 2610 and PHYS 2650 may be taken in Year 2 or Year 3 if the respective prerequisites are met.

- <sup>3</sup>
- Students who have already taken COMP 1010 before joining the program may count COMP 1010 in lieu of COMP 1012. However, students who have not taken COMP 1010 before entering the program must then take COMP 1012.

- <sup>4</sup>
- PHYS 1018 may not count towards the 120 credit hours required for this degree.

- <sup>5</sup>
- Although they are not required courses in the Physics programs, MATH 2080, MATH 2180, and MATH 3340 are recommended electives for the Physics Honours and Four Year Major degrees.

**IMPORTANT:** The four year Major program need not be completed in the manner prescribed in the grid above. The grid indicates the recommended arrangement of the required courses and is meant to be a guide around which students can plan their program

(Letters in brackets refer to minimum prerequisite standing required for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).



Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Physics and Astronomy Minor

### Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
One of:		3
PHYS 1050	Physics 1: Mechanics (C)	
PHYS 1020	General Physics 1 (C+)	
One of:		3
PHYS 1070	Physics 2: Waves and Modern Physics (C)	
PHYS 1030	General Physics 2 (C+)	
<b>Hours</b>		<b>6</b>
<b>Years 2-4</b>		
A minimum of 12 credit hours of 2000, 3000, and (or) 4000 level Physics or Astronomy courses		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

(Letters in brackets refer to minimum prerequisite standing required for further study.)

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Psychology, B.Sc. Honours (p. 928)	4	120	
Psychology, B.Sc. Major (p. 929)	4	120	Yes
Psychology Minor (p. 932)		18	

## Psychology, B.Sc. Honours B.Sc. Psychology Honours Entrance, Continuation, and Graduation Requirements

To enter the Honours program, students must have obtained a grade of "B" or better in PSYC 2260 and a grade of "B" in six credit hours in courses offered by the Faculty of Science. In addition, students must have obtained a degree grade point average of 3.50. Introductory courses in Biological Sciences, Chemistry, Computer Science, Mathematics or Statistics are highly recommended.

## Psychology

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## Psychology

Psychology is the scientific study of behaviour and mental processes, including the biological bases of behaviour and cognitive processes, and behavioural and cognitive neuroscience. The Honours and Major programs combine courses in Psychology with related courses in Science. Courses from the Faculty of Arts are included in this program. The Faculty of Science offers programs leading to a B.Sc. (Honours) degree in Psychology and a B.Sc. (Major and Major Co-op) degree in Psychology.

## Programs

Students will normally take PSYC 2260 in Year 2 and enter Honours in Year 3. Students who qualify for entry to the Four Year Major in Psychology after Year 1 should choose that option. See the Four Year Major entry requirements for details.

To continue in the Honours program, a student must register in a minimum of 9 credit hours in each Fall and Winter Term and must meet all of the continuation criteria of the Faculty of Science. In addition, students must maintain a minimum degree grade point average of 3.50 based on all courses in the program. Students who do not meet the minimum continuation requirement will be required to withdraw from the Honours program.

**To graduate**, a student must obtain 120 credit hours of courses with grades of "C" or better in each course and with a minimum degree grade point average of 3.00. In addition, students must complete the program of study in the grid (p. 929).

**Note:** Psychology courses **cannot** be used to fulfill either the introductory or advanced level Science requirements in the Three Year B.Sc. General Degree.

## Degree Requirements

### Honours<sup>1,2</sup>

Course	Title	Hours
<b>Year 1</b>		
6 credit hours from:		6
PSYC 1200	Introduction to Psychology	
PSYC 1211 & PSYC 1221	Introduction à la psychologie I and Introduction à la psychologie II	
6 credit hours Faculty of Science courses (B) <sup>3</sup>		6
18 credit hours of electives		18
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology (B) <sup>1</sup>	3
6 credit hours 2000 or 3000 level Psychology <sup>4</sup>		6
15 credit hours Faculty of Science courses <sup>5</sup>		15
3 credit hours of electives		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
PSYC 3200	Thinking Critically About Psychological Research	3
PSYC 3340	Design and Analysis for Psychological Experiments	3
PSYC 3630	Psychological Measurement and Assessment	3
3 credit hours from:		3
PSYC 3520	Independent Research in Psychology 1	
PSYC 3560	Supervised Field Study in Psychology	
PSYC 3590	Independent Research in Psychology 2	
4000 level PSYC course		
9 credit hours Psychology <sup>6</sup>		9
9 credit hours Faculty of Science courses <sup>5</sup>		9
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
PSYC 4520	Honours Research Seminar <sup>2</sup>	6
18 credit hours Psychology <sup>7</sup>		18
6 credit hours Faculty of Science courses <sup>5</sup>		6
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> PSYC 2260 satisfies the university mathematics requirement.

<sup>2</sup> PSYC 4520 satisfies the university written English requirement.

<sup>3</sup> Introductory courses in Biological Sciences, Chemistry, Computer Science, Mathematics, or Statistics are highly recommended.

<sup>4</sup> These 6 credit hours must include 3 credit hours from each of two different lettered categories of Psychology courses below.

<sup>5</sup> The Science courses must include a minimum of 18 credit hours at the 2000 level or above.

<sup>6</sup> These 9 credit hours must include 3 credit hours from each of two different lettered categories of Psychology courses below and not sampled in Year 2.

<sup>7</sup> These 18 credit hours must include 6 credit hours at the 4000 level; and 6 credit hours of 2000-4000 level Psychology courses including any remaining lettered category below.

(Letters in brackets indicate minimum prerequisite standing for further study.)

### Categories of Psychology Courses

#### Category A: Personality/Social

Course	Title	Hours
PSYC 2490	Abnormal Psychology	3
PSYC 2530	Psychology of Personality	3
PSYC 2540	Social Psychology	3

#### Category B: Developmental

Course	Title	Hours
PSYC 2290	Child Development	3

#### Category C: Learning

Course	Title	Hours
PSYC 2440	Behaviour Modification Principles	3
PSYC 2470	Learning Foundations of Psychology	3

#### Category D: Cognitive

Course	Title	Hours
PSYC 2480	Cognitive Processes	3

#### Category E: Biological

Course	Title	Hours
PSYC 2360	Brain and Behaviour	3

### Psychology Courses

All Psychology courses are available to Science students.

Psychology courses taught at the Université de Saint-Boniface can be used to satisfy degree requirements.

## Psychology, B.Sc. Major B.Sc. Psychology Major Entrance, Continuation, and Graduation Requirements

**To enter** the Major program, students must have obtained a grade of "C+" or better in PSYC 1200 (or in both PSYC 1211 and PSYC 1221) and in six credit hours in courses offered by the Faculty of Science and meet the Faculty of Science requirements for entry to the Major program. Introductory courses in Biological Sciences, Chemistry, Computer Science, Mathematics, or Statistics are highly recommended.

**To continue** in the Major program, a student must meet all of the continuation criteria of the Faculty of Science. This includes maintaining a minimum DGPA of 2.00 at each point of assessment, and no more than 18 credit hours of failing grades after entry to the program. Students who

do not meet the minimum continuation requirement will be required to withdraw from the Major program.

**To graduate** with the degree of Bachelor of Science (Major), a student must complete 120 credit hours of courses with passing grades ("D" or better) in each course, with a minimum DGPA of 2.00. In addition, the student must complete the program of study as listed in the program grid (p. 930).

### Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 931) for further information on the Co-op programs.

Entry and continuance in the Four Year Major Co-operative require completion of PSYC 2250 and PSYC 2260 with a grade of "C" or better, and a DGPA of 3.00 or higher. Students who fail to maintain a DGPA of 3.00 while enrolled in the Co-operative Option will be required to withdraw from the option and revert to the Four Year Major or the B.Sc. General.

**Note:** Psychology courses **cannot** be used to fulfill either the introductory or advanced level Science requirements in the Three Year B.Sc. General Degree.

## Degree Requirements

### Four Year Major <sup>1,2</sup>

Course	Title	Hours
<b>Year 1</b>		
One of A or B:		6
A:		
PSYC 1200	Introduction to Psychology (C+)	
B:		
PSYC 1211	Introduction à la psychologie I (C+)	
PSYC 1221	Introduction à la psychologie II (C+)	
6 credit hours Faculty of Science courses (C+) <sup>3</sup>		6
<b>Hours</b>		<b>12</b>
<b>Years 1-2</b>		
"W" course		3
<b>Hours</b>		<b>3</b>
<b>Years 1-4</b>		
27 credit hours of electives		27
<b>Hours</b>		<b>27</b>
<b>Year 2</b>		
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology <sup>1</sup>	3
6 credit hours 2000 or 3000 level Psychology <sup>4</sup>		6
<b>Hours</b>		<b>12</b>
<b>Years 2-4</b>		
30 credit hours of Faculty of Science courses, including a minimum of 18 credit hours at the 2000 level or above <sup>5</sup>		30
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
18 credit hours 2000 or 3000 level Psychology <sup>4</sup>		18
<b>Hours</b>		<b>18</b>

### Years 3-4

#### Co-op Requirements (if selected):

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>0</b>

### Year 4

18 credit hours 2000 or 3000 level Psychology <sup>4</sup>		18
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> PSYC 2260 satisfies the university mathematics requirement.
- <sup>2</sup> IMPORTANT: The four year Major program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.
- <sup>3</sup> Introductory courses in Biological Sciences, Chemistry, Computer Science, Mathematics, or Statistics are highly recommended.
- <sup>4</sup> During Years 2 to 4 a total of 42 credit hours of 2000 or 3000 level Psychology courses must be completed, including a minimum of 3 credit hours from each of the five lettered categories of courses below.
- <sup>5</sup> The Science courses must include a minimum of 18 credit hours at the 2000 level or above.

(Letters in brackets refer to minimum prerequisite standing required for further study.)

### Categories of Psychology Courses

#### Category A: Personality/Social

Course	Title	Hours
PSYC 2490	Abnormal Psychology	3
PSYC 2530	Psychology of Personality	3
PSYC 2540	Social Psychology	3

#### Category B: Development

Course	Title	Hours
PSYC 2290	Child Development	3

#### Category C: Learning

Course	Title	Hours
PSYC 2440	Behaviour Modification Principles	3
PSYC 2470	Learning Foundations of Psychology	3

#### Category D: Cognitive

Course	Title	Hours
PSYC 2480	Cognitive Processes	3

#### Category E: Biological

Course	Title	Hours
PSYC 2360	Brain and Behaviour	3

### Psychology Courses

All Psychology courses are available to Science students.

Psychology courses taught at the Université de Saint-Boniface can be used to satisfy degree requirements.

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass"

for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by

the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Psychology Minor Minor Requirements

Course	Title	Hours
<b>Year 1</b>		
One of:		6
PSYC 1200	Introduction to Psychology	
PSYC 1211 & PSYC 1221	Introduction à la psychologie I and Introduction à la psychologie II	
<b>Hours</b>		<b>6</b>
<b>Years 2-4</b>		
12 credit hours in Psychology courses numbered at the 2000 or 3000 level		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

### Psychology Courses

All Psychology courses are available to Science students. For a complete course listing, see the Faculty of Arts- Psychology (p. ).

Psychology courses taught at the Université de Saint-Boniface can be used to satisfy degree requirements.

## Statistics

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Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Statistics, B.Sc. Honours (p. 933)	4	120	Yes
Statistics, B.Sc. Major (p. 936)	4	120	Yes
Statistics - Actuarial Joint, B.Sc. Honours (p. 940)	4	120	
Statistics - Economics Joint, B.Sc. Honours (p. 941)	4	120	
Statistics - Mathematics Joint, B.Sc. Honours (p. 942)	4	120	Yes
Statistics Minor (p. 939)		18	

Statistics - Computer Science Joint, B.Sc. Honours (p. 868)

Statistics, B.Sc. Double Honours is available by arrangement with departments concerned.

## Statistics, B.Sc. Honours Statistics Honours Entrance, Continuation, and Graduation Requirements

**To enter** the Honours program in Statistics, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in STAT 2150.

STAT 1150, MATH 1220, MATH 1230, MATH 1232 and MATH 1240 are all requirements of the Statistics Honours degree program and students are strongly encouraged to take these courses in Year 1.

**To continue** in the Statistics Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** with the B.Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and minimum grade of "C" in each course that contributes to the 120 credit hours of the degree.

## Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 934) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

## Statistics

Statistics is a discipline grounded in mathematics that has practical applications in many other areas. Statistics is an analytical discipline that helps other disciplines carry out research projects and studies that involve measurement, comparison, and interpretation. Statistics is a useful ancillary subject to other sciences, the social sciences, and many of the professional programs. The department offers joint programs with Computer Science, Mathematics, Economics and Actuarial Mathematics.

## Programs

Students are required to complete the first and second year requirements of the program; and STAT 2300 and STAT 3450 before beginning their first co-op work term.

## Degree Requirements

### Honours (Including Co-operative Option if Selected) <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
STAT 1150	Introduction to Statistics and Computing <sup>2</sup>	3
MATH 1220	Linear Algebra 1 <sup>2</sup>	3
MATH 1230	Differential Calculus <sup>2</sup>	3
MATH 1232	Integral Calculus <sup>2</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
<b>Hours</b>		<b>15</b>

### Years 1-2

The following must be completed in Year 1 or Year 2:

COMP 1010	Introductory Computer Science 1	3
COMP 1020	Introductory Computer Science 2	3
STAT 2150	Statistics and Computing (B)	3
STAT 2300	Principles of Data Collection	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
6 credit hours from the lists of Mathematics and Computer Science options (Lists B and C below)		6
9 credit hours of elective courses <sup>3</sup>		9
<b>Hours</b>		<b>33</b>

### Year 2

STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
MATH 2080	Introduction to Analysis	3
MATH 2150	Multivariable Calculus <sup>2</sup>	3
<b>Hours</b>		<b>12</b>

<b>Year 3</b>		
STAT 3030	Introduction to Stochastic Processes	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3
STAT 3690	Multivariate Analysis	3
<b>Hours</b>		<b>15</b>
<b>Years 3-4</b>		
24 credit hours from the list of Statistics options for the Honours program (List A below), with at least 15 credit hours at the 4000 level		24
6 credit hours from the lists of Statistics, Mathematics and Computer Science options for the Honours program (Lists A, B and C below)		6
12 credit hours of elective courses <sup>3</sup>		12
<b>Co-op Requirements (if selected):</b>		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>42</b>
<b>Year 4</b>		
STAT 4100	Statistical Inference	3
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> IMPORTANT: The four year Honours program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

<sup>2</sup> The following substitutes are allowed:

- MATH 1300 (B) in place of MATH 1220,
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230,
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232,
- MATH 1690 in place of MATH 1230 and MATH 1232;
- MATH 2720 in place of MATH 2150;
- STAT 1000 and STAT 2000 (B) in place of STAT 1150.

<sup>3</sup> Although not required, students are encouraged to select some of their electives from traditional fields of application in Statistics such as Biological Sciences, Microbiology, Actuarial Mathematics, Economics, Psychology, or Sociology.

(Letters in brackets indicate minimum prerequisite standing for further study.)

### Optional Courses for Honours Program

Course	Title	Hours
<b>List A: Statistics Options for the Honours Program</b>		
STAT 3170	Statistical Quality Control	3
STAT 3380	Introduction to Nonparametric Statistics	3
STAT 3490	Time Series Analysis	3
STAT 3550	Nonlinear Regression Models	3
STAT 3900	Intermediate Topics in Statistics	3
STAT 3910	Intermediate Topics in Statistics with Laboratory	3

STAT 4150	Bayesian Analysis and Computing	3
STAT 4170	Lifetime Data Analysis	3
STAT 4250	Statistical Learning	3
STAT 4520	Sampling Techniques	3
STAT 4530	Design of Experiments	3
STAT 4630	Stochastic Processes	3
STAT 4700	Statistical Consulting	3
STAT 4900	Advanced Topics in Statistics	3
STAT 4910	Advanced Topics in Statistics with Laboratory	3
STAT 4950	Honours Thesis in Statistics	6

### List B: Mathematics Options for the Honours Program

MATH 2030	Combinatorics 1	3
MATH 2070	Graph Theory 1	3
MATH 2090	Linear Algebra 2	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
MATH 2740	Mathematics of Data Science	3
MATH 3330	Computational Algebra	3
MATH 3340	Complex Analysis 1	3
MATH 3360	Combinatorics 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3490	Optimization	3
MATH 3610	Introduction to Mathematical Modelling	3
MATH 4370	Linear Algebra and Matrix Analysis	3
MATH 4390	Numerical Approximation Theory	3

### List C: Computer Science Options for the Honours Program

COMP 2080	Analysis of Algorithms	3
COMP 2140	Data Structures and Algorithms	3
COMP 3170	Analysis of Algorithms and Data Structures	3
COMP 3190	Introduction to Artificial Intelligence	3
COMP 3380	Databases Concepts and Usage	3
COMP 3820	Introduction to Bioinformatics Algorithms	3
COMP 4190	Artificial Intelligence	3
COMP 4360	Machine Learning	3
COMP 4380	Database Implementation	3
COMP 4420	Advanced Design and Analysis of Algorithms	3
COMP 4710	Introduction to Data Mining	3

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-

op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.



To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw

from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

## Statistics, B.Sc. Major

### Statistics Major Entrance, Continuation, and Graduation Requirements

**To enter** the Major Degree program in Statistics, a student must have completed at least 24 credit hours with a minimum DGPA of 2.00, and also obtained a minimum grade of "C+" in STAT 2150.

STAT 1150, MATH 1220, MATH 1230, MATH 1232 and MATH 1240 are all requirements of the Statistics Major degree program and students are strongly encouraged to take these courses in Year 1.

**To continue** in the four year Major program a student must maintain a minimum DGPA of 2.00.

**To graduate** from the four year Major program a student must obtain a minimum DGPA of 2.00, and a minimum grade of "C" in the Major Program Specific courses, which include all program required courses (see program grid (p. 936)) and optional courses selected from lists A, B and C.

### Major Co-operative Option

A co-operative education option is available for Major students. Students should refer to the Co-operative Education (p. 938) for further information on the Co-op programs.

The course and minimum grade requirements for entry and continuation in the Co-operative Option are the same as those required for the regular Major program. However, the entry and continuation DGPA requirement is set at a minimum of 2.5.

Students are required to complete the first and second year requirements of the program; and STAT 2300 and STAT 3450 before beginning their first co-op work term.

### Degree Requirements

#### Four Year Major (Including Co-operative Option if Selected) <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
STAT 1150	Introduction to Statistics and Computing <sup>2</sup>	3
MATH 1220	Linear Algebra 1 <sup>2</sup>	3
MATH 1230	Differential Calculus <sup>2</sup>	3
MATH 1232	Integral Calculus <sup>2</sup>	3

MATH 1240	Elementary Discrete Mathematics	3
<b>Hours</b>		<b>15</b>

**Years 1-2**

The following must be completed in Year 1 or Year 2:

COMP 1010	Introductory Computer Science 1	3
COMP 1020	Introductory Computer Science 2	3
STAT 2150	Statistics and Computing (C+)	3
STAT 2300	Principles of Data Collection	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
6 credit hours from the lists of Mathematics and Computer Science options for the Major program (Lists B and C below)		6
12 credit hours of elective courses <sup>3</sup>		12
<b>Hours</b>		<b>36</b>

**Year 2**

STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
MATH 2720	Multivariable Calculus	3
<b>Hours</b>		<b>9</b>

**Year 3**

STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3
STAT 3690	Multivariate Analysis	3
<b>Hours</b>		<b>12</b>

**Years 3-4**

24 credit hours from the list of Statistics options for the Major program (List A below), with at least 15 credit hours at the 4000 level		24
9 credit hours from the lists of Statistics, Mathematics and Computer Science options for the Major program (Lists A, B and C below)		9
15 credit hours of elective courses <sup>3</sup>		15

**Co-op Requirements (if selected):**

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
<b>Hours</b>		<b>48</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> IMPORTANT: The four year Major program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

<sup>2</sup> The following substitutes are allowed:

- MATH 1300 (B) in place of MATH 1220,
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230,
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232,
- MATH 1690 in place of MATH 1230 and MATH 1232;
- MATH 2720 in place of MATH 2150;
- STAT 1000 and STAT 2000 (B) in place of STAT 1150.

<sup>3</sup> Although not required, students are encouraged to select some of their electives from traditional fields of application in Statistics such as Biological Sciences, Microbiology, Actuarial Mathematics, Economics, Psychology, or Sociology.

(Letters in brackets indicate minimum prerequisite standing for further study.)

**Optional Courses for the Major Program**

Course	Title	Hours
<b>List A: Statistics Options for the Major Program</b>		
STAT 3030	Introduction to Stochastic Processes	3
STAT 3170	Statistical Quality Control	3
STAT 3380	Introduction to Nonparametric Statistics	3
STAT 3490	Time Series Analysis	3
STAT 3550	Nonlinear Regression Models	3
STAT 3900	Intermediate Topics in Statistics	3
STAT 3910	Intermediate Topics in Statistics with Laboratory	3
STAT 4100	Statistical Inference	3
STAT 4150	Bayesian Analysis and Computing	3
STAT 4170	Lifetime Data Analysis	3
STAT 4250	Statistical Learning	3
STAT 4520	Sampling Techniques	3
STAT 4530	Design of Experiments	3
STAT 4630	Stochastic Processes	3
STAT 4700	Statistical Consulting	3
STAT 4900	Advanced Topics in Statistics	3
STAT 4910	Advanced Topics in Statistics with Laboratory	3
<b>List B: Mathematics Options for the Major Program</b>		
MATH 2030	Combinatorics 1	3
MATH 2070	Graph Theory 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3
MATH 2740	Mathematics of Data Science	3
MATH 3330	Computational Algebra	3
MATH 3340	Complex Analysis 1	3
MATH 3360	Combinatorics 2	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3490	Optimization	3
MATH 3610	Introduction to Mathematical Modelling	3
MATH 4370	Linear Algebra and Matrix Analysis	3
MATH 4390	Numerical Approximation Theory	3
<b>List C: Computer Science Options for the Major Program</b>		
COMP 2080	Analysis of Algorithms	3
COMP 2140	Data Structures and Algorithms	3
COMP 3170	Analysis of Algorithms and Data Structures	3
COMP 3190	Introduction to Artificial Intelligence	3
COMP 3380	Databases Concepts and Usage	3
COMP 3820	Introduction to Bioinformatics Algorithms	3
COMP 4190	Artificial Intelligence	3

COMP 4360	Machine Learning	3
COMP 4380	Database Implementation	3
COMP 4420	Advanced Design and Analysis of Algorithms	3
COMP 4710	Introduction to Data Mining	3

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular

Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

#### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.

#### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.
- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

## Statistics Minor Minor Requirements

### Option 1

Course	Title	Hours
<b>Year 1</b>		
STAT 1000	Basic Statistical Analysis 1	3
STAT 2000	Basic Statistical Analysis 2	3
<b>Hours</b>		<b>6</b>
<b>Years 2-4</b>		
STAT 3000	Applied Linear Statistical Models	3
9 credit hours of 2000, 3000, or 4000 level Statistics courses <sup>1</sup>		9
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> STAT 2000 cannot be counted toward this requirement.

### Option 2

Course	Title	Hours
<b>Year 1</b>		
STAT 1150	Introduction to Statistics and Computing	3

STAT 2150	Statistics and Computing	3
<b>Hours</b>		<b>6</b>
<b>Years 2-4</b>		
12 additional credit hours of 2000, 3000, or 4000 level Statistics courses <sup>1</sup>		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> STAT 2000 and STAT 2150 cannot be counted towards this requirement.

## Statistics - Actuarial Joint, B.Sc. Honours

### Statistics - Actuarial Mathematics Joint Honours Entrance, Continuation, and Graduation Requirements

The Department of Statistics and the Warren Centre for Actuarial Studies and Research offer a joint Honours program for students wishing in depth study in Statistics and Actuarial Mathematics.

**To enter** the Joint Honours program, students must have completed 24 credit hours with a minimum DGPA of 3.00. Students must also obtain a minimum grade of "B" in STAT 2150. All of the courses listed in Year 1 of the program grid are program requirements and students are strongly urged to take them in the first year.

**To continue** in the Joint Honours Statistics - Actuarial Mathematics program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

**To graduate** with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and a minimum grade of "C+" on all required Actuarial Mathematics (ACT) courses and a grade of "C" on all remaining courses that contribute to the 120 credit hours of the degree.

### Recommended Electives

Course	Title	Hours
FIN 3410	Investments	3
FIN 4240	Financial Modeling	3
COMP 1010	Introductory Computer Science 1	3

## Degree Requirements

### Joint Honours

Course	Title	Hours
<b>Year 1</b>		
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
STAT 2150	Statistics and Computing (B)	3
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
One "W" course		3

3 credit hours of electives		3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
STAT 2300	Principles of Data Collection	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
ACT 2020	Economic and Financial Applications	3
ACT 2120	Interest Theory	3
ACT 2210	Introduction to Risk Management	3
ACC 1100	Introductory Financial Accounting <sup>2</sup>	3
FIN 2200	Corporate Finance <sup>2</sup>	3
MATH 2720	Multivariable Calculus	3
3 credit hours of electives		3
<b>Hours</b>		<b>30</b>
<b>Year 3</b>		
STAT 3030	Introduction to Stochastic Processes	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3450	Linear Models	3
ACT 3340	Financial Derivatives for Actuarial Practice	3
One of:		6
ACT 3630	Course no longer offered	
ACT 3130 & ACT 3230	Actuarial Models 1 and Actuarial Models 2	
3 credit hours of Statistics electives <sup>3</sup>		3
9 credit hours of electives		9
<b>Hours</b>		<b>30</b>
<b>Year 4</b>		
STAT 4100	Statistical Inference	3
ACT 4060	Actuarial Aspects of Investment Practice	3
ACT 4160	Introduction to Property and Casualty Insurance Industry	3
ACT 4020	Short Term Actuarial Mathematics I <sup>4</sup>	3
ACT 4030	Short Term Actuarial Mathematics II <sup>4</sup>	3
MSCI 2150	Introduction to Management Sciences	3
9 credit hours of Statistics electives <sup>3</sup>		9
3 credit hours of electives		3
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The following substitutions are allowed:

- MATH 1300 or MATH 1310 in place of MATH 1220,
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230,
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232.
- STAT 1000 and STAT 2000 (B) in place of STAT 1150.

<sup>2</sup> Students are strongly urged to complete ACC 1100 in Year 1 when possible. FIN 2200 may be taken in Year 2, 3 or 4; however, it is strongly recommended that it be completed in Year 2. Note that ACC 1100 is a prerequisite for FIN 2200.

<sup>3</sup> The 12 credit hours of electives in Statistics in Years 3 and 4 must all be at the 3000 level or higher, at least 9 of which must be at the 4000 level. The following courses are recommended: STAT 3150, STAT 3490, STAT 3550, STAT 3690, STAT 4150, STAT 4250, STAT 4630.

<sup>4</sup> ACT 4020 and ACT 4030 may be taken in Year 3 or 4.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Statistics - Economics Joint, B.Sc. Honours

### Statistics - Economics Joint Honours Entrance, Continuation, and Graduation Requirements

The Department of Statistics along with the Department of Economics (Faculty of Arts) offer a Joint Honours program for students wishing in depth study in Statistics and Economics. For Economics course listings, refer to the Faculty of Arts (p. ).

Students will normally take STAT 2150 in second year and enter Honours in Year 3.

**To enter** the Joint Honours Statistics - Economics program in the Faculty of Science, the student must have a minimum grade of "B" in both of ECON 1010 and ECON 1020 (or ECON 1210 and ECON 1220) and STAT 2150; and have satisfied the Faculty of Science requirements for entry to the honours program. Students are strongly encouraged to take MATH 1220, MATH 1230, MATH 1232 and MATH 1240 in Year 1.

**To continue** in the Joint Honours Statistics - Economics program in the Faculty of Science, a minimum DGPA of 3.00 is required.

**To graduate** with the B.Sc. Joint Honours Statistics - Economics degree from the Faculty of Science, a student must achieve a minimum DGPA of 3.00, and a minimum grade of "C" in each course that contributes to the 120 credit hours of the degree.

## Degree Requirements

### Joint Honours

Course	Title	Hours
<b>Year 1</b>		
One of A or B:		6
A:		
ECON 1010	Introduction to Microeconomic Principles (B)	
ECON 1020	Introduction to Macroeconomic Principles (B)	
B:		
ECON 1210	Introduction to Canadian Economic Issues and Policies (B)	
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies (B)	
STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3

MATH 1232	Integral Calculus <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
COMP 1010	Introductory Computer Science 1	3
6 credit hours of electives including the required "W" course		6
<b>Hours</b>		<b>30</b>

#### Year 2

ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
STAT 2150	Statistics and Computing (B)	3
STAT 2300	Principles of Data Collection	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
MATH 2080	Introduction to Analysis	3
MATH 2150	Multivariable Calculus <sup>1</sup>	3
6 credit hours of approved Economics electives <sup>2</sup>		6
<b>Hours</b>		<b>30</b>

#### Year 3

ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3
MATH 2160	Numerical Analysis 1	3
MATH 3610	Introduction to Mathematical Modelling	3
3 credit hours of approved Economics electives <sup>2</sup>		3
6 credit hours of approved Statistics electives <sup>3</sup>		6
<b>Hours</b>		<b>30</b>

#### Year 4

ECON 4040	Seminar in Applied Econometrics	3
ECON 4042	Topics in Econometrics	3
STAT 4100	Statistical Inference	3
12 credit hours of approved Economics electives <sup>2</sup>		12
9 credit hours of approved Statistics electives <sup>3</sup>		9
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> The following substitutes are allowed:

- MATH 1300 in place of MATH 1220;
- MATH 1500 in place of MATH 1230;
- MATH 1700 in place of MATH 1232;
- MATH 2720 in place of MATH 2150;
- STAT 1000 and STAT 2000 (B) in place of STAT 1150.

Students must attain specific grade requirements in order to meet the upper level course prerequisites. Consult course descriptions for further information.

<sup>2</sup> Of the 21 credit hours of electives in Economics in Years 2, 3 and 4, no more than 6 credit hours may be at the 2000 level or below; ECON 2030 and ECON 3040 are recommended in Year 2 or 3. The normal prerequisite for ECON 3040 is ECON 2040, which will be waived for students in this program who have completed Year 1.

<sup>3</sup> The 15 credit hours of electives in Statistics in Years 3 and 4 must all be at the 3000 level or higher, at least 9 of which must be at the 4000 level. The following courses are recommended: STAT 3030, STAT 3490, STAT 3550, STAT 3690, STAT 4150, STAT 4250, STAT 4630.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Statistics - Mathematics Joint, B.Sc. Honours

### Statistics - Mathematics Joint Honours Entrance, Continuation, and Graduation Requirements

The departments of Statistics and Mathematics offer a joint Honours program for students wishing in depth study in Statistics and Mathematics. A Co-op Option is available.

**To enter** the Honours program students must have satisfied the Faculty of Science requirements for entry to the program, and have obtained a minimum grade of "B" in STAT 2150, and either MATH 1232 or MATH 1690 (or a minimum grade of "A" in MATH 1700).

**To continue** in the Honours program, students must maintain a minimum DGPA of 3.00.

**To graduate** with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and a minimum grade of "C" on all remaining courses that contribute to the 120 credit hours of the degree.

### Honours Co-operative Option

A co-operative education option is available for Honours students. Students should refer to the Co-operative Education (p. 943) for further information on the Co-op programs.

The course, grade requirements and minimum DGPA requirement for entry and continuation in the Co-operative Option are the same as that for regular Honours program.

### Degree Requirements

#### Joint Honours (Including Co-operative Option if Selected)

Course	Title	Hours
<b>Year 1</b>		
MATH 1220	Linear Algebra 1 <sup>1</sup>	3
MATH 1230	Differential Calculus <sup>1</sup>	3
MATH 1232	Integral Calculus (B) <sup>1</sup>	3
MATH 1240	Elementary Discrete Mathematics	3
<b>Hours</b>		<b>12</b>

#### Years 1-2

The following courses must be taken in Year 1 or Year 2:

STAT 1150	Introduction to Statistics and Computing <sup>1</sup>	3
STAT 2150	Statistics and Computing (B)	3
COMP 1010	Introductory Computer Science 1	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6

9 credit hours of approved electives <sup>2</sup> 9

**Hours** **24**

#### Year 2

STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2160	Numerical Analysis 1	3
MATH 2180	Real Analysis 1	3

**Hours** **24**

#### Year 3

STAT 3030	Introduction to Stochastic Processes	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3

**Hours** **12**

#### Years 3-4

MATH 2030	Combinatorics 1	3
MATH 3320	Algebra 2	3
MATH 3322	Algebra 3	3
MATH 3340	Complex Analysis 1	3
MATH 3470	Real Analysis 2	3
MATH 3472	Real Analysis 3	3
MATH 3440	Ordinary Differential Equations	3
MATH 3460	Partial Differential Equations	3

3 credit hours from: 3

MATH 2070 Graph Theory 1 3

MATH 2170 Number Theory 1 3

Any 3000/4000 level Mathematics courses 3

3 credit hours from any 4000 level Mathematics courses 3

6 credit hours from any 4000 level Statistics courses 6

9 credit hours of approved electives <sup>2</sup> 9

#### Co-op Requirements (if selected):

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0

**Hours** **45**

#### Year 4

STAT 4100 Statistical Inference 3

**Hours** **3**

**Total Hours** **120**

- <sup>1</sup> Students are strongly advised to take MATH 1220, MATH 1230, MATH 1232.
- The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:
- MATH 1210 (A) or MATH 1300 (A) in place of MATH 1220;
  - MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230;
  - MATH 1700 (A) in place of MATH 1232;
  - MATH 1690 (B) in place of MATH 1230 and MATH 1232;
  - STAT 1000 and STAT 2000 (B) in place of STAT 1150.

- <sup>2</sup> These courses may not be used for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, MATH 1090.

(Letters in brackets indicate minimum prerequisite standing for further study.)

## Co-operative Education

### Co-operative Education Option Academic Regulations: B.Sc. (Major) & B.Sc. and B.C.Sc. (Honours)

Co-operative education is a form of experiential learning which integrates the academic education (classroom-based learning) of interested and qualified students with relevant, supervised, and paid work experience (work-based learning) with employers. Co-op students gain valuable skills to guide them through their academic education and prepare them for future careers after graduation.

The Faculty of Science offers a Co-operative Education Option in the following Major programs:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Data Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy
- Psychology
- Statistics.

The Honours programs offering a Co-operative Education Option are:

- Biochemistry
- Biological Sciences
- Biotechnology (As of Fall 2018, admission to the Biotechnology programs has been temporarily suspended. For further information, see the Faculty of Science office.)
- Chemistry
- Computer Science
- Genetics
- Mathematics
- Microbiology
- Physics & Astronomy

- Statistics
- Joint Computer Science – Mathematics
- Joint Computer Science – Physics and Astronomy
- Joint Computer Science – Statistics
- Joint Mathematics – Physics and Astronomy
- Joint Statistics – Mathematics program.

Co-operative education is optional and supplementary to academic requirements of the chosen degree. All regulations governing regular Major and Honours programs apply to the Co-operative Education Option. In addition, the following variations apply:

#### Entrance

To enter the Co-operative Education Option a student must be eligible to enter the Major or Honours program offered by the department. At the time of application, students must have a minimum Degree Grade Point Average (DGPA) of 2.5 for the Major and 3.0 for the Honours Programs. For Psychology, students must have a minimum Degree Grade Point Average (DGPA) of 3.0 for the Major. Co-op is not available for students in the Honours Psychology Program.

The normal point of entry to the Co-operative Education Option is following the completion of second year in the Faculty of Science. Students seeking admission will submit an application during their second year and complete an intake process with the appropriate departmental Co-op Coordinator. Application deadlines are established by the Science Co-op Office.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Co-operative Education Option. The Science Co-op Office reserves the right to determine and select the best-qualified applicants.

Students admitted into the Co-operative Education Option will complete pre-employment training, including workshops, prior to the start of their first co-op work term. The structure and content of this training is developed by the Science Co-op Office. Attendance and completion of this training is mandatory.

#### Structure and Sequencing

The Co-operative Education Option consists of both academic terms and co-op work terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major or Honours department.

Each co-op work term can be either four months in duration or eight months in duration, as designated by the Science Co-op Office. An eight month work term would be counted as the equivalent of two 4 month terms.

Each academic term and each co-op work term will commence in January, May or September.

The sequence of academic terms and co-op work terms is variable to suit the needs of each department, and is designated by the Science Co-op Office in conjunction with each Major or Honours department. All Faculty of Science Co-operative Education Options must end on an academic term.

Students are expected to follow the academic/co-op work term sequence defined by their Major or Honours department from admission through to graduation.



### Co-op Work Term Requirements

All Co-operative Education Options require participating students to complete at least three (3) 4-month co-op work terms for a total of a minimum of 12 months' work experience. Each co-op work term is completed with one employer.

Students are required to register in the appropriate co-op work term course and pay the work term fee prior to starting their co-op work term.

Co-operative Education Option students are required to submit a work term report at the end of each co-op work term. These reports are due at times designated by the Science Co-op Office. In order to remain in the Co-operative Education program, a student must obtain a grade of "Pass" for each work term report. The Science Co-op Office will provide students with instructions regarding the content and format requirements of the work term reports.

While on a co-op work term, students are not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

### Academic Term Requirements

Coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the four-year Major program. For students completing an Honours program, the coursework requirements of the Co-operative Education Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Co-operative Education Option students are required to maintain full-time study while registered for an academic term.

To continue in a four year Major Co-operative Education Option, students must maintain a minimum DGPA of 2.50 at each point of assessment; except for students in Psychology where a minimum DGPA of 3.00 must be maintained at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Major Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

To continue in an Honours Co-operative Education Option a student must maintain a minimum DGPA of 3.00 or higher at each point of assessment. A student's performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements. Please see department entries for further information. Continuation in the Honours Co-operative Education Option is also contingent upon satisfactory performance during co-op work terms.

Students may be required to withdraw from the Co-operative Education Option for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Faculty of Science and/or Major/Honours program.
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option.
- Unsatisfactory performance during a co-op work term.
- Failure to submit a co-op work term report or the submitted report does not achieve a "Pass" grade.

- Failure to observe the policies outlined in university governing documents related to Behavioural Policies and Academic Misconduct.
- Having consulted with the Co-op Director and/or Faculty Advisor, in the opinion of the Co-op Coordinator, the student does not possess sufficient ability, skills, aptitude, attitude, diligence or motivation to successfully complete the Co-operative Education Option.

Students who wish to voluntarily withdraw from the Co-operative Education Option must obtain the written approval from their Co-op Coordinator and the Science Co-op Director. Students must submit their withdrawal request to their Co-op Coordinator and receive approval by the withdrawal dates set by the Science Co-op Office for each co-op work term.

Students are not normally permitted to withdraw from the Co-operative Education Option once they have secured a position for their co-op work term; whether the position was obtained through the Science Co-op Office or through students' own self-directed job search. Enrollment in the applicable co-op course(s) will be maintained and students are responsible for all assessed fees for the duration of the co-op work term and for meeting all academic requirements.

Students who accumulate more than 18 credit hours of failed courses after entering the four-year Major program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Major Co-op program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the Honours Co-op program. Students required to withdraw from the Honours program may be eligible to pursue the B.Sc. Major program or the B.Sc. General degree program. Students are also subject to the academic assessment policy found in the Faculty Academic Regulations (p. 801).

Four year Major Co-operative Education Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

Honours Co-operative Education Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

# Faculty of Social Work

## General Office

**Dean:** Dr. Michael Yellow Bird

**Associate Dean(s):** Dr. Maria Cheung- Undergraduate Programs; Dr. Judith Hughes- Graduate Studies & Research

**Campus Address/General Office:** 521 Tier Building, Fort Garry Campus

**Telephone:** (204) 474-7050

**Fax:** (204) 474-7594

**Email Address:** social\_work@umanitoba.ca

**Website:** [umanitoba.ca/social-work](https://umanitoba.ca/social-work/) (<https://umanitoba.ca/social-work/>)

**Academic Staff:** Please refer to the Faculty's website (<https://umanitoba.ca/social-work/faculty-and-staff/>)

## Degree Offered

### The Bachelor of Social Work Program

Historically, the social work profession has focused on the well-being of people as well as the social structures and conditions that prevent a just and equal society. The Bachelor of Social Work Program is a

professional program that is designed to prepare generalists who are knowledgeable of social work theories, and who can demonstrate skills related to practice, research, and social policy analysis. Students and graduates undertake these activities in accordance with the Canadian Association of Social Workers' Code of Ethics. The program is accredited by the Canadian Association for Social Work Education.

Graduates have competence for entry-level social work positions in a variety of different practice areas. The program is based on the principles of social justice, human rights, and anti-oppression, with an emphasis on critical thinking and understanding the structural roots of social problems. Foundation courses are grounded in critical theoretical frameworks including Indigenous world views, feminism, and anti-racism.

The program is offered at multiple geographic sites including the Fort Garry Campus, the William Norrie Centre (Inner-city), the Université de Saint-Boniface, and Thompson, Manitoba (Northern Social Work Program) as well as by Distance Delivery.

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Social Work, B.S.W. (p. 953)	3	123	

## Faculty Academic Regulations

### Admission Requirements

The following is a summary of the admission requirements to the Bachelor of Social Work program. Equivalent academic courses completed at recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office (<https://umanitoba.ca/admissions/viewbook/academics/#undergraduate-programs-of-study>), Enrolment Services, 424 University Centre; this information is also posted on the university's website.

### Admission to the Fort Garry Social Work Program

#### Admission Requirements

Completion of 30 credit hours of university-level courses which are acceptable to the University of Manitoba.

The written English and mathematics requirements are recommended to be completed as part of University 1. If these requirements are not met in University 1 (i.e. the first 30 credit hours), as per the university policy, they must be completed within the first 60 credit hours of the programs. General Academic Regulations (p. 118) for a complete list of all courses which satisfy the university written English and mathematics requirement. Minimum GPA for consideration for all applicants (including Educational Equity applicants): 2.5

A Criminal Record Statement and a Child Abuse Registry (CAR) check (for a record of those registered as an offender) must be completed following selection.

Selection criteria: Two applicant pools are created; 60% of all spaces are allocated to applicants with the highest grades, and 40% of all spaces are allocated to applicants based on the Education Equity initiative.

### Concentrated Program

All applicants wishing to complete the program in two years of full-time study must have completed a minimum of 51 credit hours of

university study (which are acceptable to the University of Manitoba) prior to admission to the BSW program. Applicants wishing to complete the degree through the two-year concentrated program must have an Adjusted Grade Point Average of 3.00 from previous university study. In the event that three credit hours in each of written English and mathematics have not been completed as part of the 51 credit hours of previous university study, they must be completed within the first year of the two-year BSW program.

The deadline for submission of applications is March 1st (for the September start date).

### The Selection Process

The selection process is designed to accomplish three objectives: to treat applicants fairly and equitably, to provide the diversity of practitioners required by the profession, and to provide for an efficient admissions process. The faculty selects applicants to the Fort Garry Campus B.S.W. program through two categories as described below.

Academic Achievement Category: 60% of all available positions are awarded on the basis of the highest Adjusted Grade Point Average.

Educational Equity Initiative: 40% of all available positions are allocated to those eligible for inclusion in one or more of the Educational Equity Priority Groups and awarded on the basis of the highest Adjusted Grade Point Average.

The purpose of the Educational Equity initiative is to achieve equality in professional education so that no person shall be denied educational opportunities or benefits for reasons unrelated to ability. In the fulfilment of this goal, the aim is to correct the conditions of disadvantage in professional education experienced by Canadian Indigenous peoples, persons with disabilities, LGBTTTQ, immigrants and refugees to Canada, and persons who are, because of their race or colour, a visible minority in Canada. Giving effect to the principle of educational equity means more than treating persons in the same way; it also requires special measures and the accommodation of difference. Details of the Educational Equity initiative are provided in the application information bulletin.

Students in the Fort Garry Social Work Program must successfully meet the graduation criteria set for all BSW students in the Faculty of Social Work.

### Admission to the Inner City Social Work Program

The Inner City Social Work (B.S.W.) ACCESS Program at the William Norrie Centre is an inner-city extension of the Faculty of Social Work. Students admitted to the Inner City Social Work Program are accepted directly into a four-year B.S.W. program and do not require prior university study.

The objective of this program is to enhance the accessibility of the B.S.W. program by preparing as social workers those mature students who have had inner-city or similar social service experience, but who lack the normal university entrance requirements. Special academic and social support is provided to students admitted to the program. Staff assists candidates in arranging funding resources.

All students complete a total of 123 credit hours of university study. Full time or part-time study is offered.

Admission to the Inner City Social Work Program is limited. Applicants to the full-time program must be 21 years old, low income, and residents of Winnipeg at the time of application. The deadline date for submitting applications is March 1. Orientation begins mid-August and is mandatory.

A part-time B.S.W. Access program is offered to individuals who meet the above criteria, work for a Winnipeg or Aboriginal agency, and/or have two years of employment in human service fields. The deadline for applications for part-time studies is February 1. Classes begin the first week in May.

As per the university's policy, all students are required to complete, within the first 60 credit hours of their programs, a minimum of one three credit hour course with significant content in written English, and a minimum of one three credit hour course with significant content in mathematics.

Please refer to the Calendar's General Academic Regulations for a complete list of all courses which satisfy the university written English and mathematics requirement.

Students at the Inner City Social Work Program must successfully meet the graduation criteria set for all BSW students in the Faculty of Social Work. For further information, contact:

Inner City Social Work Program  
485 Selkirk Avenue  
Winnipeg, Manitoba, R2W 2M6  
Telephone: (204) 668-8160

### Admission to the Northern Social Work Program

The Northern Social Work (B.S.W.) ACCESS program, based in Thompson Manitoba, is an extension of the Fort Garry Faculty of Social Work. Students are admitted directly into a four-year B.S.W. program and do not require prior university study.

All students complete a total of 123 credit hours of university study. Full time or part-time study is offered.

The objective of this program is to enhance the accessibility of the B.S.W. program by preparing as social workers mature students who, without the support of the program, would be unable to successfully complete a university degree due to lack of financial resources, lack of academic qualifications and remote location. Special academic and personal support is provided to students admitted to the program, as well as some assistance in arranging funding resources.

Students who have completed 30 credit hours of university-level courses and have a minimum GPA of 2.5 may apply as External Students.

Admission to the Northern Social Work program is limited. Applicants must meet specified northern residency requirements. The deadline date for submitting applications is March 1 (classes begin in September).

As per the university's policy, all students are required to complete, within the first 60 credit hours of their programs, a minimum of one three credit hour course with significant content in written English, and a minimum of one three credit hour course with significant content in mathematics. Please refer to the Calendar's General Academic Regulations (p. 118) for a complete list of all courses which satisfy the university written English and mathematics requirement. Students in the Northern Social Work program must successfully meet the graduation criteria set for all BSW students in the Faculty of Social Work. For further information, contact the:

Faculty of Social Work at Thompson  
3 Station Road  
Thompson, Manitoba, R8N 0N3  
Telephone: (204) 677-1450

### Admission to the Distance Delivery Social Work Program

The Faculty of Social Work is committed to the accessibility of social work education. The faculty has extended the concept of accessibility to include geographical accessibility through the delivery of the B.S.W. based on two approaches:

1. to individuals by means of an online study program and
2. to community-based groups using the cohort method.

The Distance Delivery B.S.W. program is intended to encourage individuals who are employed in the social services and living outside of Winnipeg, but who may not have had the opportunity to pursue professional social work education.

All students complete a total of 123 credit hours of university study. Full time or part-time study is offered.

Delivery methods for the online study component of the program include a combination of web conferences and online courses. Access to a computer, high-speed internet and a headset with a microphone is required.

All course examinations are scheduled and arranged by the university's Registrar's Office to take place in the student's community.

Delivery of the program to the community-based cohorts utilizes face-to-face delivery with the option of a combination of face-to-face, web conferences, and online study.

Applicants to the Distance Delivery B.S.W. program must meet all three of the following requirements to be admitted into the program:

- Residency outside of the city of Winnipeg; and
- 1 year (1750 hours) of work experience, within the last 5 years, in the social services; and
- Minimum of 30 credit hours of university-level courses which are acceptable to the University of Manitoba, with a minimum GPA of 2.5 for consideration of all applicants, including Educational Equity applicants.

Complete and detailed admissions information is available on our website or by calling the Faculty of Social Work Distance Delivery BSW General Office at 204-474-7912.

The deadline for submission of applications is March 1st (for the September start date).

As per the university's policy, all students are required to complete, within the first 60 credit hours of their programs, a minimum of one three credit hour course with significant content in written English, and a minimum of one three credit hour course with significant content in mathematics. Please refer to the General Academic Regulations (p. 118) for a complete list of all courses which satisfy the university written English and mathematics requirement.

Students in the Distance Delivery B.S.W. program must successfully meet the graduation criteria set for all BSW students in the Faculty of Social Work.

### The Université de Saint-Boniface

The Université de Saint-Boniface, in conjunction with the University of Manitoba, now offers a French language Bachelor of Social Work program. Please contact the Program Coordinator at 204 237-1818 ext. 447 for more information.

### Special Student Admission & Students Enrolled in other Faculties/Schools

#### Special Student Admission

A Special Student in Social Work is one who wishes to take undergraduate Social Work courses with no intentions of proceeding to a B.S.W. degree at the present time. In addition, the student is not currently registered at any other university. Students seeking admission as Special Students may request information from the Faculty of Social Work, 521 Tier Building; telephone (204) 474 7050. Criteria for admission are:

- Successful completion of a minimum of 30 credit hours of university level courses which are acceptable to the University of Manitoba; and
- Adjusted Grade Point Average of 2.5 (C+).

Students are reminded they must apply online and submit an official transcript (one bearing the university seal) along with the application form available on the University of Manitoba website. An application fee applies. Once admitted as a Special Student, students will:

- Be limited to completion of nine credit hours of required social work courses plus SWRK 1310 and SWRK 2080.
- Be prohibited from registering for courses until August (refer to Aurora Student for specific dates).
- Have all courses classified as "SS," which means that grades for these courses may not generate a Grade Point Average.

#### Students Enrolled in other Faculties/Colleges/Schools

Students currently enrolled in other faculties, colleges or schools at the University of Manitoba may register for Social Work courses provided they have completed a minimum of 30 credit hours of university study and achieved a minimum Cumulative Grade Point Average of 2.5. These students will also be limited to completion of SWRK 1310 and SWRK 2080 plus nine credit hours of required social work courses.

Courses available to Special Students and students enrolled in other faculties, colleges and schools at the University of Manitoba:

## Faculty Academic Regulations

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/#Limited%20Access>) will not affect registration for the 2022-2023 (including Summer Term 2023).**

The provisions of the General Academic Regulations (p. 118), and the University Policies and Procedures (p. 37), apply to all students. In addition, the Faculty of Social Work has regulations and requirements, published below, that apply specifically to its students.

**All students are asked to note that some academic policies and regulations are under review and are subject to change.**

### Prerequisite and Co-requisite Policy

The faculty has established a set of pre-/co-requisite requirements to assist students in planning their program of study. All students must abide by the pre- and corequisite requirements for all courses. Any exceptions to the pre- and corequisite policy MUST be approved by the Committee on Academic Standings prior to course registration.

If a student successfully completes a course for which a pre/co-requisite requirement has not been satisfied, this course will not be considered applicable to their BSW program.

### Residence Requirements for a Degree Program

The general university residence requirement applies to the Faculty of Social Work.

### Scholastic Progress

Except in circumstances covered in the official regulations referred to below, clear standing in the faculty requires the Degree Grade Point Average of 2.5 (C+) at the end of each term. A minimum grade of 2.0 (C) is required for all Social Work courses. The passing grades for electives taken in other faculties, colleges or schools are those required by the faculties, colleges or schools concerned. Complete statements of the regulations governing scholastic progress in the Faculty of Social Work are published in the B.S.W. Student Handbook. Students wishing to do so may consult the policy governing scholastic progress as written in the B.S.W. Student Handbook with the Chair of the Committee on Academic Standings, or the Dean. In the event of any question or dispute, this set of regulations shall be considered the official version. Directors of off-campus programs and the Student Services and Admissions/ Advising Office at Fort Garry Campus will advise students on issues concerning scholastic progress.

1. The Scholastic Progress document listed in the BSW Student Handbook is intended to be a supplement to the University of Manitoba Undergraduate Academic Calendar. Should discrepancies exist between the information presented in the BSW Student Handbook and the Undergraduate Calendar, the latter shall prevail.
2. Decisions about a student's scholastic progress or required withdrawal on academic grounds are made by the Committee on Academic Standings of the Faculty of Social Work acting on behalf of the Faculty Council. These decisions are made after a student has completed 30 credit hours of coursework as a Faculty of Social Work student. For students that transfer in 51 to 60 credit hours, decisions will be made upon the completion of the initial 15 credit hours as a Faculty of Social Work student.
3. A student's degree grade point average (DGPA) will be calculated and recorded after each academic term in which the student registers.

4. Clear academic standing is required to continue in the Faculty of Social Work. Clear academic standing is attained by meeting all of the following requirements:
  - a. A minimum grade of "C" (2.0) in all social work courses and a minimum grade of "D" in non-social work elective courses.
  - b. A minimum average of "C+" in all courses taken prior to each review (DGPA a minimum of 2.5).
5. Permission of the Committee on Academic Standings is required to alter any pre-requisite or co-requisite requirements, for exceptional circumstances. Violation of pre/co-requisite policy will result in withdrawing a student from the course to which pre/co-requisite has not been completed.
6. A student who has not attained clear academic standing as defined by Section 4 above will have their academic status reviewed by the Committee on Academic Standings:
  - a. A student who passes all courses, but whose DGPA is less than 2.5 minimum may be permitted to proceed on probation for one academic period (as determined by Committee on Academic Standings) unless the DGPA is less than 2.0. To clear probation, a student must raise their DGPA to 2.5 by the end of the probationary period. A student may not be permitted to proceed in the concentrated program if they are on probationary status.
  - b. A student who passes all courses, but whose DGPA is less than 2.0 may be required to withdraw from the Faculty of Social Work. The Committee on Academic Standings will take into consideration:
    - i. Performance in pass/fail courses;
    - ii. Use of academic and personal supports in the program; and
    - iii. Life circumstances affecting academic performance.
    - iv. Students in ACCESS programs (ICSWP and Northern BSW program) and cohorts.
  - c. A student who fails a non-social work course is subject to the regulations for supplemental privileges of the department concerned. Students should note, nonetheless, that all non-social work elective requirements must be completed.
  - d. A student who fails to meet the required standard (as per Field Evaluation Form) in Field Instruction may be allowed an extension/addendum, or may be required to repeat, or may be required to withdraw.
  - e. Unless approved by the Committee on Academic Standings, a student shall not be permitted to alter the co-requisite requirement for Field Instruction and Practices. Appeals notwithstanding, a student must have obtained a clear standing in Field Instruction 1 (SWRK 3150) and 6 credit hours of Practices (SWRK 4200), (including DGPA of 2.5 minimum) or permission of the Committee on Academic Standings in order to proceed to Field Instruction 2 (SWRK 4120) and an additional 6 credit hours of Practices (SWRK 4300).
  - f. No social work course where a final grade is achieved may be repeated more than once.
  - g. A student with a failing grade in more than two courses shall be required to withdraw from the Faculty of Social Work.
  - h. All students must complete within the first 60 credit hours, three credit hours in written English and three credit hours in Mathematics as part of the BSW degree requirements. Students who have not completed their Mathematics or Written English Requirements within the first 60 credit hours will be placed on hold and be required to speak to their Academic Advisor.
  - i. Unless approved by the Committee on Academic Standings, a student shall not be permitted to repeat a required or elective course or substitute an elective course for another.
 

In making a decision, the Committee on Academic Standings will take into account the overall academic performance of the student, recommendations of the student's instructors, and any particular circumstances of the student's situation which it deems to be relevant.
7. Subject to the provisions of # 6 above, failure to attain clear academic standing, or to clear probationary status, are grounds upon which a student shall be required to withdraw from the Faculty of Social Work. When a student is to be considered for a requirement to withdraw subject to the provisions of # 6, the student shall be notified by mail of the date, time and place for the Committee on Academic Standings review meeting. The student shall receive a minimum of ten (10) working days' notice of the meeting date. They may present oral and/or written submissions at such a meeting and may bring an advocate to speak on their behalf. The Chair of the Committee on Academic Standings shall be notified prior to the meeting if the student intends to appear before the Committee.
8. Students must complete all their social work courses and non-social work electives within nine (9) years. Requests for extensions to go beyond the nine-year limit must be submitted to the Committee on Academic Standings for their assessment and possible approval prior to the time limit expiry date. The maximum time limit for an extension is two years. The Committee shall also determine which, if any, courses previously completed shall need to be repeated or replaced.
9. Along with provisions in # 8 above, Social Work subject courses in the BSW program are valid for 9 years counting from when the student completed the course, including courses taken prior to admission. If a Social Work course expires while the student is still in the Faculty of Social Work, they will be required to repeat the course to fulfil the BSW degree requirements.
10. Students in clear academic standing who plan to re-register should ordinarily indicate their intention to do so by the deadline for applications for admission prior to the session in which they intend to register.
  - a. Students in clear academic standing who withdraw from the BSW Program for less than two calendar years and are within their nine-year limit may re-register by applying to the Program Site (Fort Garry, Inner City Social Work Program, Thompson or Distance Delivery) of the Faculty of Social Work.
  - b. Students in clear academic standing seeking to continue their BSW Program after a two calendar year, or more, absence, but within their nine-year limit and who have not registered with another faculty or institute during their absence, must submit a written request to the Committee on Academic Standings for re-entry.
  - c. Students wishing to re-enter the Faculty who have exceeded their nine-year limit, or who have registered in another faculty or institute during their absence must re-apply for admission to the Faculty through normal application procedures.
11. Students may ask the Committee on Academic Standings for reconsideration of any Standings decision, except the requirement to withdraw on academic grounds. Reconsideration requests should normally be received in writing by the Chair of the Committee of Academic Standings within ten working days of notification of a decision. Students who request a reconsideration shall be informed of the date, time and place of a reconsideration meeting. They may

present oral and/or written submissions at such a meeting, and bring an advocate to speak on their behalf. All decisions of the Committee may be appealed to the Senate Committee on Appeals.

12. Notwithstanding the above regulations, students are reminded that the Senate has granted to the Councils of each professional Faculty the right to require any student to withdraw from the program for which they are enrolled. A full statement of the conditions governing this right is found in the following section on Requirement to Withdraw Criteria and Procedures.
13. A student who has been required to withdraw on academic grounds and who wishes to re-enter the Faculty must request reinstatement from the Committee on Academic Standings. The following will apply in such cases:
  - The applicant will be expected to demonstrate that they will now be able to meet the academic requirements of the program.
  - No application for reinstatement will be considered before a minimum period of 2 years has elapsed from the effective date of the required withdrawal to the effective date of the requested reinstatement.
  - If the student is reinstated after the time limit for program completion has expired, the Committee shall determine which, if any, courses previously completed shall be repeated or replaced.
14. Students wishing to re-enter the Faculty who have registered in another faculty or institute during their absence must re-apply for admission to the Faculty through normal application procedures. A student required to withdraw as a result of proceedings under the provisions of the Professional Unsuitability By-Law, or the Student Discipline By-Law (p. 84), will not normally be reinstated to the Faculty. Exceptional requests may be directed to the Dean of the Faculty.
15. As per the co-requisite policy of the Faculty, when a student withdraws from a Field Instruction course (SWRK 3150, SWRK 4120) the Faculty will automatically withdraw the student from the co-requisite course (Field Focus – SWRK 4200, SWRK 4300). Additionally, when a student withdraws from a Field Focus course (SWRK 4200, SWRK 4300), the Faculty will automatically withdraw the student from the co-requisite course (Field Instruction – SWRK 3150, SWRK 4120).
16. The Faculty's policy concerning voluntary withdrawal from courses is identical to that found in the general regulations for the University, with the exception of co-requisite courses. Students are allowed one voluntary withdrawal from SWRK 3150 and one voluntary withdrawal from SWRK 4120.
17. BSW students who are enrolled in the Fort Garry campus, Inner City Social Work Program and Northern Social Work Program may take up to 6 credit hours of online Social Work courses by Distance Delivery. A student requesting to take more than 6 credit hours of distance delivery courses will require approval of the Associate Dean Undergraduate.
18. As a requirement by the Social Work accreditation standards provided by the Canadian Association of Social Work Education (CASWE), a minimum of 40% of BSW degree requirements must be non-social work courses. A minimum of 48 credit hours of non-social work courses must make up the elective requirement of the BSW degree in order to graduate from the program.

### Professional Unsuitability Bylaw

The Senate has approved a bylaw granting authority to the faculty to require a student to withdraw for reasons of professional unsuitability (see University Policy and Procedures- Student Discipline Bylaw (p. 84)).

The bylaw is published in the B.S.W. Student Handbook. Students are reminded of their obligation to be familiar with all regulations governing their continued progress in the program.

### Dean's Honour List

BSW student eligibility for the Dean's Honour List is considered on a term by term basis. To qualify for the Dean's Honour List a student must:

- Have completed a minimum of 9 credit hours in the term under consideration, of which a minimum of 6 credit hours must be with a standard grade.
- and
- Have achieved a minimum Term GPA of 3.6

Pass/Fail courses are included in the credit hour count.

### Appeal of Grades

The general university policy for appeal of assigned grades applies to the Faculty of Social Work.

Final Examinations & Final Grades Policy (p. 48)

The Faculty Council has established the Academic Standing Appeals Committee to deal with these matters.

### Distance Courses Open to Fort Garry, Inner City and Northern Social Work Students

Fort Garry, Inner City, and Northern BSW students may obtain up to a maximum of 6 credit hours of required social work courses by Distance Delivery. A student requesting to take more than 6 credit hours requires the approval of the Associate Dean (Undergraduate).

### Opting Into Field and Practices of the Two-Year Plan

Students may apply for "opt-in" by fulfilling the following conditions:

- Consult with and submit written request for "Opt-in" to the Coordinator of Student Services and Admission/Advising Office and Field Coordinator no later than February 1.
- Successfully complete all Social Work courses required by the end of Winter term prior to opt-in year (except for SWRK 4210, SWRK 4200, SWRK 4300, SWRK 3150 and SWRK 4120) and
- Successfully complete all elective courses (including written English and mathematics requirements) by the end of the Winter term prior to opt-in year.
- Achieve a minimum Degree Grade Point Average of 3.00 at point of opting in.
- Final approval to opt-in is also based on faculty resources: space availability in SWRK 4210 and SWRK 4220 during Summer Session; space availability in SWRK 4200 and SWRK 4300 courses in Fall and Winter terms; and the availability of concentrated field placements.

### Courses Open to Challenge for Credit

The Faculty of Social Work accommodates those students who are qualified and who can demonstrate acceptable knowledge and skill, by allowing them to challenge certain Social Work courses. They are:

Course	Title	Hours
SWRK 2080	Interpersonal Communication Skills	3
SWRK 3100	Systematic Inquiry in Social Work	3
SWRK 3130	Contemporary Canadian Social Welfare	3

Information on the procedures for a challenge is available in the B.S.W. Student Handbook. The dates at which courses may be challenged are given in the academic schedule of the Undergraduate Calendar.

### Credit for Social Work Courses Taken at Other Universities

The Faculty of Social Work supports the principle of granting credit for social work courses taken within the last nine years in accredited programs leading to professional social work qualification. Equivalency shall not be granted for SWRK 3150 or SWRK 4120. The Faculty of Social Work will not entertain requests for consideration for equivalency transfer for the SWRK 4200 which is a co-requisite to SWRK 3150 and/or SWRK 4120. For more information on granting credits for social work courses please refer to the B.S.W. Student Handbook for more details.

## Program and Graduation Requirements

### General Information

When planning your workload, allow approximately two hours of study/reading time for each hour of class time. It is also advisable to schedule a time to use the library. The faculty will offer as many evening courses as possible each year; however, some courses may only be available during the daytime.

### Field Instruction

Field instruction provides students with an opportunity to engage, as beginning practitioners, in the processes of social work assessment, planning, intervention, evaluation and integration of theory from classroom course work to placement setting. Students complete their field placement requirements in a variety of programs and agencies. Possible field placement sites may include school settings, government policy departments, correctional services, child and family services, immigrant and refugee services, and health care services and other settings.

Students must successfully complete the following pre-requisite course requirements and be in the appropriate year of their degree plan to be eligible to register for Field Instruction:

Course	Title	Hours
SWRK 1310	Introduction to Social Welfare Policy Analysis	3
SWRK 2080	Interpersonal Communication Skills	3
SWRK 2090	Human Behaviour and Social Work Practice	6
SWRK 3140	Introduction to Social Work Practice	3

### The annual deadline for Field Applications: February 1

Students wishing to divert from their degree plan should consult with their Academic Advisor and/or the Coordinator of Student Services and Admissions/Advising Office before February 1, of the Academic year they wish to pursue Field Instruction.

All B.S.W. students are required to complete two field placement requirements:

Course	Title	Hours
SWRK 3150	Field Instruction 1	12
Co-requisite course:		
SWRK 4200	Field Focus of Social Work Practice	
SWRK 4120	Field Instruction 2	12
Co-requisite course:		
SWRK 4300	Field Focus of Social Work Practice 2	

Co-requisite: A course that must be completed in the same term as a second course. This applies to SWRK 3150 and SWRK 4200 as well as SWRK 4120 and SWRK 4300. SWRK 3150 and SWRK 4120 is graded on a PASS/FAIL basis. The Field Focus of Social Work Practice course (SWRK 4200/SWRK 4300) selected should correspond as closely as possible to the Field Placement's area of practice.

University-appointed, agency-based Field Instructors who have knowledge, skills, and expertise in social work practice provide Field Instruction.

Faculty Field Liaisons are also appointed and available to provide support to Students and Field Instructors throughout the academic session.

Students must demonstrate readiness for practice during the process of securing a placement.

The Field Coordinator is the Instructor of Record for SWRK 3150 and SWRK 4120.

Students seeking field placement in a health-related setting are expected to comply with the immunization policies of the designated Health Authority in their region or community area.

All students must meet all agency-specific requirements prior to commencing field placement, such as; Child Abuse Registry Checks, Vulnerable Sector Record Checks and Criminal Record Checks, or others as determined and specified by the respective field agency. Please note students will be responsible for any additional fees associated with the above requirements.

If concerns are raised regarding a student's behaviour, judgment or practice, and/or if the student demonstrates difficulty in their attempts to attain confirmation of field resulting from their performance in the field interview process: the Field Coordinator and Associate Dean of Undergraduate Programs will determine what additional steps may be taken to resolve this matter, or may determine the student is unprepared for meeting the requirements of field placement at this time.

Students are expected to demonstrate initiative and participate actively in all aspects of field placement. If a student is unable to attend field placement due to illness or agency closure, they must make up the field hours for that particular day.

Students are permitted one voluntary withdrawal from the course SWRK 3150 and one voluntary withdrawal from the course SWRK 4120. If a student withdraws from SWRK 3150, they must withdraw from the co-requisite SWRK 4200 and if a student withdraws from SWRK 4120, they must withdraw from co-requisite SWRK 4300. A student with more than one voluntary withdrawal from SWRK 3150 or SWRK 4120 shall be required to withdraw from the Faculty.

If a student fails SWRK 3150 course or SWRK 4200 they cannot take SWRK 4120 or SWRK 4300 until both SWRK 3150/SWRK 4200 requirements met. Students need to complete both SWRK 3150 and SWRK 4200 to proceed to SWRK 4120 and SWRK 4300. In Accelerated Field/Concentrated Field, if a student fails SWRK 3150 in the Fall Term, they are permitted to continue their SWRK 4200 course through to the end of Winter term. As a result of failing SWRK 3150, in January, you are required to withdraw from both SWRK 4120 **and** SWRK 4300. Students interested in taking their placement at their place of employment should consult the BSW Handbook for more details on the policy and procedure

## Prior Learning Assessment and Recognition (PLAR)

SWRK 3152

PLAR is an option available to any BSW student, regardless of program delivery method.

Any BSW student who has two or more years of Social Work employment experience in the past 5 years may choose to apply for eligibility to register for SWRK 3152 PLAR, in lieu of their first field placement requirement. For more information on how to apply or explore PLAR, please see the website (<https://umanitoba.ca/social-work/>).

### The annual deadline to apply for PLAR: December 1

Students enrolled in PLAR are required to complete:

Course	Title	Hours
SWRK 3152	Prior Learning Assessment and Recognition of Field Practice	12
Co-requisite course:		
SWRK 4200	Field Focus of Social Work Practice	

To connect with the Field Education Program Team specific to your program, please see the website ([https://umanitoba.ca/faculties/social\\_work/programs/field\\_education/595.html](https://umanitoba.ca/faculties/social_work/programs/field_education/595.html)).

### Fort Garry Campus and Inner City Social Work Program

Prior to applying for field placement, students are expected to participate in the *Everything you wanted to know about Field* workshop and *The Resumé and Interview Preparation* workshop offered at Fort Garry and Inner City programs prior to Field Information Day. Students are required to e-mail a completed Field Application form, along with an updated résumé, on or before Feb. 1 to the Field Program Assistant.

Please refer to the Field Education Program section of the website for more information.

Most Field Placement agencies will require that the student participate in an interview process and will indicate to the Field Coordinator acceptance for Field Placement.

Upon receipt of the student's completed Field Application Form, new users to the Intern Placement Tracking (IPT) program will receive a temporary password, user name and an IPT Student Manual. In IPT, students are required to identify up to eight agency preferences for placement, due on or before March 1st. Field placements will not be secured for students who do not submit their request, along with all required documentation, by the aforementioned deadline dates.

The Field Coordinator is responsible for securing a reasonable Field Placement. Please note, student placement in a field setting is **not guaranteed** based on completion of pre-requisite courses and/or submission of a Field Application Form. Please note: Fort Garry Campus and Inner City Social Work Program Students are not to contact field placement agencies or prospective Field Instructors directly.

The Field Coordinator or Field Program Assistant refers students eligible for field to an appropriate field placement agency for consideration of an interview. While efforts will be made to consider a student's field focus area of interest, there is no guarantee of a student being placed in one of her/his identified agency preferences. The final authority for field placement referral and confirmation rests with the Field Coordinator. Decisions may be based on the availability of agency openings as well

as the educational needs of the student. Students who are offered a field placement will receive confirmation of the placement by e-mail.

All Fort Garry and Inner City students registered in the Fall/Winter term Field Instruction courses (SWRK 3150 and SWRK 4120) are required to attend field orientation on the first Tuesday of September. As attendance at field orientation is mandatory, regular classes are not scheduled on the first Tuesday in September.

Students requiring additional information may contact the Field Program Assistant at 204-474-6171 or the Field Coordinator at 204-474-8767.

### Fort Garry Campus Regular 3 year Program

Students registered in SWRK 3150 or SWRK 4120 attend field placement two days per week (15 hours) during Fall/Winter terms. Students require a minimum Degree Grade Point Average (D.G.P.A.) of 2.5 to be eligible for field.

### Fort Garry Campus Concentrated Program

Students attend field placement four days per week (30 hours) during Fall/Winter terms for a total of 840 hours, participating in one field placement only. Students contemplating switching to a concentrated field placement are required to have maintained a minimum Degree Grade Point Average (D.G.P.A.) of 3.0. Students should make themselves aware of eligibility requirements of the Concentrated Program and contact the Coordinator of Student Services and Admissions/Advising Office for confirmation of their eligibility no later than February 1.

### Inner City Social Work Program

Students registered in SWRK 3150 or SWRK 4120 attend field placement two days per week (15 hours) during Fall/Winter terms. Students require a minimum Degree Grade Point Average (D.G.P.A.) of 2.5 to be eligible for field.

### Inner City Social Work Program - Accelerated Field

Students who have completed 75 credit hours including required pre-requisites and have maintained a minimum Degree Grade Point Average (D.G.P.A.) of 3.0 are eligible to apply for the ICSWP Accelerated Field. Students attend field placement four days per week (30 hours) during Fall/Winter Terms for a total of 840 hours, participating in one field placement only. Inner City Social Work Program (ICSWP) students interested in pursuing Accelerated Field are encouraged to consult with their Academic Advisor to confirm eligibility and receive guidance on the procedure. Students wishing to do an Accelerated Field must submit a written request to the Director of ICSWP. If approved, written documentation from the Director can be attached to the student's Field Request Form, February 1.

Students eligible for the ICSWP Accelerated Field undertake Field Instruction 1 (SWRK 3150) and Field Instruction 2 (SWRK 4120) at one field placement between September and April. Students approved to take Accelerated Field must also register for two co-requisite Field/Focus of Social Work Practice (SWRK 4200 and SWRK 4300) courses.

### Fort Garry Campus and Inner City Social Work Program Summer Term SWRK 4120 (May-August)

Summer field placements are an opportunity for BSW students from Fort Garry Campus and ICSWP to complete SWRK 4120 over a shorter period than the regular Fall/Winter academic session. It is an exception to the usual mode of field education at the BSW level. It is offered for the convenience of students and when resources permit it. Please note: SWRK 3150 is not offered in summer session.



Students require a minimum Degree Grade Point Average (D.G.P.A.) of 3.0 to be eligible to apply for Summer Field. Students in SWRK 4120 in the summer term must register for the co-requisite course SWRK 4300.

Students who have previously received a grade of **fail** in SWRK 3150 are not eligible to take SWRK 4120 in summer session. Students who have previously failed SWRK 4120 and have been given the opportunity to repeat it are not eligible to repeat SWRK 4120 in summer session.

### Fort Garry Campus and Inner City Social Work Program

Please refer to the BSW Handbook for more details pertaining to Field Instruction Taken at Place of Employment[1]

### Northern Program

Students work closely with the Field Coordinator in preparing for and securing an appropriate field placement. Please note a student placement in a field setting is not guaranteed based on completion of pre-requisite courses.

### 3rd Year Students complete SWRK 3150

Students are required to complete 460 hours including 420 hours in field placement and 40 hours of integrated seminar. Students approved as eligible for field require a minimum Degree Grade Point Average (D.G.P.A.) of 2.5.

### 4th Year Students complete SWRK 4120

Students are required to complete 460 hours including 420 hours in field placement and 40 hours of integrated seminar. Students approved as eligible for field require a minimum Degree Grade Point Average (D.G.P.A.) of 2.5.

Students requiring additional information may contact the Field Coordinator at 204-677-1456.

### Distance Delivery Program

The student is responsible for securing their own Field Placements and need to follow the guidelines for securing Field Placements as per the website:

Distance Delivery Field Education Program (<https://umanitoba.ca/explore/programs-of-study/social-work-distance-delivery-bsw/>)

Students applying for field placement for the:

- **Fall/Winter Term (September to April):**

Students must attend a Field Preparation web conference offered throughout the months of September to January and submit a completed Field Application Form by February 1st. Students approved as eligible for field require a minimum Degree Grade Point Average (D.G.P.A.) of 2.5. Students will be required to complete a Field Preparation module outlining guidelines and procedures for applying and securing placements across Canada.

Students registered in SWRK 3150 or SWRK 4120 in Fall/Winter terms (September to April – 28 weeks) attend field placement two days or 15 hours per week for a total of 420 hours. Students who are approved for Field must also register for the co-requisite Field Focus of Social Work Practice (SWRK 4200 or SWRK 4300) course.

- **Summer Term (May to August):**

Students must attend a Field Preparation web conference offered throughout the months of September to January and must submit

a completed Field Application Form by February 1. Students require a minimum Degree Grade Point Average (D.G.P.A.) of 3.0 to be eligible to apply and will be required to complete a Field Preparation module outlining guidelines and procedures for applying and securing placements across Canada.

Students registered in SWRK 3150 or SWRK 4120 in the Summer term (May to August -14 weeks) attend field placement four days or 30 hours per week for a total of 420 hours. Students who are approved for Field must also register for the co-requisite Field Focus of Social Work Practice (SWRK 4200 or SWRK 4300) course.

- **Accelerated Field Fall/Winter Term (September to April)**

### Field Instruction 1 (SWRK 3150) and Field Instruction 2 (SWRK 4120)

- Students who have completed 75 credit hours including required pre-requisites and have maintained a minimum Degree Grade Point Average (D.G.P.A.) of 3.0 are eligible to apply for Accelerated Field. Students complete SWRK 3150 September – December followed by SWRK 4120 January – April. Students registered in Accelerated Field Instruction attend field placement four days or 30 hours per week for a total of 840 hours by end of term in April.

Students who are approved to take Accelerated Field must also register for two co-requisite Field Focus of Social Work Practice (SWRK 4200 and SWRK 4300) courses.

All students registered in Distance Delivery Field Instruction courses (SWRK 3150 and SWRK 4120) are required to complete several Field Instruction Modules and participate in a one-hour web conference prior to entering field placement. Completion of the Field Instruction Modules and attendance at Field Instruction Web Conference is mandatory.

Students requiring information may contact the Distance Delivery Field Assistant at 204-474-9537 or the Distance Delivery Field Coordinator at 204-474-8316

Field placements will not be approved for students who do not submit the completed Field Application Form by the deadline date. Final approval for field placement rests with the Distance Delivery Field Coordinator. Decisions may be based on the availability of agency openings as well as the educational needs of students.

### Requirements for Graduation

Eligibility for graduation is contingent upon:

- The successful completion of 72 credit hours of required Social Work courses; successful completion means attaining a minimum grade of "C" in all Social Work courses and a minimum Degree Grade Point Average (D.G.P.A.) of 2.50 (C+).
- As a requirement by the Social Work accreditation standards provided by the Canadian Association of Social Work Education (CASWE), a minimum of 40% of BSW degree requirements must be non-social work courses. A minimum of 48 credit hours of non-social work courses must make up the elective requirement of the BSW degree in order to graduate from the program.
- The successful completion of 51 credit hours of electives. Students admitted after 1997/98, are required to successfully complete three credit hours of written English and three credit hours of Mathematics within the first 60 credit hours of their programs. The passing grades for electives taken in other faculties, colleges or schools are those

required by the faculties, colleges or schools concerned. A minimum of "C" must be attained in Social Work electives. The minimum Degree Grade Point Average (D.G.P.A.) required for graduation is also 2.50 (C+).

- Total credit hours required for a B.S.W. are 123 (51 credit hours of electives + 72 credit hours of required Social Work courses)

### Student Responsibilities

It is the student's responsibility to be familiar with all the requirements of the B.S.W. degree, to ensure compliance with degree program requirements, including prerequisite requirements, and to understand all relevant regulations, policies and practices. The final completion of degree requirements is the student's responsibility.

The Interfaculty Option in Aging is offered by the following faculties/colleges: Arts, Agriculture and Food Sciences, Medicine, Nursing, Kinesiology and Recreation Management, and Social Work. To complete the option, students will complete each of the following requirements:

Course	Title	Hours
NURS 2610 or KIN 2610	Health and Physical Aspects of Aging	3
SWRK 2650 or FMLY 2650	The Social Aspects of Aging <sup>1</sup>	3
or		
SWRK 3150 or SWRK 4120	Field Instruction 1 Field Instruction 2	12
SWRK 4200 or SWRK 4300	Field Focus of Social Work Practice Field Focus of Social Work Practice 2	6

<sup>1</sup> These courses are offered on a rotational basis by participating units.

Students are encouraged to take courses from the participating units other than Social Work.

Upon the successful completion of these requirements, a notation will be added to the student's transcript. For further information on the Interfaculty Option in Aging, please refer to the website (<https://umanitoba.ca/explore/programs-of-study/aging-interfaculty-option/>).

## Social Work, B.S.W.

### Curriculum Outline

Students should contact their Academic Advisors from their program delivery sites for information on curriculum outlines.

#### A) Three-Year Plan

This plan allows a Fort Garry Campus student who has completed 30-50 credit hours of general university study prior to admission, to combine Social Work professional courses with other university courses. It requires three years of full-time study, after admission to the faculty, to complete the requirements for the B.S.W. degree. A student who has already completed the 51 credit hours of general university study which are acceptable to the University of Manitoba may also register for this program ignoring the elective requirements.

#### Three-Year Plan Example

Course	Title	Hours
SWRK 1310	Introduction to Social Welfare Policy Analysis	3
SWRK 2080	Interpersonal Communication Skills	3
SWRK 2090	Human Behaviour and Social Work Practice	6
SWRK 3140	Introduction to Social Work Practice	3
SWRK 3150	Field Instruction 1	12
SWRK 4120	Field Instruction 2	12
SWRK 4200	Field Focus of Social Work Practice	6
SWRK 4300	Field Focus of Social Work Practice 2	1-6
SWRK 2110 or SWRK 2130	Emergence of the Canadian Social Welfare State Comparative Social Welfare Systems	3
SWRK 3100	Systematic Inquiry in Social Work	3
SWRK 3130	Contemporary Canadian Social Welfare	3
SWRK 4210	Feminist Perspectives on Social Work Practice and Social Welfare Policy	6
SWRK 4220	Aboriginal People and Social Work Practice	6

#### Notes:

- SWRK 1310 and SWRK 2080 are open to University 1 students,
- All students must take the foundation courses very early in the program. Failure to do so may restrict progression through the program.
- See course descriptions (p. ) for a complete list of pre-/co-requisites.
- Students must take SWRK 1310 before proceeding to SWRK 2110, SWRK 2130, and SWRK 3130. In addition, SWRK 1310, SWRK 2080 and SWRK 2090 are pre- or co-requisite to SWRK 3140.
- All foundation courses (SWRK 1310, SWRK 2080, SWRK 2090 and SWRK 3140) are pre-requisite to SWRK 4200, SWRK 4300, SWRK 4210, SWRK 4220, SWRK 3150 and SWRK 4120. In addition, SWRK 3150 and SWRK 4200 are pre-requisites to SWRK 4120.
- See Aurora Class Schedule for a list of SWRK 4200 and SWRK 4300 courses.
- Students must take one section of SWRK 4200 and one section of SWRK 4300. Each section is anchored in a different field or focus of social work practice.
- Students must take SWRK 4200 concurrently with SWRK 3150 and SWRK 4300 concurrently with SWRK 4120. If a student withdraws from SWRK 4200, they must also withdraw from SWRK 3150 and if a student withdraws from SWRK 4300, they must also withdraw from SWRK 4120. As well, if a student withdraws from SWRK 3150 they must withdraw from SWRK 4200 and if a student withdraws from SWRK 4120 they must withdraw from SWRK 4300. Students, who fail to withdraw from the co-requisite course, will be withdrawn.
- Students admitted after '97-'98 must complete 3 credit hours of written English and 3 credit hours of mathematics as part of first 60 credit hours (unless completed prior to admission).

This plan assumes that students do not take courses in the summer.

Course	Title	Hours
<b>Year 1</b>		
Select 21 credit hours in Social Work Courses		21
Select 6 credit hours in Electives		6
<b>Hours</b>		<b>27</b>
<b>Year 2</b>		
Select 27 credit hours in Social Work Courses		27
Select 6 credit hours in Electives		6
<b>Hours</b>		<b>33</b>
<b>Year 3</b>		
Select 24 credit hours in Social Work Courses		24
Select 9 credit hours in Electives		9
<b>Hours</b>		<b>33</b>
<b>Total Hours</b>		<b>93</b>

### Planning Chart for Elective Courses for Three-Year Program

Course	Title	Hours
<b>Required Electives</b>		
Admitted on basis of (Year 1)		30
Unallocated transfer		
Electives to be completed		
Written English (W) (Year 1)		
Mathematics (M) (Year 1)		

## B) Two-Year Plan (Concentrated Program) – Fort Garry Campus

Fort Garry Campus students who have completed 51 credit hours of general university study prior to admission to the B.S.W. program, and have attained a minimum Adjusted Grade Point Average (A.G.P.A.) of 3.00, are eligible for the two year plan (Concentrated Program). If a student has completed the 51 credit hours of general university study which are acceptable to the University of Manitoba, but does not have the required 3.00 A.G.P.A., or prefers a more extended time period, that student can register for either the three-year plan or the part-time plan.

Students eligible to register for the concentrated program may choose to do so at point of initial registration following admission only.

If any of the required social work courses were part of 51 credit hours completed prior to admission to the BSW program, they will have to be substituted with elective courses after admission to the BSW program. Any outstanding elective courses, including written English and mathematics requirements, must be completed by the end of Winter term in the first year of the BSW Concentrated Program.

Students must maintain a Degree Grade Point Average (D.G.P.A.) of a minimum 3.00 at the end of each term to remain in the Concentrated Program. In an instance where one or both of these requirements are not met, the student's status will be changed from Concentrated to Regular.

Students planning on completing their program in two years must follow the structure outlined below (which requires completing at least 12 credit hours, including SWRK 4210 and SWRK 4220, during the summer).

### Two-Year Plan

Course	Title	Hours
<b>Year 1</b>		
(September-August)		

SWRK 1310	Introduction to Social Welfare Policy Analysis	3
SWRK 2080	Interpersonal Communication Skills	3
SWRK 2090	Human Behaviour and Social Work Practice	6
SWRK 2110 or SWRK 2130	Emergence of the Canadian Social Welfare State or Comparative Social Welfare Systems	3
SWRK 3100	Systematic Inquiry in Social Work	3
SWRK 3130	Contemporary Canadian Social Welfare	3
SWRK 3140	Introduction to Social Work Practice	3
SWRK 4210	Feminist Perspectives on Social Work Practice and Social Welfare Policy	6
SWRK 4220	Aboriginal People and Social Work Practice	6
<b>Hours</b>		<b>36</b>

### Year 2

(September-May)		
SWRK 3150	Field Instruction 1	12
SWRK 4200	Field Focus of Social Work Practice	6
SWRK 4120	Field Instruction 2	12
SWRK 4300	Field Focus of Social Work Practice 2	6
<b>Hours</b>		<b>36</b>
<b>Total Hours</b>		<b>72</b>

**Note:** See course descriptions (p. ) for a complete list of pre/co-requisites

## C) The Part-Time Plan

Please note that it is possible to pursue the Bachelor of Social Work degree through a program of part-time study. Part-time students must complete all the required social work and elective courses within nine years of their admission to the faculty.

## Required Social Work Courses

Course	Title	Hours
SWRK 1310	Introduction to Social Welfare Policy Analysis	3
SWRK 2080	Interpersonal Communication Skills	3
SWRK 2090	Human Behaviour and Social Work Practice	6
SWRK 2110	Emergence of the Canadian Social Welfare State	3
SWRK 2130	Comparative Social Welfare Systems	3

## Elective Social Work Courses

Course	Title	Hours
SWRK 2050	Community and Organizational Theory	3
SWRK 2070	Small Group Dynamics	3
SWRK 4050	Selected Topics in Social Work	3
SWRK 4080	Current Issues in Social Welfare	3

**Note:** Special and non-Social Work students are required to abide by the same pre-/co-requisite policy that applies to B.S.W. students.

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## Agribusiness and Agricultural Economics (ABIZ)

### ABIZ 0440 Agricultural Economics & Marketing 1 4 cr

Introduction to key economic concepts and business principles and their application to Canadian agribusiness.

### ABIZ 0450 Agricultural Economics and Marketing 2 4 cr

(Lab required) The application of economic analysis in the study of marketing: concepts, policy, practices and institutions. May not be held with ABIZ 2510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ABIZ 0440.

**Mutually Exclusive:** ABIZ 2510

### ABIZ 0460 Financial Management 1 4 cr

Study of accounting principles and financial information for the preparation and presentation of financial statements to facilitate the management of farms and agricultural businesses.

### ABIZ 0470 Financial Management 2 4 cr

(Lab required) Study of analysis of financial statements and financial information by decision makers managing the finances of farms and agricultural businesses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ABIZ 0460.

### ABIZ 0710 Agricultural Policy 3 cr

Review of agriculture, international trade and food safety policies affecting the production and distribution of agricultural commodities and food products.

### ABIZ 0730 Financial Risk Management 3 cr

Various approaches to managing market risk will be studied, including forward pricing, hedging using futures and options along with insurance, diversification and the use of technology to manage production risk.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ABIZ 0470 or pre- or corequisite: ABIZ 0450.

### ABIZ 0740 Special Topics in Business Management 3 cr

Selected topics of current interest in Business Management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of Director of the School of Agriculture.

**ABIZ 0750 Advanced Agricultural Financial Management and Lending 3 cr**

This course will offer realistic templates for assessing loan application cases and determining financial need, production feasibility and repayment for lenders. Students will analyze lender portfolios and the financial management of various enterprises. Students will learn to apply financial management concepts in evaluating investment options in farm and agribusiness decision-making. May not be held with ABIZ 0690 or DAGR 0730.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ABIZ 0470.

**Mutually Exclusive:** ABIZ 0690, DAGR 0730

**ABIZ 1000 Introduction to Agribusiness Management 3 cr**

Introduction to management principles applied to agribusiness. Topics covered will include cooperative and corporate organizations, financial analysis, marketing and planning. All students will prepare a business plan. Students will use spreadsheet skills with respect to processing information and preparing forecasts.

**Attributes:** Recommended Intro Courses

**ABIZ 1010 Economics of World Food Issues and Policies 3 cr**

Determinants of global food consumption, production and the factors underpinning food security and malnutrition. The importance of international trade in balancing countries' supply and demand for food, examination of trade barriers and institutions facilitating trade.

**Attributes:** Recommended Intro Courses

**ABIZ 2210 Transportation Principles 3 cr**

This course is a study of demand forecasting, cost analysis, regulation of carriers, role of transport in economic development, project appraisal, and transport planning focusing upon the agricultural, agri-food and other supply chains. Also offered as SCM 2210. May not be held with SCM 2210.

**Equiv To:** SCM 2210

**ABIZ 2390 Introduction to Environmental Economics 3 cr**

Economics of management of water, air and land resources quality, and the economics of conservation. The economic implications of environmental standards, licensing criteria and pollution charges will be illustrated by current issues. Students may not hold credit for both ABIZ 2390 and ECON 2390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 1010 or ECON 1011 or the former ECON 1200 or the former ECON 1201] or [ECON 1210 (or ECON 1211 and ECON 1220 (or ECON 1221))].

**Equiv To:** ECON 2390

**ABIZ 2510 Introduction to Agricultural and Food Marketing 3 cr**

Economic principles and institutions involved in the Canadian agricultural and food marketing system with applications to farming and agribusiness. May not be held with ABIZ 0450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A minimum grade of C in ECON 1010 (or ECON 1011 or the former ECON 1200 or the former ECON 1201) or both ECON 1210 (ECON 1211) and ECON 1220 (ECON 1221).

**Mutually Exclusive:** ABIZ 0450

**ABIZ 2520 Introduction to Management Sciences 3 cr**

(Lab required) An introduction to management science techniques and models relevant to the agricultural and agri-food sectors. Topics include linear programming, distribution problems, decision theory and queuing models. May not be held with MSCI 2150 or MSCI 2151.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: A minimum grade of C in [MATH 1300 (MATH 1301) or MATH 1210] and [MATH 1500 (MATH 1501) or MATH 1510 or MATH 1520]. Pre- or corequisite: AGRI 2400 or STAT 1000 or STAT 1001.

**Equiv To:** MSCI 2150, MSCI 2151

**ABIZ 2610 Agricultural Law 3 cr**

This course explores the complex set of laws affecting the agricultural and agri-food sectors, focusing upon those laws critical for effective planning and sound decision making with respect to farm operations, agribusinesses and agri-food sector institutions. Topics include but are not limited to Manitoba's and Canada's legal systems, the major laws affecting the stakeholders listed above, and the legal resolution of issues in the agricultural and agri-food sectors. May not be held with the former DAGR 0760.

**Mutually Exclusive:** DAGR 0760

**ABIZ 2620 Agricultural Human Resource Management 3 cr**

Students will carry out processes such as job analysis and design, recruitment and selection, training and development, performance management and compensation management to develop a comprehensive human resource management plan for an agricultural enterprise. An overview of human resource legislation will be provided and resources to support human resource management decision making will be identified. May not be held with AGRI 3030 when titled "Agricultural Human Resource Management" or HRIR 2440 or the former DAGR 0530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ABIZ 1000 or DAGR 0480.

**Mutually Exclusive:** AGRI 3030, DAGR 0530, HRIR 2440, HRIR 2441

**ABIZ 3080 Introduction to Econometrics 3 cr**

(Lab required) The application of statistical tools, especially regression analysis for estimating economic relationships and testing economic hypotheses and model specification through the use of spreadsheets and data sets related to agricultural and agri-food sector applications. May not be held with ECON 3040 (or the former ECON 3180).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: A minimum grade of D in [AGRI 2400 or STAT 2000 (STAT 2001) or ECON 2040 or the former ECON 3170] and [ECON 1010 (ECON 1011) and ECON 1020 (ECON 1021) or the former ECON 1200 (the former ECON 1201)].

**Equiv To:** ECON 3040, ECON 3180

**ABIZ 3120 Commodity Futures Markets 3 cr**

Theory and economic functions of commodity markets, including futures and options markets, with a focus on agricultural commodities. The roles of the various participants; the determination of inter-temporal prices and various aspects of hedging will be studied.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: A minimum grade of C in [ECON 1010 (ECON 1011) or the former ECON 1200 (the former ECON 1201)] or [ECON 1210 (ECON 1211) and ECON 1220 (ECON 1221)] and a minimum grade of D in AGRI 2400 or STAT 2000 (STAT 2001).

**ABIZ 3510 Economics of Food Policy 3 cr**

Economics of market intervention; trade policy analysis, and agricultural protection, exports, subsidies, tariffs, quotas; intermediate versus final goods; currency exchange rates and agricultural trade policy; trade agreements. Not to be held with ABIZ 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECON 2010 or the former ECON 2450.

**Mutually Exclusive:** ABIZ 3500

**ABIZ 3520 Food Distribution and International Merchandising (3-0:0-0) 3 cr**

An introduction to management concepts and their application to domestic and international merchandising.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (ABIZ 1000), and (ABIZ 2510 or MKT 2210).

**ABIZ 3530 Farm Management 3 cr**

Management decisions and business planning as they relate to farm production, marketing and financing activities. Identifying potential markets; comparative advantage analysis; organizational form and contractual requirements; alternative marketing and production strategies; financing production and marketing activities; develop farm business plan.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ABIZ 1000.

**ABIZ 3540 Financial Risk Management 3 cr**

Topics explored will include risk expected returns and valuation of capital; addressing risk in the context of capital budgeting; derivative securities (i.e. futures and options) and financial risk management; the management of risk within and outside of agricultural production; and public policy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: A minimum grade of D in [AGRI 2400 or STAT 1000 (STAT 1001)] and [ABIZ 1000 or ABIZ 2510].

**ABIZ 3550 Environmental Policy 3 cr**

Environmental policy development and enactment in Canada; federal and provincial review processes; socio-political aspects of policy development; chemical and pesticide licensing procedures and environmental effects monitoring; environmental policy and sustainability; case studies; discussion of various policies; ethics of development, preservation and conservation; environmental risk management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ABIZ 2390 or ECON 2390.

**ABIZ 3560 Agribusiness Portfolio Management 3 cr**

The application of portfolio management to agribusiness, including asset allocation, portfolio construction and analysis, and operation of investment instruments and capital markets. Includes Canadian Securities Course. Recommended G.P.A. of 2.80 or higher.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Major in Agribusiness or Accounting and/or Finance, with 60 credit hours, ACC 1100 and ECON 1010 OR ECON 1020 or the former ECON 1200, or permission from instructor.

**ABIZ 4120 Intermediate Econometrics 3 cr**

A course in applied econometrics that explores the regression model and how it may be applied. Special emphasis is placed on violations to the assumptions of least squares, specification error, and applying the model to production, marketing, forecasting and other applications. May not be held with ECON 4040 or the former ECON 4120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ABIZ 3080 or ECON 3040 (or the former ECON 3180).

**Equiv To:** ECON 4120

**ABIZ 4240 Agricultural Economics Special Project 3 cr**

Students will undertake a project to analyze an applied problem and present results in a research and/or extension paper. A list of relevant readings will be assigned. Permission of the Department Head required.

**ABIZ 4260 Price Analysis 3 cr**

Theory and methods of price analysis, commodity markets and the demand and supply factors that underpin seasonal, cyclical and secular changes in commodity prices. Not to be held with ABIZ 4250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [ECON 2010 or the former ECON 2450] and [ABIZ 3080 or ECON 3040 or the former ECON 3180].

**Mutually Exclusive:** ABIZ 4250

**ABIZ 4500 Agribusiness Strategies Seminar 3 cr**

This course will provide participants with insights into management strategies and decision making, as well as the responsibilities, tensions and pressures encountered by senior management. Some classes will include participation by senior management followed by a debriefing session.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ACC 1100 and ABIZ 1000 and 84 credit hours completed toward the Agribusiness degree program.

## Accounting (ACC)

**ACC 1100 Introductory Financial Accounting 3 cr**

(Lab required) Examination of accounting postulates underlying the preparation and presentation of financial statements.

**Equiv To:** ACC 1101

**ACC 1110 Introductory Managerial Accounting 3 cr**

(Lab required). Role of accounting in creation and application of business information used by decision-makers in the management of enterprise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACC 1100 (009.110) (D). Prerequisite or Concurrent Requirement: ECON 1010 (D) and ECON 1020 (D) or the former ECON 1200 (D).

**Equiv To:** ACC 1111

**ACC 2010 Intermediate Accounting - Assets 3 cr**

Accounting policies and practices dealing with calculation and measurement of assets and related reporting problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACC 1100 (C+).

**Equiv To:** ACC 2011

**ACC 2020 Intermediate Accounting - Equities 3 cr**

Consideration of current accounting relating to equities with attention to the accounting treatment of current and long-term liabilities, income tax allocation, share capital, and surplus. May not be held with FIN 3250 or ACC 2021.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (ACC 2010 or ACC 2011) and (FIN 2010 or FIN 2200 or FIN 2201).

**Equiv To:** ACC 2021

**Mutually Exclusive:** FIN 3250

**ACC 3010 Data Analytics in Accounting 3 cr**

Data analytics concepts, techniques, and skills to translate accounting and business problems into actionable proposals.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (ACC 1110 (D) or ACC 1111 (D)) ; and IDM 2020 or (the former MIS 2000 or MIS 2001).

**ACC 3030 Advanced Accounting 3 cr**

Topics include: partnerships, consolidations, mergers, reporting on conglomerates, and fund accounting. Not offered every year. May not be held with ACC 3031.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (ACC 2010 or ACC 2011) and (ACC 2020 or ACC 2021).

**Equiv To:** ACC 3031

**ACC 3040 Cost Accounting 3 cr**

Study of accounting concepts and functions as they relate to product costing, planning, control, and decision-making.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACC 1110 (C+).

**Equiv To:** ACC 3041

**ACC 3080 Canadian Income Taxation 3 cr**

(Lab required). Structure and concepts of the Canadian income tax system, calculation of income and tax thereon for individuals and corporations, introduction to planning principles. May not be held with ACC 3050 or ACC 3051.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACC 1100 (C+).

**Equiv To:** ACC 3050, ACC 3051

**ACC 3530 Accounting Information Systems 3 cr**

Role of accounting systems in total management information systems; design and installation of accounting systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ACC 1110 or ACC 1111 (D).

**ACC 4010 Auditing 3 cr**

Study of philosophy and concepts of auditing, legal and ethical responsibilities of the auditor, basic techniques of auditing including statistical sampling and flowcharting, and the operational audit. May not be held with ACC 4011.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (ACC 2010 or ACC 2011 ) and (ACC 2020 or ACC 2021).

**Equiv To:** ACC 4011

**ACC 4030 Accounting Theory 3 cr**

Examination of principles and postulates of accounting theory. Coverage of selected topics will vary from year to year depending on interests of course participants. May not be held with ACC 4031.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (ACC 2020 or ACC 2021) and (FIN 2200 or FIN 2201).

**Equiv To:** ACC 4031

**ACC 4040 Advanced Managerial Accounting 3 cr**

A critical examination of managerial accounting techniques and the controllership function.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACC 3040 (D).

## Actuarial Mathematics (ACT)

**ACT 2020 Economic and Financial Applications 3 cr**

A synthesis of macroeconomic issues, quantitative aspects of finance using interest theory, and insurance economics.

**ACT 2120 Interest Theory 3 cr**

The application of calculus and probability to discrete and continuous interest functions. Key topics are the measurement of interest, present and accumulated values, and annuities. May not be held with the former ACT 3320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 1232 or MATH 1690 or MATH 1700 (B) or MATH 1710 (B). Pre- or corequisite: [MATH 2720 or MATH 2721 (D)] or [MATH 2731 or the former MATH 2750 or MATH 2730 (D)] and STAT 2400 (D).

**Equiv To:** ACT 3320

**ACT 2210 Introduction to Risk Management 3 cr**

Mathematical tools for the quantitative assessment of risk and their application to problems encountered in risk management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: STAT 2400 (D) or consent of instructor.

**ACT 3130 Actuarial Models 1 3 cr**

Elementary concepts respecting the quantification of the financial impact of contingent payments. May not be held with ACT 3630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ACT 2120 (C+) and [STAT 2800 (D) or the former STAT 3400 (D) or the former STAT 3500 (D)].

**Mutually Exclusive:** ACT 3630

**ACT 3230 Actuarial Models 2 3 cr**

Intermediate and advanced concepts respecting the quantification of the financial impact of contingent payments. Not to be held with ACT 3630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACT 3130 (C+).

**Mutually Exclusive:** ACT 3630

**ACT 3340 Financial Derivatives for Actuarial Practice 3 cr**

Introduction of interest rate models and rational valuation of derivative securities.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACT 2020 (C+) or consent of instructor.

**ACT 4000 Advanced Actuarial Topics 3 cr**

A selection of advanced topics of current actuarial interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACT 3230 (D).

**ACT 4010 Regression Modeling in Actuarial Science 3 cr**

Construction of generalized linear models and regression-based time series models with actuarial applications. May not be held with IDM 4050 when titled "Time Series and Regression Analysis for Management".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: STAT 2800 (D) or the former STAT 3400 (D) or the former STAT 3500 (D).

**Mutually Exclusive:** IDM 4050



**ACT 4020 Short Term Actuarial Mathematics I 3 cr**

Introduction to useful frequency and severity models, aggregate models, coverage modifications, risk measures and construction and selection of parametric models. This course covers part of the learning objectives of Short-Term Actuarial Mathematics Exam by the Society of Actuaries (SoA). May not be held with the former ACT 4140 or the former ACT 4630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: STAT 2800 (D) or the former STAT 3400 (D) or the former STAT 3500(D).

**Equiv To:** ACT 4140

**Mutually Exclusive:** ACT 4630

**ACT 4030 Short Term Actuarial Mathematics II 3 cr**

Introduction to useful credibility theory, insurance and reinsurance coverage, and pricing and reserving for short term insurance coverages. This course covers part of the learning objectives of Short-Term Actuarial Mathematics Exam by the Society of Actuaries (SoA). May not be held with the former ACT 4240 or the former ACT 4630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACT 4020 (C+) (or the former ACT 4140(C+)).

**Equiv To:** ACT 4240

**Mutually Exclusive:** ACT 4630

**ACT 4060 Actuarial Aspects of Investment Practice 3 cr**

This course examines stochastic interest rates and tools and techniques for coping with general product issues in asset/liability management. May not be offered every year. Students may not hold credit for both ACT 4060.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FIN 2200 (C+).

**ACT 4160 Introduction to Property and Casualty Insurance Industry 3 cr**

The introduction to the Property and Casualty Insurance Industry and the discussion of relevant topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Corequisite: ACT 2120 (C+) or consent of instructor.

## Agriculture (AGRI)

**AGRI 1010 Business Communication 3 cr**

Strengthen the thinking, writing, speaking and listening skills required by IEAP students to succeed in the agricultural, food science or agri-business world. Students will develop an understanding of cultural influence in communication tasks used in academic and workplace settings.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: Must be enrolled in the Internationally Educated Agrologists Program.

**AGRI 1600 Introduction to Agrifood Systems 3 cr**

(Lab required) This course explores agricultural production systems with special focus on the Canadian Prairies. Students will develop scholarly, social, communication and professional skills that will enable them to be successful in the application of technical knowledge to food production challenges. This course will include a field trip component. May not be held with the former AGRI 1500.

**Mutually Exclusive:** AGRI 1500

**AGRI 2002 Agricultural and Food Sciences Co-operative Education Work Term 1 3 cr**

A work assignment of a minimum of 420 hours in business, industry, government or research for co-operative education students. Requires submission of a written report covering the work completed during the professional assignment. This course is restricted to students where a co-operative education work term placement in the Agricultural and Food Sciences Co-operative Education Program has been confirmed. May not be held with the former AGRI 4550. Course evaluated on a pass/fail basis.

**Mutually Exclusive:** AGRI 4550

**AGRI 2030 Technical Communications 3 cr**

Lectures and workshops to develop written and oral communication skills for preparing and presenting scientific and technical reports. Basic composition skills, communication graphics and job interview techniques are included.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 24 credit hours of University coursework.

**Attributes:** Written English Requirement

**AGRI 2180 Introductory Toxicology 3 cr**

A survey of general principles underlying the effects of toxic substances on biological systems, including history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants. This course is co-taught with BIOL 2380 and ENVR 2180. May not be held with BIOL 2380 (BIOL 2381), the former BIOL 2382, ENVR 2180, ENVR 2190 or the former AGRI 2190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [BIOL 1030 (BIOL 1031) or HEAL 1502] and [(CHEM 1100 (CHEM 1101) and CHEM 1120 (CHEM 1121)) or one of CHEM 1110 (CHEM 1111) or CHEM 1130 or the former CHEM 1320 or the former CHEM 1310 (the former CHEM 1311)].

**Equiv To:** BIOL 2380, BOTN 2180, ENVR 2180, ZOOL 2180

**Mutually Exclusive:** AGRI 2190, BIOL 2382, BOTN 2190, ENVR 2190, ZOOL 2190

**AGRI 2300 Indigenous Issues in Food Systems 3 cr**

An overview of the historical and contemporary relationships between food systems and Indigenous people. The course will provide background to allow students to craft their own solutions to food system issues faced by Indigenous people.

**AGRI 2400 Experimental Methods in Agricultural and Food Sciences 3 cr**

(Lab required) Experimental design and data analysis using examples relevant to agricultural, food and human nutritional sciences. Ethics in research; critical thinking in data analysis; quantitative data analysis methods; applications of statistical analyses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: AGRI 1600 or HNSC 1200 or HNSC 1210 or the former AGRI 1500.

**AGRI 2500 Managing Farm Safety 3 cr**

This course provides introductory information on farm safety. It is designed to raise awareness about safety issues and legislation in the agricultural industry, and to encourage students to reflect upon safety at their own worksite or in farm operation. May not be held with the former DAGR 0520 or DAGR 0660 when titled "Introduction to Farm Safety."

**Mutually Exclusive:** DAGR 0520, DAGR 0660

**AGRI 2510 Managing Farm Business Transition 3 cr**

This course is designed to provide students with the tools and knowledge to incorporate transition management into farm business management planning. Students will be introduced to profiles/dynamics, business structures, as well as financial and managerial influences that affect farm and business transition options. There will be an application of real farm examples as context to the instructional material. May not be held with the former DAGR 0550 or DAGR 0660 when titled "Succession/Transition Considerations in Farm Management."

**Mutually Exclusive:** DAGR 0550, DAGR 0660

**AGRI 3002 Agricultural and Food Sciences Co-operative Education Work Term 2 3 cr**

A work assignment of a minimum of 420 hours in business, industry, government or research for co-operative education students. Requires submission of a written report covering the work completed during the professional assignment. This course is restricted to students where a co-operative education work term placement in the Agricultural and Food Sciences Co-operative Education Program has been confirmed. Course evaluated on a pass/fail basis. May not be held with the former AGRI 4560.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: AGRI 2002 or the former AGRI 4550.

**Mutually Exclusive:** AGRI 4560

**AGRI 3030 Modern Topics in Agriculture 1 3 cr**

An interdisciplinary course including topical national and international issues in agriculture. The course will vary from year to year to provide material of current interest in a wide variety of subject areas. Student participation by means of seminars will be encouraged.

**Mutually Exclusive:** ABIZ 2620, HRIR 2440, HRIR 2441

**AGRI 3040 Modern Topics in Agriculture 2 3 cr**

Similar to AGRI 3030.

**AGRI 3500 Geographical Information Systems (GIS) Applications in Agriculture 3 cr**

Geographical information systems (GIS) applications are becoming widespread in modern agriculture. This course introduces students to fundamental concepts as well as recent developments in GIS pertaining to agriculture. Students will engage in spatial analyses that include mapping and summarizing soil, crop, livestock, and weather datasets. During these analyses, students will experience the complete GIS workflow by downloading and inputting data into GIS software, quality controlling and pre-processing datasets, using GIS analytical tools, and exporting spatial products such as digital maps. Students are encouraged take GEOG 3730 or GEOG 2200 in advance of AGRI 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A minimum 60 credit hours of university level courses.

**AGRI 4000 Practising the Profession of Agrology 1 3 cr**

Introduction to the profession of Agrology in Manitoba with an emphasis on understanding the structure of the agriculture industry, the agriculture network and how it functions. Laboratory sessions will focus on guest speakers and tours of companies and agencies in the agriculture industry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Must be enrolled into the Internationally Educated Agrologists Program (IEAP).

**AGRI 4002 Agricultural and Food Sciences Co-operative Education Work Term 3 3 cr**

A work assignment of a minimum of 420 hours in business, industry, government or research for co-operative education students. Requires submission of a written report covering the work completed during the professional assignment. This course is restricted to students where a co-operative education work term placement in the Agricultural and Food Sciences Co-operative Education Program has been confirmed. Course evaluated on a pass/fail basis. May not be held with the former AGRI 4570.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: AGRI 3002 or the former AGRI 4560.

**Mutually Exclusive:** AGRI 4570

**AGRI 4010 Practising the Profession of Agrology II 3 cr**

This course will cover the role of a practising agrologist in Manitoba, with an emphasis on professional ethics and responsibilities, regulations of the agriculture profession in Canada, and the culture of the work environment. Laboratory sessions focus on guest speakers and tours of companies and agencies in the agriculture industry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students must be enrolled in the Internationally Educated Agrologists Program.

**AGRI 4100 Current Issues in Agricultural Systems 3 cr**

Integration of current issues in agricultural systems including land, plant, and animal systems, coupled to the food and nutrition needs of society. Emphasis on ethics, equity, economics, and professional approaches to challenges in food systems using case studies, teamwork and scientific communication to specialists and the public. This is a capstone course restricted to students in year 4 of the B.Sc. Agribusiness, Agriculture, or Agroecology degree programs. May not be held with FOOD 4100 or HNSC 4100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: AGRI 2030 and Faculty approval.

**Mutually Exclusive:** FOOD 4100, HNSC 4100

## Agriculture Diploma (DAGR)

**DAGR 0410 Skills for Agricultural Communication and Decision Making 4 cr**

(Lab required) A course designed to improve critical thinking and abilities in written and oral communication to support student success in their academic careers and as agricultural industry professionals.

**DAGR 0430 Crop Production Specialization and Innovation 4 cr**

(Lab required) Tools and research to support sound agronomic decision-making for production of cereals, oilseeds, pulses and upcoming innovative special crops in Manitoba. The course will emphasize assessing the potential of incorporating innovative and specialized crops to achieve economical and ecological benefits. The course will address planning, production and harvesting of special crops as well as product quality, opportunities for processing and marketing. May not be held with the former PLNT 0760.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 0410 or the former DAGR 0420. Pre- or corequisite: DAGR 0490.

**Equiv To:** PLNT 0760

**DAGR 0480 Introductory Farm Management 3 cr**

Students will be introduced to the various roles that are carried out by farm managers. Students will be required to attend interview sessions outside of scheduled classes with an assigned Farm Management Advisor. The Advisor will support students as they apply their management skills and knowledge to a real farm business or a case farm. There will be one full day field trip. May not be held with the former DAGR 0680.

**Mutually Exclusive:** DAGR 0680

**DAGR 0490 Applied Farm Management 3 cr**

An introduction to an objectives-driven plan that deals with production and financial management. Students will generate and analyze enterprise budgets and financial statements. Students will be required to attend interview sessions outside of scheduled classes with an assigned Farm Management Advisor. The Advisor will support students as they apply their management skills and knowledge to a real farm business or a case farm. There will be three full day field trips. May not be held with the former DAGR 0680.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: DAGR 0480 and ABIZ 0460. Pre or Co-requisite: ABIZ 0470 and DAGR 0430 (or the former PLNT 0760).

**Mutually Exclusive:** DAGR 0680

**DAGR 0510 Farm Management Practicum 3 cr**

Students will have the opportunity for practical hands-on experience and to apply the knowledge they have acquired to intensify study of livestock or crop production management. May not be held with DAGR 0630 when titled "Glenlea."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of the Director of the School of Agriculture.

**DAGR 0540 Exploring New Opportunities in Adding On-Farm Value 4 cr**

(Lab required) A practical study of the opportunities for farm operators to increase value return for farm products with innovative approaches to production, processing and marketing. Students will learn from case studies the challenges and realities of value chain integration. Students will develop their ability to critically evaluate business plans for farm product enterprises.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ABIZ 0460 and DAGR 0480. Pre- or corequisites: ABIZ 0470 and DAGR 0490.

**DAGR 0610 Advanced Communication and Leadership 3 cr**

A course designed to improve leadership potential and develop advanced communication skills for agricultural industry professionals.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: DAGR 0410.

**DAGR 0630 Special Project 3 cr**

This project allows a student to make practical application of scientific knowledge acquired and/or to intensify the study of a topic of particular interest. A satisfactory report is required to qualify for credit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of the Director of the School of Agriculture.

**DAGR 0660 Special Topics in General Agriculture 3 cr**

Selected topics of current interest in General Agriculture. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written consent of Director of the School of Agriculture.

**Mutually Exclusive:** AGRI 2500, AGRI 2510, DAGR 0520, DAGR 0550

**DAGR 0910 Integrated Sustainable Agri-Food Systems 3 cr**

The agri-food system encompasses how food is being produced, processed, transported, marketed and consumed. The three pillars of sustainability (economic, social and environmental) will be used to evaluate and improve agricultural sustainability, and will also be applied to the agri-food system (beyond production). Sustainable solutions are unique to each agricultural situation and require long-term thinking and evidence-based decision-making. Focus will be on the balance between food production practices and protecting the natural resources on which agriculture is reliant. There will be a full-day field trip.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisite: DAGR 0980.

**DAGR 0920 Current Issues in Agriculture and Food 3 cr**

The course will present current day and potential future issues facing Canada's agri-food sector. Students will be required to identify and optimize solutions to these issues, with a focus on the roles and responsibilities of farmers, other food producers and agri-food industry members. The impact of these issues on farms and the agri-food industry now and in the future will be emphasized as will the role farmers can play in policy development in response to these issues. An opportunity for students to engage with several guest speakers from the agri-food community. There will be two or three full-day field trips. May not be held with DAGR 0690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: DAGR 0980.

**Mutually Exclusive:** DAGR 0690

**DAGR 0980 Farm Management Project 1 3 cr**

Development of a comprehensive objectives-driven plan that deals with production and financial management. Students will be required to attend interview sessions outside of scheduled classes with an assigned Farm Management Advisor. The Advisor will support students as they apply their management skills and knowledge to a real farm business or a case farm. There will be two full-day field trips. Additionally, students must submit a satisfactory set of financial and production records for the farm they will be basing their project on by July 15th in order to enter DAGR 0980. May not be held with the former DAGR 0690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ABIZ 0470 and DAGR 0490. Pre- or corequisite: ABIZ 0450.

**Mutually Exclusive:** DAGR 0690

**DAGR 0990 Farm Management Project 2 3 cr**

Refinement of a comprehensive objectives-driven plan that deals with production and financial management. Students will be required to attend interview sessions outside of scheduled classes with an assigned Farm Management Advisor. The Advisor will support students as they apply their management skills and knowledge to a real farm business or a case farm. Students will present and defend their plan to a panel composed of academics and industry representatives. Students must submit a satisfactory set of current financial and production records for the farm they will be basing their project on to register. May not be held with the former DAGR 0690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: DAGR 0980 and ABIZ 0450.

**Mutually Exclusive:** DAGR 0690

## Agroecology (AGEC)

### AGEC 2370 Principles of Ecology 3 cr

(Lab required) Principles of ecology at the individual, population, community, and ecosystem levels. May not be held with BIOL 2300 or BIOL 2301 or BIOL 2390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1030 (BIOL 1031) or BIOE 2590.

**Equiv To:** BIOL 2300, BOTN 2370, BOTN 2371, ZOOL 2370, ZOOL 2371

**Mutually Exclusive:** BIOL 2390

## American Sign Language (ASLL)

### ASLL 1000 American Sign Language 1 3 cr

(Lab required) Designed for students with little or no knowledge of ASL. Students learn basic ASL vocabulary and grammatical structures to facilitate conversational practice at the beginning level, including introducing oneself, asking basic questions about family, friends, and surroundings, and discussing day to day activities. Learning and practicing fingerspelling is included for English "loanwords". Aspects of Deaf culture and the Deaf community are introduced.

**Attributes:** Humanities, Recommended Intro Courses

## Animal Science (ANSC)

### ANSC 0420 Animal Biology and Nutrition 4 cr

An introduction to animal structure and function. Genetics, growth and reproduction will be related to animal production. Further, the digestive systems of various livestock species will be studied and related to types of feedstuffs that each species can utilize. The general function of nutrients within animals will also be discussed. Nutrient content of feedstuffs and application to nutrient requirements will be discussed.

### ANSC 0600 Animal Health and Welfare 3 cr

This course explores the common livestock and poultry diseases of the Prairie provinces. Emphasis will be placed on prevention through management and health programs, but treatment of specific diseases will also be addressed. Additionally, animal welfare as it relates to commercial animal production will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 0420.

### ANSC 0670 Beef Cattle Production and Management 4 cr

(Lab required) This course provides an overview of the beef cattle industry including types of beef cattle enterprises and factors affecting profitability of production. Application of principles of nutrition, genetics and physiology in the management of beef cattle enterprises will be covered. May not be held with ANSC 4520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 0420.

**Mutually Exclusive:** ANSC 4520

### ANSC 0680 Dairy Cattle Production and Management 4 cr

(Lab required) This course provides a study of current production practices in Canada's dairy industry with focus on nutrition, reproduction, genetics, health, replacement rearing and marketing. May not be held with ANSC 4530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 0420.

**Mutually Exclusive:** ANSC 4530

### ANSC 0690 Swine Production and Management 4 cr

(Lab required) This course focuses on the swine industry, including the types of swine enterprises and factors affecting profitability of production. Application of principles of nutrition, genetics and physiology in the management of swine are covered. May not be held with ANSC 4640 or the former ANSC 4540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 0420.

**Mutually Exclusive:** ANSC 4540, ANSC 4640

### ANSC 0700 Poultry Production and Management 4 cr

(Lab required) This course provides an overview of the poultry industry, including its marketing system, breeding, hatchery practices, management and feeding within large scale turkey and chicken enterprises. May not be held with ANSC 4550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 0420.

**Mutually Exclusive:** ANSC 4550

### ANSC 0720 Special Topics in Livestock Management 3 cr

Selected topics of current interest in livestock management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written consent of Director of the School of Agriculture.

### ANSC 0730 Horse and Stable Management 3 cr

Principles of horse production, including breeding, reproductive management, nutrition, behavior, health and general management.

Applications to major sections of the horse industry. There will be one or two field trips.

### ANSC 2500 Animal Production 3 cr

(Lab required) Production practices in the major animal industries in Canada, focusing on key factors including the biology of growth, reproduction and nutrition. Issues related to welfare, environment, housing, and contributions to the Canadian economy are introduced.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: AGRI 1600 (or the former AGRI 1510) (D).

### ANSC 2510 Anatomy and Physiology 1: Control Systems 3 cr

(Lab required) This course covers the structure, functions and interactions of the coordinating/regulatory systems in the animal body, including the nervous, muscular, cardiovascular, respiratory, renal and endocrine systems.

### ANSC 2520 Anatomy and Physiology 2: Nutrient Utilization 3 cr

(Lab required) This course deals with the digestion, absorption and utilization of nutrients by farmed species. Basic characteristics of the digestive system, aspects of regulation of feed intake and rates of passage, intermediary metabolism of nutrients, growth and development, health, and other factors influencing nutrient utilization.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ANSC 2510 and [CHEM/MBIO 2730 and one of CHEM 2740 or CHEM 1120 (CHEM 1121)] or [the former CHEM/MBIO 2770] or [CHEM/MBIO 2700 (CHEM/MBIO 2701) and one of CHEM 2720 (CHEM 2721) or CHEM 1120 (CHEM 1121)] or [the former CHEM/MBIO 2360 (the former CHEM/MBIO 2361)].

### ANSC 2540 Companion Animal Nutrition and Management 3 cr

This course covers the functional anatomy, genetics, nutrition, reproduction, behaviour, and diseases of non-equine companion animals and ornamental fish.

**ANSC 3500 Principles of Animal Genetics 3 cr**

Topics discussed will include population genetics, quantitative variation, selection and mating systems with particular reference to domestic species.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 2520.

**ANSC 3510 Feeds and Feeding 3 cr**

A detailed discussion of feedstuffs used for domestic animals, animal nutrient requirements, ration balancing, feedstuff processing and feed safety.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 2520.

**ANSC 3520 Animal Reproduction 3 cr**

The comparative anatomy and physiology of reproduction of farmed animals will be emphasized. Focus will be on the natural synchronization of reproductive processes and the potential to regulate and improve reproductive efficiency.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 2510.

**ANSC 3530 The Animal and Its Environment 3 cr**

(Lab required) This course explores how an animal is influenced by its environment with respect to effects upon health, welfare and performance. Principles of farmed animal behaviour, welfare and behavioural management, health, and facility design and modification will be considered in the context of animal/environment interactions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 2510 or BIOE 2590.

**ANSC 4090 Livestock Problems 3 cr**

A minor thesis on livestock problems, prepared by the student under direction. (For Animal Systems Majors only).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of department head.

**ANSC 4220 Animal Science Investigations 6 cr**

Minor research on some problem in animal science. Instruction and supervision in setting up the project, in collecting and processing data, and in writing the report. (For fourth-year students in Animal Systems Major only.)

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of Department Head.

**ANSC 4240 Mathematical Modeling of Biological Systems 3 cr**

Lectures and computer based laboratory exercises will be used to discuss mathematical modeling methods applied to biological systems taking aspects of animal science as a model to develop modeling techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 1500 or MATH 1520 or equivalent.

**ANSC 4280 Applied Animal Genetics 3 cr**

Application of principles of animal breeding. Modern methods, techniques, and programs for genetic improvement of cattle, sheep, and swine.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 3500.

**ANSC 4410 Grassland Agriculture: Plant, Animal and Environment 3 cr**

Inter-relationships between the biological components of grassland agriculture as they relate to forage production on the Canadian Prairies. Topics include utilization by wild and domestic animals, plant community relationships and role of forages in multiple land use planning. This course also given in Plant Science as PLNT 4410.

**Equiv To:** PLNT 4410

**ANSC 4500 Animal Health 3 cr**

Responses of basic animal functions to challenge by potentially pathogenic organisms, genetic or metabolic disorders, and toxicants will be discussed. Strategies for prevention and treatment will be outlined. Offered in 2005-2006 and alternate years thereafter.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 2520.

**ANSC 4510 Domesticated Animal Behaviour 3 cr**

An awareness and understanding of normal behaviors of animals will be emphasized. Relationships between behavior, welfare and management will be explored. Emphasis will be on farmed animals but companion animals, wild animals and laboratory species will also be discussed. Offered in 2006-07 and alternate years thereafter.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 2520 or consent of the instructor.

**ANSC 4520 Ruminant Production Systems-Meat 3 cr**

(Lab required) To provide an appreciation of the ruminant industry in terms of size, complexity and relationship to the economy and give an understanding of the breeding, feeding, management and marketing strategies for modern ruminant production systems. May not be held with ANSC 0670.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A minimum of 60 credit hours and ANSC 2500 (D).

**Mutually Exclusive:** ANSC 0670

**ANSC 4530 Ruminant Production Systems-Milk 3 cr**

(Lab required) This course provides a description of the ruminant milk industry in terms of size, complexity and relationship to the economy and gives an understanding of the breeding, feeding, management and marketing practices in a modern system for milk production. May not be held with ANSC 0680.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A minimum of 60 credit hours and ANSC 2500 (D).

**Mutually Exclusive:** ANSC 0680

**ANSC 4550 Avian Production Systems 3 cr**

(Lab required) Describes the various avian production systems in terms of size, complexity, and relationship to the economy and gives an understanding of the management and marketing practices in the usual poultry systems. May not be held with ANSC 0700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A minimum of 60 credit hours and ANSC 2500 (D).

**Mutually Exclusive:** ANSC 0700

**ANSC 4570 Advanced Applied Animal Nutrition 3 cr**

An advanced study of theoretical and applied aspects of monogastric and ruminant nutrition. A laboratory component will provide training in current techniques in feed analyses and computer modeling. Offered in 2005-2006 and alternate years thereafter.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 3510.

**ANSC 4640 Swine Production Systems 3 cr**

(Lab required) Describes the swine industry in terms of size, complexity and relationship to the economy and gives an understanding of the breeding, feeding, management and marketing practices in a modern production unit. Outlines other monogastric production systems of relevance to the agriculture industry. May not be held with ANSC 0690 or the former ANSC 4540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A minimum of 60 credit hours and ANSC 2500 (D).

**Equiv To:** ANSC 4540

**Mutually Exclusive:** ANSC 0690

## Anthropology (ANTH)

**ANTH 1210 Human Origins and Antiquity 3 cr**

An introduction to physical anthropology and archaeology. Topics include: biological evolution, evolution and comparative behaviour of primates, fossil evidence for human evolution, and the emergence of human culture. Students may not hold credit for both ANTH 1210 and ANTH 1211.

**Equiv To:** ANTH 1211

**Attributes:** Social Science, Recommended Intro Courses

**ANTH 1220 Cultural Anthropology 3 cr**

The comparative study of human societies and cultures, including language, economic and political organization, family and kinship, ritual and belief systems, cultural stability and change. Students may not hold credit for ANTH 1220 and any of: ANTH 1221 or ANTH 1520.

**Equiv To:** ANTH 1221, ANTH 1520

**Attributes:** Social Science, Recommended Intro Courses

**ANTH 1520 Critical Cultural Anthropology 3 cr**

An introduction to social cultural anthropology that critically examines production and exchange systems, age, gender, kinship and other social distinctions, belief systems, politics, and interactions between cultural systems. Learning and performance assessment is based upon supervised reading and essay writing. Students may not hold credit for ANTH 1520 and any of: ANTH 1220 or ANTH 1221.

**Equiv To:** ANTH 1220, ANTH 1221

**Attributes:** Social Science, Recommended Intro Courses, Written English Requirement

**ANTH 2000 Culture, Society, and Power 3 cr**

An advanced introduction to cultural anthropology that focuses on anthropological approaches to the cross-cultural organization, dynamics, and tensions of social relationships at individual, group, and societal levels. Students may not hold credit for ANTH 2000 and any of: ANTH 2001 or the former ANTH 2390 or the former ANTH 2391.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 2001

**Mutually Exclusive:** ANTH 2390, ANTH 2391

**Attributes:** Social Science

**ANTH 2020 Relatedness in a Globalizing World 3 cr**

Anthropological approaches to diverse practices of human relatedness across cultures and over time, including 21st century reconfigurations or marriage, family, reproduction and kinship.

**Attributes:** Social Science, Written English Requirement

**ANTH 2040 Native North America: A Sociocultural Survey 3 cr**

An ethnographic survey of the cultures of Native North American peoples. Students may not hold credit for both ANTH 2040 and ANTH 2041.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 2041

**Attributes:** Social Science

**ANTH 2060 European Archaeology 3 cr**

This course will survey the archaeological record of Europe from the earliest human occupation through the rise of early cities and complex societies. Case studies will be used to examine the social, political, economic, and technological adaptations of early human societies in the region.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2100 Introduction to Archaeology 3 cr**

A general introduction to the principles of archaeology and the materials, analyses, and interpretations encountered in archaeological study.

Students may not hold credit for both ANTH 2100 and ANTH 2101.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Equiv To:** ANTH 2101

**Attributes:** Social Science

**ANTH 2230 Anthropology of Travel and Tourism 3 cr**

Anthropological approaches to the study of cultural practices and phenomena of travel and tourism. Travel is examined in various social, historical, and cultural contexts as a way of seeing and experiencing the world. Emphasis is placed on the intersection of culture, colonialism, capitalism, and globalization, with practices of travel, including mass tourism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science, Written English Requirement

**ANTH 2240 Plagues and People 3 cr**

Examines selected plagues in evolutionary, ecological, and epidemiological context, and considers the complex biological, social, and economic repercussions for human populations. Foci include past, present, and emerging infectious disease epidemics.

**Attributes:** Social Science

**ANTH 2300 Anthropology of Childhood 3 cr**

Anthropological approaches to the study of children and childhood. Childhood is examined as a social and historical construction, and children are analyzed as active contributors to their social worlds. Cross-cultural ethnographic material relating to children and youth is critically read and discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2350 Ethnology of Sub-Saharan Africa 3 cr**

A survey of culture and society in traditional and contemporary Africa. Students may not hold credit for both ANTH 2350 and the former ANTH 2351.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520 or the former ANTH 2360 or the former ANTH 2361] or written consent of instructor.

**Equiv To:** ANTH 2351

**Attributes:** Social Science

**ANTH 2370 Language and Culture 3 cr**

The investigation of the complex interaction of language and culture, including linguistic perspectives on prehistory, ethnosemantics, and sociocultural correlations of linguistic variation. Students may not hold credit for both ANTH 2370 and ANTH 2011.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 2011

**Attributes:** Social Science

**ANTH 2380 Art, Symbols, Cultures 3 cr**

Studies of the social contexts and functions of human artistic and symbolic behaviour in cross-cultural perspective. Students may not hold credit for both ANTH 2380 and ANTH 2381.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 2381

**Attributes:** Social Science

**ANTH 2430 Ecology, Technology and Society 3 cr**

Ecological analysis of the interplay of socio-political and technological processes in different types of societies. Focus upon the ecological side-effects and selected technologies, economic mechanisms and political institutions. Students may not hold credit for both ANTH 2430 and ANTH 2500. May not be used for Major or Minor in Anthropology.

**Mutually Exclusive:** ANTH 2500, ENG 3020

**Attributes:** Social Science

**ANTH 2450 Ethnology of China 3 cr**

Issues in the anthropological study of contemporary China will be introduced in comparative perspective. The emphasis will be on issues such as economic development, changing gender relations, population growth and migration, and the politics of culture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2470 Anthropology of Mass Communication 3 cr**

This course focuses on media production and dissemination and on images of the world created by media. Media practices and products are addressed in relation to the formation of social relations and identities, the shaping of peoples' sense of time and space, and media's role in the construction of communities and in processes of socio-economic and cultural change.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2500 Culture, Environment, and Technology 3 cr**

Study of ecological systems, focusing on processes of adaptation in societies differing in organization and in views of technology. Demographic and technological changes are examined in relation to cultural, political and ideological factors. Students may not hold credit for both ANTH 2500 and ANTH 2430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Mutually Exclusive:** ANTH 2430

**Attributes:** Social Science

**ANTH 2510 Anthropology of Economic Systems 3 cr**

A comparative study of factors bearing upon production, exchange, and consumption of goods, practices and ideas in varying social contexts. The course also examines the articulation of economic systems in the global political economy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2530 Anthropology of Political Systems 3 cr**

Analysis of political institutions and their changing nature in diverse societies and forms of society, with attention to authority, leadership, decision-making, power and its disguises, and forms of resistance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2550 Culture and the Individual 3 cr**

The study of the interrelations between life-cycle, psychological functioning and malfunctioning, and social and cultural institutions. Emphasis is placed on enculturation and life-cycle rituals. Students may not hold credit for both ANTH 2550 and ANTH 2551.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 2551

**Attributes:** Social Science

**ANTH 2560 Anthropology of Illness 3 cr**

Comparative study of cultural factors involved in health/illness: concepts of disease and curing practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2570 Urban Anthropology 3 cr**

Comparison of the processes of urbanization and various forms of urbanism, with attention to archaeological evidence and the emergence of urbanism and urbanization in developing nations.

**Attributes:** Social Science

**ANTH 2600 Old World Prehistory 3 cr**

A survey of the archaeological evidence and cultural interpretations of Old World cultures from the beginning of the Pleistocene to the development of agriculture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2610 Old World Civilizations 3 cr**

Archaeological evidence and cultural interpretations of the origins of complex societies from the development of agriculture to the beginnings of written history in the Old World.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2620 New World Prehistory 3 cr**

Archaeological evidence and cultural interpretations of those New World cultures which did not develop civilizations, from the earliest inhabitants until the period of initial European contact.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2630 New World Civilizations 3 cr**

Archaeological evidence and cultural interpretations of the growth and development of complex societies in the New World from the origins of agriculture to the period of initial European contact. Emphasis will be placed on the "high cultures" of Central and South America.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2640 Manitoba Prehistory 3 cr**

Archaeological evidence and culture history of prehistoric populations which inhabited the various environmental zones of Manitoba.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2650 Archaeology of the Ancient Near East 3 cr**

This course is an overview of the prehistory and early historical periods of the ancient Near East. Considerable attention is given to the fundamental transitions that transform the human existence and create the foundations for later civilization, such as: (1) the colonization of the region by humans; (2) the emergence of food production (domestication of plants and animals), settled village life, and hierarchical social organization; (3) the rise of states, urban centers, and writing; and (4) the emergence of militaristic empires. The course examines both archaeological and historical evidence with a heavy emphasis on material culture, primary archaeological, and historical data, and the process of scholarly interpretation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2690 Peoples and Cultures of Contemporary Latin America 3 cr**

An ethnographic survey of the cultural diversity of contemporary Latin America with selected case study examples drawn from Mexico and Central America, South America, and the Hispanic Caribbean. Case studies are selected to represent a variety of anthropological perspectives.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2820 Human Osteology 3 cr**

An examination of normal and pathological skeletal anatomy. Quantitative methods of analysis for archaeological and forensic applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2860 Evolution and Human Diversity 3 cr**

An introduction to the interacting roles of heredity, culture and environment in human families and populations. Introduces the biological bases for variation within/between human populations. Students may not hold credit for both ANTH 2860 and ANTH 2861.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Equip To:** ANTH 2861

**Attributes:** Social Science

**ANTH 2880 Human Evolution 3 cr**

Intensive study of human organic evolution within hominid primates. Consideration of the relationships of socio-cultural adaptation to human evolution.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2890 Human Population Biology 3 cr**

Intensive study of the evolutionary implications of genetic variation within/between human populations in relationship to ecological and cultural variation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2860] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2910 Post-Colonial Archaeology 3 cr**

An archaeological survey of the early post-European period in North America. Case studies will emphasize selected regions, time periods, and topics that may include: the western Canadian fur trade; European colonialism in North America; international colonialism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 2930 Archaeology of a Selected Area 3 cr**

Detailed examination of the archaeology of a geographical area that is of current interest to faculty and students. The areas will rotate annually and will include but not be limited to the Caribbean, Europe, the Northwest Coast, Canada, the Arctic and the sub-Arctic. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 3200 Anthropology of Food 3 cr**

Considers the diversity of ways that anthropologists have used food as a productive entry point for understanding culture, society, and human ecology. The course will survey highpoints in the history of the anthropology of food and address current topics such as food security and food movements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Attributes:** Social Science



**ANTH 3320 Women in Cross-Cultural Perspective 3 cr**

Critical perspectives on the role of women cross-culturally, with ethnographic reference to non-Western societies and cultures. Students may not hold credit for both ANTH 3320 and ANTH 3321.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 3321

**Attributes:** Social Science

**ANTH 3330 Sex and Sexualities 3 cr**

Comparative approaches to the study of human sexuality and the diversity of sexual expression and identification from a feminist and cross-cultural ethnographic perspective. Sex and sexualities are examined as social and cultural constructions, experiences, discourses, identities, and practices located in specific local contexts and shaped by wider social processes including colonialism and globalization. Students may not hold credit for ANTH 3330 and any of: the former WOMN 3330 or the former ANTH 3350 or WOMN 3500 with the topic "Anthropology of Sex and Sexualities."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Anthropology or Women's and Gender Studies courses] or written permission of instructor.

**Equiv To:** ANTH 3350, WOMN 3330

**Attributes:** Social Science, Written English Requirement

**ANTH 3380 Anthropology and Contemporary Social Issues 3 cr**

Anthropological perspectives on poverty, social accountability, colonialism, racism, education, ecological degradation and violence. Students may not hold credit for both ANTH 3380 and ANTH 3381.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2000 (or ANTH 2001) and 3 credit hours from the following: ANTH 2020 or ANTH 2530 or ANTH 2831] or [the former ANTH 2390 or the former ANTH 2391] or written consent of instructor.

**Equiv To:** ANTH 3381

**Attributes:** Social Science

**ANTH 3470 History of Anthropology 3 cr**

A temporal survey of the development of major paradigms and theoretical movements in anthropological thought and method. Students may not hold credit for both ANTH 3470 and ANTH 3471.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2000 (or ANTH 2001) and 3 credit hours from the following: ANTH 2020 or ANTH 2530 or ANTH 2831] or [the former ANTH 2390 or the former ANTH 2391] or written consent of instructor.

**Equiv To:** ANTH 3471

**Attributes:** Social Science

**ANTH 3500 Peoples of the Arctic 3 cr**

Ethnographic survey of the aboriginal peoples of the circumpolar regions of Asia, North America, and Greenland. Attention will be given to the aboriginal and post-contact situations among such peoples. Students may not hold credit for both ANTH 3500 and ANTH 3501.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 3501

**Attributes:** Social Science

**ANTH 3550 Canadian Subcultures 3 cr**

An anthropological study of dimensions of community, ethnicity, and social class in Canadian society. Students may not hold credit for both ANTH 3550 and ANTH 3551.

**Equiv To:** ANTH 3551

**Attributes:** Social Science

**ANTH 3600 Archaeological Method and Theory 3 cr**

The historical development and current application of theoretical and methodological frameworks for archaeological interpretation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2100] or written consent of instructor.

**Attributes:** Social Science

**ANTH 3720 Demography of Past Populations 3 cr**

This course provides students with a basic understanding of demographic methods and techniques applied in analysis of long term changes in the demographic patterns of anthropological populations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

**Attributes:** Social Science

**ANTH 3730 Forensic Anthropology 3 cr**

This course provides the theory, methods, and techniques for forensic identification of human skeletal remains, including estimation of sex, age-at-death, stature, population affinities and features of personal biology. The laboratory component of this course, where students work with actual human skeletal remains, is a major component.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANTH 2820.

**Attributes:** Social Science

**ANTH 3740 Human Growth and Variation 3 cr**

An examination of variation in human body form and composition in the context of normal growth and development viewed in an evolutionary perspective.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2860] or written consent of instructor.

**Attributes:** Social Science

**ANTH 3750 Anthropological Perspectives on Globalization and the World-System 3 cr**

An anthropological perspective on the modern world-system and the expansion of capitalism into peripheral areas of the world; the transformation of indigenous societies and cultures; the rise of ethnic conflict, protest and resistance; and a comparative examination of selected global and transnational processes. Students may not hold credit for both ANTH 3750 and ANTH 3751.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520 or ANTH 2000 or ANTH 2001 or the former ANTH 2390 or the former ANTH 2391] or written consent of instructor.

**Equiv To:** ANTH 3751

**Attributes:** Social Science

**ANTH 3810 Anthropology of Belief Systems 3 cr**

A comparative study of belief systems, rituals, and ceremonies in non-Western and Western societies and cultures. Students may not hold for credit both ANTH 3810 and ANTH 3811.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 3811

**Attributes:** Social Science

**ANTH 3910 Archaeological Field Training 6 cr**

Theory and practical field experience in the investigation of archaeological sites from the formulation of research designs through data analysis in the field. Offered in alternate summers. See Anthropology Department for details.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2100] and written consent of instructor.

**Attributes:** Social Science

**ANTH 3930 Ethnographic Research Methods 3 cr**

A survey of ethnographic research methods with an emphasis on qualitative approaches, including both field and analytical techniques. Students may not hold credit for both ANTH 3930 and the former ANTH 3390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2000] or written consent of instructor.

**Equiv To:** ANTH 3390

**Attributes:** Social Science

**ANTH 3950 Archaeological Laboratory Methods 3 cr**

Analytic and interpretive methods for treating archaeologically recovered materials such as lithics, ceramics and other artifacts are addressed through lectures, demonstrations and other laboratory exercises.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2100] or written consent of instructor.

**Attributes:** Social Science

**ANTH 3960 Cultural Resource Management 3 cr**

A survey of the concepts, methods, and techniques used in the management of cultural, especially archaeological, heritage resources. The roles of public agencies, private contractors, and heritage legislation in Canadian CRM are reviewed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2100] or written consent of instructor.

**Attributes:** Social Science

**ANTH 3970 Ethnography of a Selected Region 3 cr**

An ethnographic survey of the culture(s) of a selected geographical area currently of interest to faculty and students. The areas to be studied may differ from year to year. Students may not hold for credit both ANTH 3970 and ANTH 3971. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 1220 or ANTH 1221 or ANTH 1520] or written consent of instructor.

**Equiv To:** ANTH 3971

**Attributes:** Social Science

**ANTH 3980 Botanical Analysis in Archaeology 3 cr**

Analytic and interpretive methods for treating archaeologically recovered plant remains and soils are addressed through lectures, demonstrations, and laboratory exercises.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2100] or written consent of instructor.

**Attributes:** Social Science

**ANTH 3990 Faunal Analysis in Archaeology 3 cr**

Analytic and interpretive methods of treating archaeologically recovered faunal remains are addressed through lectures, demonstrations, and laboratory exercises.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2100] or written consent of instructor.

**Attributes:** Social Science

**ANTH 4080 Museums, Memory, and Witnessing 3 cr**

The course brings scholarship, contemporary art, exhibitions, activism, and policy into creative and critical conversation on the state and idea of museums today. Discussing key issues in museology – such as collections and collecting, conservation, representation, repatriation, and restitution – we explore the museum as witness. Particularly examining how museums are entangled with violence, we attend to memory as our approach for delving into both museums' histories and their imagined futures. Includes visiting museums.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Social Science

**ANTH 4470 Scientific Methods and Applications in Archaeology and Biological Anthropology 3 cr**

In this course, a range of scientific methods that can be applied to answer questions in archaeology and biological anthropology will be considered. These include microscopy, 3-D and virtual technologies, ancient DNA, and elemental analyses. Students will learn how many of the core techniques are transferable across fields and will learn the strengths and limitations of the different techniques. The class will be formatted as a seminar class, combined with practical and laboratory-based exercises. Field trips to facilities across the University will be scheduled in class time over the course of the term. May not be held with ANTH 4860 when titled "Advanced Practicum in Tools, Techniques & Interpretation for Biological Anthropology and Archaeology."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of ANTH 2100, ANTH 2101, ANTH 2860, ANTH 2861, ANTH 2890, or written consent of instructor.

**Mutually Exclusive:** ANTH 4860

**Attributes:** Social Science

**ANTH 4760 Practicum in Archaeology 3 cr**

This course is designed to provide advanced undergraduate students in archaeology with individualized practical experience in different aspects of archaeology by working with professional archaeologists.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 2100] and written consent of instructor.

**Attributes:** Social Science

**ANTH 4780 Selected Topics in Cultural Anthropology 3 cr**

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Attributes:** Social Science

**ANTH 4790 Selected Topics in Archaeology 3 cr**

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head

**Attributes:** Social Science

**ANTH 4800 Seminar in Applied Anthropology 6 cr**

A review of the history of applied anthropology and investigation of major case studies, research methodologies, intervention strategies, and substantive areas of application.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Attributes:** Social Science

**ANTH 4830 Advanced Reading and Research 3 cr**

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor and department head.

**Attributes:** Social Science

**ANTH 4840 Advanced Independent Work 6 cr**

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor and department head.

**Attributes:** Social Science

**ANTH 4850 Advanced Seminar in Anthropological Theory 3 cr**

An analysis of the process of theory formation in the social sciences in general and in cultural (social) anthropology in particular. The theoretical content of various contemporary "schools" in anthropology is critically analyzed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ANTH 3470 or ANTH 3471] or written consent of instructor or department head.

**Attributes:** Social Science

**ANTH 4860 Selected Topics in Biological Anthropology 3 cr**

Topics in biological anthropology which will vary depending on the needs of students and the interest of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Mutually Exclusive:** ANTH 4470

**Attributes:** Social Science

## Arabic (ARA)

**ARA 1000 Elementary Arabic 6 cr**

(Lab required) An introductory course in written and oral Arabic, for students with little or no previous knowledge of the language. Language laboratory exercises will be included in addition to class time. Students may not hold credit for ARA 1000 and any of: the former ARA 2260 or the former SEM 2260. Not open to students who have previously obtained credit in ARA 2000.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Equiv To:** ARA 2260, SEM 2260

**Attributes:** Humanities, Recommended Intro Courses

**ARA 2000 Intermediate Arabic 6 cr**

(Lab required) This intermediate class will improve writing, reading, conversation and listening comprehension for everyday Arabic, and cover many of the important grammatical features of the language. By the end of this course, the learner should be able to communicate in many situations with fluency or near fluency.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ARA 1000 or the former ARA 2260 or the former SEM 2260] or written consent of instructor.

**Attributes:** Humanities, Recommended Intro Courses

**ARA 3000 Advanced Arabic 6 cr**

Students who have already mastered beginning and intermediate vocabulary and grammar will learn to use the language in a broader cultural context, developing their skills in reading and writing Arabic. The course utilizes communication-based activities and interactive learning techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ARA 2000] or written consent of instructor.

**Attributes:** Humanities

## Arts Interdisciplinary (ARTS)

**ARTS 1110 Introduction to University 3 cr**

A seminar course designed to help students make the transition to university by imparting the knowledge, skills, and attitudes requisite for success in university study. Each section limited to 30 students. Open only to students who have completed fewer than 60 credit hours of course work. Students may not hold credit for both ARTS 1110 and ARTS 1111.

**Equiv To:** ARTS 1111

**Attributes:** Recommended Intro Courses, Written English Requirement

**ARTS 1160 Leadership: An Interdisciplinary Approach 3 cr**

This course provides an introduction to the key issues and concerns of leadership and leadership studies, focusing on the central question of "what is leadership." Students will examine the philosophical and historical foundations of leadership theory and practice, along with the more contemporary (and often more theoretical) reflections on both leadership practices and the varied disciplines that study them. This course will satisfy the Faculty of Arts Social Science requirement. Students may not hold credit for both ARTS 1160 and LEAD 2010.

**Mutually Exclusive:** LEAD 2010

**Attributes:** Social Science, Recommended Intro Courses

**ARTS 2020 Introduction to Health Humanities 3 cr**

This interdisciplinary course is aimed at students interested in the health professions who are looking to gain awareness of the critical ways in which humanities disciplines can help to attune future health professionals to a number of critical and complicated issues that they will encounter in their practices. These issues include the problem of defining health, bioethical questions (abortion, physician assisted suicide, genetic testing, etc.), and relationships between patients and health professionals. This course will make use of a number of important disciplinary practices from the humanities and social sciences to attune students to these issues and give them the resources for handling them better in professional health care contexts.

**Attributes:** Humanities

**ARTS 3010 Arts Co-operative Option 1 1 cr**

Work assignments in business, industry, or government for students admitted to the Arts Co-operative Option. Required submission of a written report covering the work completed during the work term. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Arts Co-operative Option Coordinator and the Faculty of Arts.

**ARTS 3020 Arts Co-operative Option 2 1 cr**

Work assignments in business, industry, or government for students admitted to the Arts Co-operative Option. Required submission of a written report covering the work completed during the work term. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ARTS 3010 and written consent of the Arts Co-operative Option Coordinator and the Faculty of Arts.

**ARTS 3030 Arts Co-operative Option 3 1 cr**

Work assignments in business, industry, or government for students admitted to the Arts Co-operative Option. Required submission of a written report covering the work completed during the work term. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ARTS 3020 and written consent of the Arts Co-operative Option Coordinator and the Faculty of Arts.

## Asian Studies (ASIA)

**ASIA 1420 Asian Civilizations to 1500 (B) 3 cr**

A study of major themes in the history and culture of China and Japan, the Indian subcontinent and Southeast Asia from ancient times to around 1500. Also offered as History HIST 1420. May not hold credit with HIST 1420.

**Equiv To:** HIST 1420

**Mutually Exclusive:** HIST 1410

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**ASIA 1430 Asian Civilization from 1500 (B) 3 cr**

A study of major themes in the history and culture of China and Japan, the Indian subcontinent and Southeast Asia in modern times. Also offered as History HIST 1430. May not hold credit with HIST 1430.

**Equiv To:** HIST 1430

**Mutually Exclusive:** HIST 1410

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**ASIA 1750 Introduction to Korean 6 cr**

(Lab required) An introduction to spoken and written Korean for students with little or no previous knowledge of the language. Students will be taught basic pronunciation, vocabulary, and grammar, as well as the Hangul writing system. Students who have received all or a portion of their elementary or secondary education in the Korean language may not normally enrol. Not open to students who have previously obtained credit in ASIA 2750.

**Attributes:** Humanities, Recommended Intro Courses

**ASIA 1760 Introduction to Chinese (Mandarin) 6 cr**

An introduction to modern vernacular (Mandarin) Chinese in spoken and written form. Grounding in pronunciation, basic grammar, vocabulary, and some written characters. Students who have received all or a portion of their elementary or secondary education in the Chinese language may not normally enrol. Not open to students who have previously obtained credit for ASIA 2760 or ASIA 3760 or the former ASIA 2360.

**Equiv To:** ASIA 2360

**Attributes:** Humanities, Recommended Intro Courses

**ASIA 1770 Introduction to Japanese 6 cr**

This course teaches basic Japanese grammar, vocabulary, pronunciation, and about 190 written characters. The course is intended for students with no prior knowledge of Japanese. Students with prior knowledge of the language are required to take a placement test or to meet with the Program Director or designate for an interview. This includes heritage learners (students who speak the language and/or whose family member(s) communicate with them in the language) and students whose knowledge comes from self-study, private instruction, or who have studied Japanese at high school or at institutions other than the University of Manitoba. Not open to students who previously obtained credit for ASIA 2770 or ASIA 3770.

**Attributes:** Humanities, Recommended Intro Courses

**ASIA 1780 Basic Sanskrit 6 cr**

Students will first learn the Devanagari script then proceed to reading, writing, conversation, grammar and vocabulary. Not open to students who previously obtained credit for ASIA 2780.

**Attributes:** Humanities

**ASIA 1790 Basic Hindi-Urdu 6 cr**

Training in conversation, reading and writing of modern standard Hindi and some elements of Urdu. Students will learn to read and write the Devanagari script, and learn the basic grammar of the language. Not open to students who have previously obtained credit for the former ASIA 2790 or the former ASIA 3790.

**Attributes:** Humanities

**ASIA 2080 South Asian Civilization 3 cr**

An interdisciplinary study of the Indian subcontinent from the ancient to the contemporary period, focusing on geographic, religious, historic, sociological, and political developments. Students may not hold credit for both ASIA 2080 and the former ASIA 2070.

**Mutually Exclusive:** ASIA 2070

**Attributes:** Humanities

**ASIA 2570 History, Culture, and Society in Chinese Film 3 cr**

This course will focus on the presentation of various aspects of twentieth century Chinese culture through the medium of film. Films will be selected largely from those recently produced in China, Taiwan, and Hong Kong, with some attention to recent North American movies by ethnic Chinese directors.

**Attributes:** Humanities

**ASIA 2580 Women in Chinese Film 3 cr**

This course will focus on the cinematic presentation of women in Chinese films. Films will be selected largely from those produced recently in China, Taiwan, and Hong Kong, as well as in North America by ethnic Chinese directors. The intention is to review how the image of women as reflected in Chinese cinema has changed with time, place, and modern technology.

**Attributes:** Humanities

**ASIA 2600 Japanese Film 3 cr**

A survey of cinematic art in Japan, with emphasis on the major directors and trends of the postwar period. Films to be studied will be drawn from the work of Mizoguchi, Ozu, Kurosawa, the "New Wave" directors of the 1960s, the comedies of Itami, and films of contemporary directors such as Kitano and Miyazaki.

**Attributes:** Humanities

**ASIA 2610 Modern Chinese Literature in Translation 3 cr**

A study of 20th and 21st century Chinese literature (in English translation) from the May 4th Movement to the present. With a special focus on prose fiction, students will be introduced to the historical and critical context of literary production in modern China. Lectures and texts in English. Students may not hold credit for both ASIA 2610 and the former ASIA 2660.

**Mutually Exclusive:** ASIA 2660

**Attributes:** Humanities

**ASIA 2620 Japanese Civilization 3 cr**

An interdisciplinary study of Japanese civilization from earliest times to the Meiji Restoration. All aspects of traditional Japanese culture will be examined, including geography, religion, philosophy, history, sociology, economics and politics. The nature of Japanese cultural identity will be taken as a unifying theme.

**Attributes:** Humanities

**ASIA 2630 Chinese Civilization 3 cr**

An interdisciplinary study of Chinese civilization from earliest times to the Opium War. All aspects of traditional Chinese culture will be examined, including geography, religion, philosophy, history, sociology, economics, and politics. A central unifying theme will be the examination of Chinese cultural identity.

**Attributes:** Humanities

**ASIA 2650 Premodern Chinese Literature in Translation 3 cr**

A study of pre-modern Chinese literature up to 1911. Includes writings in early history and philosophy, essays, poetry, short stories and novels. Lectures and texts in English.

**Attributes:** Humanities

**ASIA 2662 Chinese Diaspora Literature 3 cr**

This course focuses on the contemporary literature of the Chinese diaspora. Through a reading of prose fiction by writers of Chinese ethnicity living in locations like Taiwan, Hong Kong, Southeast Asia, Australia and North America, we will explore the notion of "different ways of being Chinese." Some of the material studied will have been originally written in English, but much of it will be read in English translation. Lectures and texts in English.

**Attributes:** Humanities

**ASIA 2670 Modern Japanese Literature in Translation 3 cr**

This course is intended as an introduction to Japanese Literature from the Meiji era (1868-1912) to the present day. Although some attention will be paid to poetry, the emphasis will be on short stories and the novel.

**Attributes:** Humanities

**ASIA 2750 Intermediate Korean 6 cr**

(Lab required) A continuation of the study of spoken and written Korean for students who have successfully completed ASIA 1750. Students will be taught advanced pronunciation, vocabulary, and grammar. Students who have received all or a portion of their elementary or secondary education in the Korean language may not normally enrol except by special permission of the instructor.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 1750] or written consent of instructor.

**Attributes:** Humanities

**ASIA 2760 Intermediate Chinese (Mandarin) 6 cr**

Continues the introduction of basic vocabulary, grammatical structures, and written characters. Emphasis will be given to the development of aural/oral skills. Not open to students who have previously obtained credit for ASIA 3760 or the former ASIA 2360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 1760] or written consent of instructor.

**Equiv To:** ASIA 2360

**Attributes:** Humanities, Recommended Intro Courses

**ASIA 2770 Intermediate Japanese 6 cr**

For students who have taken Japanese ASIA 1770. Continues the introduction of basic vocabulary, grammatical structures and more written characters. Greater emphasis will be given to the development of aural/oral skills. Not open to students who have previously obtained credit in ASIA 3770.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 1770] or written consent of instructor.

**Attributes:** Humanities, Recommended Intro Courses

**ASIA 2780 Intermediate Sanskrit 6 cr**

Advanced grammar, vocabulary, and syntax to enable the student to read epic and pauranic materials.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 1780] or written consent of instructor.

**Attributes:** Humanities

**ASIA 3480 Selected Topics in Asian Studies 1 3 cr**

An intensive study of specially selected authors or themes in Asian Studies. The particular subject will vary year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of Asian Studies coordinator.

**Attributes:** Humanities

**ASIA 3490 Selected Topics in Asian Studies 2 3 cr**

An intensive study of specially selected authors or themes in Asian Studies. The particular subject will vary year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of Asian Studies coordinator.

**Attributes:** Humanities

**ASIA 3520 The Japanese Theatre 3 cr**

(Lab required) An overview and practical introduction to the Japanese theatre. Combines the study of theatre history and representative traditional and modern genres (kagura, nō, kyōgen, kabuki, bunraku, shingeki) with training in traditional movement and dance, and the performance of short, kyōgen plays.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [at least one of :ASIA 1770 or ASIA 2620 or THTR 1220] or written consent of instructor.

**Attributes:** Humanities

**ASIA 3560 Themes and Genres in Asian Literature 3 cr**

A study of selected works of Asian literature organized around specific themes or genres in English translation. Content may vary from year to year, but will include literary works from two or more regions and two or more historical periods. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 1420 (or HIST 1420) or ASIA 1430 (or HIST 1430)] or written consent of instructor.

**Attributes:** Humanities

**ASIA 3600 Japanese Popular Culture 3 cr**

This course examines various examples of popular culture in contemporary Japan, including popular literature, film, television, popular music, and leisure activities. Attention will also be paid to popular culture theory and methods of analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 2620] or written consent of instructor.

**Attributes:** Humanities

**ASIA 3750 Advanced Korean 6 cr**

A continuation of the study of spoken and written Korean for students who have successfully completed ASIA 2750. Students will engage in group projects, discussions, and presentations on topics covered in the course and in a range of communicative situations. Students will also be introduced to authentic examples of Korean novels, essays, journal articles, movies, TV dramas, and selections from Korean history and arts. Students who have received all or a portion of their elementary or secondary education in the Korean language may not normally enroll except by special permission of the instructor.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 2750] or written consent of instructor.

**Attributes:** Humanities

**ASIA 3760 Advanced Chinese (Mandarin) 6 cr**

This course is for those who have taken Intermediate Chinese or who have obtained basic language skills in Mandarin Chinese elsewhere. A balanced approach to reading, writing, and aural/oral skills will be employed. Students will use advanced prepared texts and will also be introduced to selected examples of contemporary Chinese literature. Not open to students who previously obtained credit for the former ASIA 3660 or the former ASIA 2360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 2760] or written consent of instructor.

**Equiv To:** ASIA 2360

**Attributes:** Humanities

**ASIA 3770 Advanced Japanese 6 cr**

This course is designed for those who have taken ASIA 2770 Intermediate Japanese or have basic linguistic skills in Japanese and wish to improve their ability in the Japanese language previously acquired.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 2770] or written consent of instructor.

**Attributes:** Humanities

**ASIA 3780 Advanced Reading in Japanese 3 cr**

This course allows students to further develop their skills in the Japanese language through a focus on reading. Course material will be drawn from examples of modern literature and film scripts.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 3770] or written consent of instructor.

**Attributes:** Humanities

**ASIA 3792 Linguistic Analysis of Japanese 3 cr**

This course analyses structures and usage of the Japanese language, using linguistic methodology to understand the language and associated social, cultural, psychological, and cognitive factors.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ASIA 2770] or written consent of instructor.

**Attributes:** Humanities

## Astronomy (ASTR)

**ASTR 1810 Introduction to Astronomy: The Magnificent Universe 3 cr**

(Lab required) This introductory astronomy course surveys our magnificent Universe. The topics covered in this course outline the properties of stars and planets that can be observed and the physics necessary to interpret these observations. It also includes an introduction to galaxies and cosmology. Using lectures and laboratory sections, it provides an astronomy background and introduction to the scientific method. It ranges from introductory physical background to considering current research problems. This course is taught with algebra and trigonometry used frequently. May not be held with the former PHYS 1810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of Physics 40S, PHYS 0900 (P), PSKL 0100 (P), PHYS 1018, or equivalent) and (one of Pre-calculus Mathematics 40S (70% or better), Applied Mathematics 40S (70% or better), MSKL 0100, MATH 1018, or equivalent). It is strongly recommended that students attain a minimum of 70% as the average of their marks in Physics 40S and Pre-calculus Mathematics 40S.

**Equiv To:** PHYS 1810

**Attributes:** Science, Recommended Intro Courses

**ASTR 1830 Life in the Universe 3 cr**

This descriptive, general interest course explores the topic of life in the universe. Some of the following topics will be covered. (1) Some astronomy fundamentals (gravity, light). (2) The solar system (an introduction to the solar system, the formation of the solar system, the origin of life on Earth, extremophiles, the conditions needed for life, possible locations for life in the solar system). (3) Exoplanets (discovery methods, properties of detected Exoplanets, the Habitable Zone). (4) Star system formation (pre-stellar disks, planetary migration). (5) The Interstellar medium (nebulae, molecular clouds). (6) Our Milky Way galaxy as an environment for life and the Drake Equation. (7) The Search for Extra Terrestrial Intelligence (SETI). This course is qualitative with simple arithmetic and trigonometry used occasionally. May not be held with the former PHYS 1830.

**Equiv To:** PHYS 1830

**Attributes:** Science, Recommended Intro Courses

**ASTR 2000 Foundations of Astrophysics 3 cr**

This course covers the foundations of astrophysics, with emphasis on the core physical principles and processes that govern astronomical phenomena. The course emphasizes how the physics of matter, radiation, gravity, magnetic fields, and the interaction between light and matter can be used to understand a range of astrophysical phenomena, including fundamental processes, fascinating energetic objects, and topics at the forefront of modern research.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of PHYS 1070, PHYS 1071, or PHYS 2152) or (a "C+" or better in PHYS 1030 or PHYS 1031) and (one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710, or the former MATH 1730) or permission of the department. ASTR 1810 is recommended.

**Attributes:** Science

**ASTR 2070 Observational Astronomy Techniques 3 cr**

(Lab Required) Students will learn the basic astronomy tools and practical concepts pertaining to observational astronomy. Lecture topics include spectroscopy, the optics of mirrors and lenses relevant to telescopes, types of telescopes, and factors that affect the quality of astronomical observations. The practical aspects include observational project development, and hands-on telescope experience using the University of Manitoba's Ewen Campus Observatory (ECO) and the Glenlea Astronomical Observatory (GAO) as well as smaller 8-inch portable telescopes. May not be held with the former PHYS 2070.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of PHYS 1070, PHYS 1071, or PHYS 2152) or (a "C+" or better in PHYS 1030 or PHYS 1031) and (one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710, or the former MATH 1730) and (one of ASTR 1810, the former PHYS 1810, ASTR 1830, the former PHYS 1830, or ASTR 2000) or permission of the department.

**Mutually Exclusive:** PHYS 2070

**Attributes:** Science

**ASTR 3070 Observational Astronomy Project 3 cr**

(Lab Required) Students will learn to develop and execute an observational research project. Students will choose their research topic with the constraint that the data be collected using the University of Manitoba's Astronomical Observatory at Glenlea Astronomical Observatory and the Ewen Campus Telescopes. The optical observational data will be supplemented by archival data from professional research telescopes such as the Hubble Space Telescope, Chandra X-ray Observatory and others. The course covers the determination of observational constraints, the use of filters, methods of data analysis, and interpretation of results. The research project will be written into a report and presented.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ASTR 2070 or the former PHYS 2070 or permission of the department.

**Attributes:** Science

**ASTR 3180 Stars 3 cr**

This course provides an overview of the physics of stars, including all phases of stellar evolution: from star formation, to the main-sequence phase, to star death, to the formation of degenerate or compact remnants such as white dwarfs, neutron stars and black holes. Topics include radiative transfer, stellar structure and atmosphere, nuclear fusion, stellar evolution, degenerate stars, and other exotic forms of compact stellar remnants. May not be held with the former PHYS 3180.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ASTR 2000 or permission of the department.

**Equip To:** PHYS 3180

**Attributes:** Science

**ASTR 3230 The Phenomenology of Galaxies 3 cr**

This course investigates galaxies from the perspective of recent observational data, exploring characteristics that theories have yet to explain. Topics include sources of their radiation, such as stars, gas and dust; their structure and kinematics, which indicate the existence of dark matter; and their formation and evolution, which has implications for cosmological studies. May not be held with the former PHYS 4230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ASTR 2000 or permission of the department. ASTR 2070 or ASTR 3180 is recommended.

**Mutually Exclusive:** PHYS 4230

**Attributes:** Science

**ASTR 4020 Cosmology and Black Holes 3 cr**

Topics include static solutions of Einstein's equations, gravitational waves, static models for stars (white dwarfs, neutron stars), dynamic models for stars (Birkhoff theorem, black holes), and cosmology (Robertson-Walker metric, Friedmann equations). Further topics discussed in the course are cosmic inflation, dark matter and energy, as well as large-scale structure of the universe. May not be held with the former PHYS 4020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 4010.

**Equip To:** PHYS 4020

**Mutually Exclusive:** ASTR 7020

**Attributes:** Science

**ASTR 4100 High-Energy Astrophysics 3 cr**

This course provides an overview of the field of high-energy astrophysics and of high-energy missions, with emphasis on X-ray and gamma-ray astrophysical sources and relevant radiation processes. Radiation and high-energy processes include synchrotron radiation, bremsstrahlung, Inverse Compton scattering, pion decay, and particle acceleration.

Astrophysical sources include accreting compact objects, supernovae and their remnants, gamma-ray bursts, and clusters of galaxies. The course can include topics relevant to nuclear astrophysics and will train students in writing observing proposals for high-energy facilities. May not be held with PHYS 4300 when the topic is "High-Energy Astrophysics".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 2386 or the former PHYS 2380) and PHYS 2600 and PHYS 3670. ASTR 2000 is recommended.

**Mutually Exclusive:** ASTR 7100, PHYS 4300

**Attributes:** Science

**ASTR 4200 Radio Astronomy 3 cr**

This course will provide an introduction to observational radio astronomy and processes in radio astrophysics. Topics will include: an introduction to radio astronomy; basic radiative transfer; blackbody radiation and radiation from an accelerated charge; radio telescopes, receivers, and interferometers; thermal continuum sources (e.g., HII regions); non-thermal continuum sources (e.g., radio galaxies); pulsars; and spectral-line sources (e.g., the 21 cm line, radio recombination lines, and rotational energy transitions in simple molecules). May not be held with PHYS 4300 when the topic taught is "Radio Astronomy."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 2386 or the former PHYS 2380) and PHYS 2600 and PHYS 3670. ASTR 2000 is recommended.

**Mutually Exclusive:** ASTR 7200, PHYS 4300

**Attributes:** Science

**ASTR 4400 Magnetohydrodynamics, Astrophysical Plasmas, and the Interstellar Medium 3 cr**

This course develops a theoretical understanding of interstellar magnetic fields for a diverse range of astrophysical objects, processes, and phenomena. The theoretical aspects of magnetohydrodynamics (MHD), including waves, shocks, instabilities, and turbulence are discussed. MHD and plasma physics are applied to the magneto-ionic interstellar medium of our galaxy, including supernova remnants. Magnetic fields in molecular clouds and cores are examined, with emphasis on their role in star formation. The course also develops a theoretical foundation for the physics of cosmic ray diffusion and acceleration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 3630 and PHYS 3670.

**Mutually Exclusive:** ASTR 7400

**Attributes:** Science

## Biochem. and Medical Genetics (BGEN)

### BGEN 2000 Medical Cell Biology 3 cr

This course will outline the molecular mechanisms underpinning human cellular biological processes, their role in specialized human cells, normal development and homeostasis, and how changes in cellular function can lead to the pathobiology of human diseases.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HEAL 1502 (C+), or BIOL 1030 (C+) or BIOL 1031 (C+).

### BGEN 2010 Applied Nutrition for Pharmacy Practice 2 cr

This course will provide an evidence-based guide for pharmacists on how nutrition and supplements can be applied in the management of disease or enhancement of health in pharmacy practice. Topics will focus on the underlying biochemical basis for nutrition management of selected chronic metabolic and genetic diseases. Chronic disorders for which pharmacists are most frequently consulted will be selected for discussion. Other topics could include frequently encountered diets or supplements.

### BGEN 3010 Genetics in Biomedicine 3 cr

This course provides students with an overview of the field of human genetics from the research laboratory to the clinic. This course will cover the topics of epigenetics, patterns of inheritance, population genetics, complex traits, prenatal diagnosis and ethics. May not be held with BGEN 3022 or BGEN 3024 or the former BGEN 3020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BGEN 2000 (C+) or BIOL 2520 (C+) or BIOL 2521 (C+).

**Mutually Exclusive:** BGEN 3020, BGEN 3022, BGEN 3024

### BGEN 3022 Introduction to Human Genetics A 3 cr

Introduction to basic principles of human genetics with emphasis on pedigrees analysis, population genetics and cytogenetics. May not be held with BGEN 3010 or the former BGEN 3020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2500 or BIOL 2501 or BGEN 2000 or instructor permission.

**Mutually Exclusive:** BGEN 3010, BGEN 3020

### BGEN 3024 Introduction to Human Genetics B 3 cr

Principles of human genetics with emphasis on clinical applications, including human development, disease treatments, prenatal diagnosis and ethics. May not be held with BGEN 3010 or the former BGEN 3020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BGEN 3022.

**Mutually Exclusive:** BGEN 3010, BGEN 3020

### BGEN 4010 Project Course in Human Genetics 6 cr

A research project chosen in consultation with and supervised by a faculty member. A written report is required. The course is available primarily to final year Honours students in the Honours Genetics program. Selection of project and supervision to be arranged prior to September 30 and submitted in writing to department head. Deadline for submission of first draft to supervisor by March 1. Deadline for submission of final draft to supervisor and course coordinator is March 31.

## Biological Sciences (BIOL)

### BIOL 1000 Biology: Foundations of Life 3 cr

A course in unifying principles of biology including cell biology, bioenergetics, cell division, genetics and evolution. May not be used for credit in a Major or Honours program in the Biological Sciences. May not be held with BIOL 1001, BIOL 1020, or BIOL 1021.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Grade 12 or 40S Mathematics course (50%), MATH 1018, or MSKL 0100.

**Equiv To:** BIOL 1001

**Mutually Exclusive:** BIOL 1020, BIOL 1021

**Attributes:** Science, Recommended Intro Courses

### BIOL 1010 Biology: Biological Diversity and Interaction 3 cr

An introduction to biological diversity including prokaryotes, protists, fungi, plants and animals; the form and function of plants and animals and basic concepts of ecology. May not be used for credit in a Major or Honours program in the Biological Sciences. May not be held with BIOL 1011, BIOL 1030, or BIOL 1031.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Grade 12 or 40S Mathematics course (50%), MATH 1018, or MSKL 0100.

**Equiv To:** BIOL 1011

**Mutually Exclusive:** BIOL 1030, BIOL 1031

**Attributes:** Science, Recommended Intro Courses

### BIOL 1020 Biology 1: Principles and Themes 3 cr

(Lab required) A laboratory-based course in unifying principles of biology including cell biology, bioenergetics, cell division, genetics and evolution. This course is intended for Major and Honours students in the Biological Sciences. May not be held with BIOL 1021, BIOL 1000, BIOL 1001, or BIOE 2590. Students who complete BIOL 1000 or BIOL 1001 as the prerequisite for BIOL 1020 will not be allowed to use either BIOL 1000 or BIOL 1001, and BIOL 1020 towards their degree program as the courses may not be held for credit with one another.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [Biology 40S (50%) and (one of: Mathematics 40S (50%), MATH 1018, or MSKL 0100) and (one of: Chemistry 40S (50%), CHEM 1018, CSKL 0100, Physics 40S (50%), PHYS 1018, or PSKL 0100)] or [BIOL 1000 or BIOL 1001].

**Equiv To:** BIOL 1021

**Mutually Exclusive:** BIOE 2590, BIOL 1000, BIOL 1001

**Attributes:** Science

### BIOL 1030 Biology 2: Biological Diversity, Function and Interactions 3 cr

(Lab Required) A laboratory-based course introducing biological diversity including prokaryotes, protists, fungi, plants and animals; the form and function of plants and animals and basic concepts of ecology. This course is intended for major and honours students in the Biological Sciences. Not to be held with BIOL 1031, BIOL 1010 or BIOL 1011, BIOE 2590. NOTE: BIOL 1030 is a prerequisite to further courses in Microbiology and to most courses in Biological Sciences. It is also intended for students proceeding to Agricultural and Food Sciences, Dentistry, Human Ecology, Medicine, Optometry, Pharmacy, Veterinary Science, Physical Education and Science.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1020 or BIOL 1021.

**Equiv To:** BIOL 1031

**Mutually Exclusive:** BIOE 2590, BIOL 1010, BIOL 1011

**Attributes:** Science



**BIOL 1300 Economic Plants 3 cr**

A survey of economically important plants and their products. The history of plant use, plants in folklore and medicine, fermentation and viticulture, domestication of plants, and forestry are the major topics covered. Chemical, structural, and nutritional aspects of plant products are also discussed.

**Equiv To:** BOTN 1010

**Attributes:** Science, Recommended Intro Courses

**BIOL 1340 The State of the Earth's Environment: Contemporary Issues 3 cr**

A presentation of contemporary environmental issues focusing on the scientific basis of problems caused by the growth of human population, use and depletion of resources, pollution, and damage to the environment. The current state of our knowledge bases will be discussed, along with improvements in them that may be necessary. The course will consider needs for action, priorities, and opportunities. May not be used to meet a program requirement of an Honours or Major program in the Biological Sciences. Not to be held with ENVR 1000.

**Mutually Exclusive:** ENVR 1000

**Attributes:** Science, Recommended Intro Courses

**BIOL 1410 Anatomy of the Human Body 3 cr**

(Lab Required) Microanatomy and gross anatomy discussed including changes occurring from conception to old age. Although this course may be used as an elective in an Arts or Science program, it may not be used to meet a program requirement of an Honours or Major program in the Biological Sciences. May not be held with BIOL 1411. No prerequisite. High school Biology strongly recommended.

**Equiv To:** BIOL 1411, ZOOL 1320

**Attributes:** Science, Recommended Intro Courses

**BIOL 1412 Physiology of the Human Body 3 cr**

(Lab Required) Function of all systems discussed with homeostatic regulatory mechanisms as foundation themes. Although this course may be used as an elective in an Arts or Science program, it may not be used to meet a program requirement of an Honours or Major program in the Biological Sciences. Not available to students who have previously obtained credit in, or are currently registered in both of BIOL 2410 (BIOL 2411) and BIOL 2420 (BIOL 2421) or BIOL 1413. This prerequisite is waived for students in the Baccalaureate Program for Registered Nurses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1410 or BIOL 1411; or one of BIOL 1030, BIOL 1031.

**Equiv To:** BIOL 1413, ZOOL 1330

**Mutually Exclusive:** BIOL 2410, BIOL 2411, ZOOL 2530, ZOOL 2531

**Attributes:** Science, Recommended Intro Courses

**BIOL 2200 The Invertebrates 3 cr**

(Lab Required) Biology and phylogeny of invertebrates. Emphasis on common taxa and on those groups of particular phylogenetic significance. Not to be held with BIOL 2201.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 1030, BIOL 1031.

**Equiv To:** BIOL 2201, ZOOL 2600, ZOOL 2601

**Attributes:** Science

**BIOL 2210 The Chordates 3 cr**

(Lab Required) A study of the origin, evolutionary history and structure of the major groups of Chordates. Provides the foundation for more specialized courses such as Biology of Fishes, Ornithology, and Systematics and Biogeography of Fishes. Not to be held with BIOL 2231.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 1030, BIOL 1031.

**Mutually Exclusive:** BIOL 2231, ZOOL 2320, ZOOL 2501

**Attributes:** Science

**BIOL 2240 The Non-Flowering Plants 3 cr**

(Lab Required) An introduction to the mosses and liverworts, ferns and their allies, and conifers, specifically treating their structure, reproduction, identification and ecological significance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 1030, BIOL 1031.

**Equiv To:** BOTN 2110

**Attributes:** Science

**BIOL 2242 The Flowering Plants 3 cr**

(Lab Required) A study of the structure and function of the flowering plants. Lecture topics are supplemented by laboratory exercises that focus on the anatomy and morphology of roots, stems, leaves and reproductive organs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1030 or BIOL 1031.

**Equiv To:** BOTN 2010

**Attributes:** Science

**BIOL 2260 Biology of Fungi and Lichens 3 cr**

(Lab Required) An introduction to the fungi, both free living and lichenized, with emphasis on the major taxonomic groupings, their organization and structure, their life histories, identification and general economic significance. May not be held with BIOL 2261.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1030 or BIOL 1031.

**Equiv To:** BIOL 2261, BOTN 2210

**Attributes:** Science

**BIOL 2262 Biology of Algae 3 cr**

(Lab Required) (Formerly BIOL 3260) Lectures and laboratories dealing with the cellular features of major groups of algae and their phylogenetic and adaptive significance. The basics of algal taxonomy are also covered. Not to be held with the former BIOL 3260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 1030, BIOL 1031.

**Equiv To:** BOTN 2290

**Mutually Exclusive:** BIOL 3260

**Attributes:** Science

**BIOL 2300 Principles of Ecology 3 cr**

(Lab required) Principles of ecology at the individual, population, community, and ecosystems levels. This course is the normal prerequisite to other courses in ecology. May not be held with BIOL 2301, BIOL 2390, or AGEC 2370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1030 or BIOL 1031. Prerequisite or concurrent

requirement: one of STAT 1150, STAT 1000, STAT 1001, or STAT 2220.

**Equiv To:** AGEC 2370, BIOL 2301, BOTN 2370, BOTN 2371, ZOOL 2370, ZOOL 2371

**Mutually Exclusive:** BIOL 2390, BOTN 2280, ZOOL 2290

**Attributes:** Science

**BIOL 2301 Principes d'écologie 3 cr**

(Laboratoire requis) Principes d'écologie au niveau de l'individu, de la population, de la communauté et de l'écosystème. C'est normalement le cours préalable aux autres cours d'écologie. On ne peut se faire créditer BIOL 2301 et BIOL 2300, BIOL 2390 ou AGEC 2370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : BIOL 1031 ou BIOL 1030. Préalable ou concomitant : un de STAT 1001, STAT 1000 ou STAT 1150.

**Equiv To:** AGEC 2371, BIOL 2300, BOTN 2370, BOTN 2371, ZOOL 2370, ZOOL 2371

**Mutually Exclusive:** BIOL 2390, BOTN 2280, ZOOL 2290

**Attributes:** Université de Saint-Boniface

**BIOL 2380 Introductory Toxicology 3 cr**

A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants. This course is also taught in Environmental Science as ENVR 2180 and in Agriculture as AGRI 2180. May not be held with BIOL 2381, the former BIOL 2382, ENVR 2180, ENVR 2190, AGRI 2180 or AGRI 2190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 1030, BIOL 1031, or HEAL 1502]; and [(CHEM 1100 or CHEM 1101) and (one of CHEM 1110, CHEM 1111, CHEM 1120, CHEM 1121, CHEM 1126, or CHEM 1130)] or (one of the former CHEM 1310, the former CHEM 1311, or the former CHEM 1320).

**Equiv To:** AGRI 2180, BIOL 2381, BOTN 2180, ENVR 2180, ZOO 2180

**Mutually Exclusive:** AGRI 2190, BIOL 2382, BOTN 2190, ENVR 2190, ZOO 2190

**Attributes:** Science

**BIOL 2390 Introductory Ecology 3 cr**

The course involves a study of the interrelationships of living organisms (including human) with each other and with their environment. It is not normally acceptable as a prerequisite to other courses in ecology. Not to be held with BIOL 2300, BIOL 2301, or AGEC 2370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 1010, BIOL 1030, BIOL 1031.

**Equiv To:** BOTN 2280, ZOO 2290

**Mutually Exclusive:** AGEC 2370, BIOL 2300, BIOL 2301, BOTN 2370, BOTN 2371, ZOO 2320, ZOO 2370, ZOO 2371

**Attributes:** Science

**BIOL 2410 Human Physiology 1 3 cr**

The mechanisms of action of the body's major control systems (nervous and endocrine) and of the muscular and reproductive systems are examined. Not to be held with BIOL 2411 or BIOL 3460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 1030, BIOL 1031 or BIOL 1412; or a "C+" or better in both BIOL 1000 (or equivalent - BIOL 1001) and BIOL 1010 (or equivalent - BIOL 1011).

**Equiv To:** BIOL 2411, ZOO 2530, ZOO 2531

**Mutually Exclusive:** BIOL 1412, BIOL 1413, BIOL 3460, ZOO 1330, ZOO 3530

**Attributes:** Science

**BIOL 2420 Human Physiology 2 3 cr**

An examination of homeostatic regulation by the body's major effector organ systems (cardiovascular, respiratory, digestive, renal, and immune). Not to be held with BIOL 2421.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Completion of BIOL 2410 (D), or BIOL 2411 (D), or BIOL 3460 (D); or consent of department.

**Equiv To:** BIOL 2421, ZOO 2540, ZOO 2541

**Attributes:** Science

**BIOL 2440 Human Reproductive Physiology 3 cr**

This course provides an in-depth understanding of human reproduction with particular emphasis on intrinsic control mechanisms and extrinsic methods of regulation of reproduction. This course also provides the basis for the understanding of alterations from normal mechanisms of reproductive processes. Check with the Department of Biological Sciences for course availability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 1410 and BIOL 1412; or consent of department.

**Equiv To:** ZOO 2140

**Attributes:** Science

**BIOL 2500 Genetics 1 3 cr**

(Lab Required) Principles of heredity, gametogenesis and the cytological basis of inheritance in plants and animals. The concepts of dominance and genetic interaction, sex and inheritance, linkage, chromosomal variations, quantitative and population genetics, the genetic code. Not to be held with BIOL 2501 or PLNT 2520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 1030, BIOL 1031.

**Equiv To:** BIOL 2501, BOTN 2460, BOTN 2461, PLNT 2520

**Mutually Exclusive:** MBIO 1410

**Attributes:** Science

**BIOL 2520 Cell Biology 3 cr**

The microscopic and submicroscopic aspects of cellular structure and function are considered with emphasis on the living cell as a dynamic system. Not to be held with BIOL 2521.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 1030, BIOL 1031.

**Equiv To:** BIOL 2521, ZOO 2280, ZOO 2281

**Attributes:** Science

**BIOL 2600 Introduction to Computational Biology 3 cr**

(Lab required) Biologists working in fields from genomics to ecology to physiology collect, analyze, and interpret their data using quantitative methods. More and more, biological researchers are encountering data (genomic, environmental, phenotypic) in unprecedented volumes that require new data handling approaches. The overall goal of this course is to introduce biology students to the types of biological questions that can be answered by applying computational methods to large-scale, publicly available data sets. The course will include a survey of several major public biological data repositories and will introduce students to the tools that biologists use to access, explore, analyze and visualize these data. This course is restricted to Faculty of Science students in a Major or Honours program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (BIOL 1030 or BIOL 1031) or [(STAT 1150 or (STAT 1000 and STAT 2000)) and (one of BIOL 1000, BIOL 1001, BIOL 1010, or BIOL 1011)].

**Attributes:** Science

**BIOL 2890 Special Topics in Biology 3 cr**

Biology encompasses a broad array of ideas and special topic areas.

In this course, students can pursue a specific topic in detail through lectures, seminars and research projects. Normally taken by declared Honours and Major students in Biological Sciences. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of department.

**Attributes:** Science

**BIOL 2892 Special Topics in Biology with Laboratory 3 cr**

(Lab required) Biology encompasses a broad array of ideas and special topic areas. In this course, students can pursue a specific topic in detail through lectures, laboratories, seminars and research projects. Normally taken by declared Honours and Major students in Biological Sciences. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of department.

**Attributes:** Science

**BIOL 3100 Skills in Biological Sciences 3 cr**

This course will introduce students to the concepts and skills necessary to succeed in a research directed Biology-based career, including: communication skills (scientific writing and oral presentations), critical thinking, strategies for employment and graduate training, familiarization with the range of biological research, and exposure to a variety of Biology-based careers. This course is restricted to Honours students in the Biological Sciences or departmental permission.

**Equiv To:** BOTN 3570, ZOO 3750

**Attributes:** Science

**BIOL 3200 Advanced Invertebrate Biology 3 cr**

Topics of current interest within diverse phyla of Invertebrates to be surveyed. Students may develop approved research proposals and present up-to-date research summaries.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2200 or BIOL 2201.

**Equiv To:** ZOO 3610

**Attributes:** Science

**BIOL 3242 Vascular Flora of Manitoba 3 cr**

(Lab Required) A survey of the vascular plants of Manitoba emphasizing identification, nomenclature and classification, and including brief accounts of the distribution and post-glacial history of the main floristic associations within the province. Students must submit a collection of at least 20 different vascular plants identified to species. A guide to the collection should be obtained from the Department of Biological Sciences office in the Spring/Summer prior to commencing the course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2240 or BIOL 2242 or permission of the department.

**Equiv To:** BOTN 3070

**Attributes:** Science

**BIOL 3250 Lichens and Bryophytes 3 cr**

(Lab required) The biology, evolution, and ecology of lichens and bryophytes. Emphasis is placed on the role of lichens and bryophytes in the ecosystem, gene flow, animal interactions, co-evolution, secondary compounds, and species identification. May not be held with the former BIOL 3240 or the former BIOL 4246.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2240 or BIOL 2260 or BIOL 2261.

**Mutually Exclusive:** BIOL 3240, BIOL 4246, BOTN 3260, BOTN 4050

**Attributes:** Science

**BIOL 3270 Introductory Parasitology 3 cr**

(Lab required) General course covering major parasitic phyla: namely, Protozoa, Platyhelminthes, Aschelminthes, Acanthocephala, and Arthropoda. Emphasis will be on principles of parasitology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2200 or BIOL 2201; or consent of department.

**Equiv To:** ZOO 3460

**Attributes:** Science

**BIOL 3280 Forest Botany 3 cr**

An examination of the structure and dynamics of plant communities in forested ecosystems. Topics include forest type classification, physiological and anatomical responses of representative forest species, decomposition and nutrient cycling, disturbance and forest succession.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 2242; and one of BIOL 2300, BIOL 2301 or AGE 2370; or consent of the department.

**Equiv To:** BOTN 3270

**Attributes:** Science

**BIOL 3290 Medicinal and Hallucinogenic Plants 3 cr**

A botanical and historical survey of medicinal, hallucinogenic and poisonous plants used in various cultures. Not to be held with BIOL 3291.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of 30 hours of university credit, or consent of department.

**Equiv To:** BIOL 3291, BOTN 3280

**Attributes:** Science

**BIOL 3300 Evolutionary Biology 3 cr**

(Lab Required) Evolution is the ultimate cause of biological diversity.

This course introduces the major questions and research methods in evolutionary biology. Topics include evolutionary genetics, adaptation, speciation, and the reconstruction of evolutionary history.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of BIOL 2500, BIOL 2501, or PLNT 2520; and any one of the following: BIOL 2200, BIOL 2210, BIOL 2231, BIOL 2240, BIOL 2260, BIOL 2261, BIOL 3260; or consent of department.

**Equiv To:** BOTN 3000, ZOO 3000, ZOO 3001

**Attributes:** Science

**BIOL 3310 Foundations of Population Ecology 3 cr**

(Lab Required) The study of living populations, through experimentation and theory, will be examined. Topics investigated will include population regulation, competition, predation, disease, harvest, nonlinear and spatial dynamics and individual based models. Concepts and methods are reinforced through tutorials and evaluated by assignments and examinations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGE 2370] and [one of STAT 1150, STAT 2000, or STAT 2001] or consent of department.

**Equiv To:** ZOO 3680

**Attributes:** Science

**BIOL 3312 Community Ecology 3 cr**

Lectures and laboratories emphasizing the structure and function of terrestrial biotic communities with emphasis upon selected Manitoba situations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [one of BIOL 2300, BIOL 2301, or AGE 2370] and [one of STAT 1150, STAT 1000, STAT 1001, or AGRI 2400]; or consent of department.

**Equiv To:** BOTN 3540

**Attributes:** Science

**BIOL 3314 Field Ecology 3 cr**

Lectures and field exercises examine problems, techniques, and assumptions involved in measuring parameters of biological populations, communities, and environmental variables. The bulk of this course will be delivered during a field trip to a site determined by the instructor.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGE 2370] and [one of STAT 1150, STAT 2000, or STAT 2001]; or consent of department.

**Equiv To:** BOTN 3420, ZOO 3450

**Attributes:** Science

**BIOL 3318 Boreal Ecology 3 cr**

A survey of ecological factors in the formation, evolution, and survival of northern biota.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001]; or consent of department.

**Equiv To:** ZOO 3380

**Attributes:** Science

**BIOL 3340 Biology of Primitive Fungi and Allies 3 cr**

Studies on the evolution of ancestral fungi, relevant Chromista and slime molds within the broader context of evolution of derived fungi and ancient groups basal to fungi and animals. The course also encompasses cogent life histories, development, structure, taxonomy, and fundamental biochemistry. General methods for environmental collection, isolation and study of these organisms will be presented in lectures.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2260 or BIOL 2261, or consent of the department.

**Attributes:** Science

**BIOL 3350 Data Analysis in Ecology 3 cr**

This course will consider methods of collection and analysis of ecological data, emphasizing experimental design of ecological studies, sampling, analysis of ecological data sets, and presentation techniques. May not be held with the former BIOL 4320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGECE 2370] and [one of STAT 1150, STAT 2000, or STAT 2001]; or consent of department.

**Mutually Exclusive:** BIOL 4320, ZOO 4200

**Attributes:** Science

**BIOL 3360 Animal Behaviour 3 cr**

An introduction to the study of animal behaviour, including mechanisms and evolutionary explanations of behaviour, as well as current ideas in animal behaviour. Topics include the genetic, physiological aspects of behaviour, and introductions to key topics in behavioural ecology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGECE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001] and [one of BIOL 2200, BIOL 2201, BIOL 2210, or BIOL 2231]; or consent of department.

**Equip To:** ZOO 3100

**Attributes:** Science

**BIOL 3370 Limnology 3 cr**

(Lab required) Lectures and laboratories providing an introduction to the physics, chemistry and biology of lakes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [one of BIOL 2300, BIOL 2301, or AGECE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001]; or consent of department.

**Equip To:** ZOO 3500

**Attributes:** Science

**BIOL 3372 Wetland Ecology 3 cr**

Lectures and field exercises examine the biotic (algae, macrophytes, invertebrates, and vertebrates) and abiotic (hydrology, nutrient cycling) properties of Manitoba's wetlands. Various wetland types, including prairie potholes, peatlands, and coastal marshes will be considered in lectures and field work. The course is offered in Summer Session.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGECE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001]; or consent of department.

**Equip To:** BOTN 3580, ZOO 3580

**Attributes:** Science

**BIOL 3400 Plant Physiology 3 cr**

(Lab required) An integrative view of major physiological processes in plants, spanning the biochemical, cellular, tissue, organ and whole plant levels of organization. The focus will be on photosynthesis, respiration, plant water reactions, plant mineral nutrition, and the role of hormonal and extrinsic factors in the regulation of plant growth. This course is taught together with PLNT 3400. Students may not hold credit for both BIOL 3400 and PLNT 3400. May not be held with the former BIOL 3450 or the former PLNT 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 2242; and [(one of CHEM 2700, CHEM 2701, MBIO 2700, or MBIO 2701) and (CHEM 2720 or CHEM 2721)], or [(CHEM 2730 or MBIO 2730) and CHEM 2740], or [one of the former CHEM 2360, the former CHEM 2361, the former CHEM 2770, the former MBIO 2360, the former MBIO 2361, or the former MBIO 2770]; or consent of the department.

**Equip To:** PLNT 3400

**Mutually Exclusive:** BIOL 3450, BOTN 2020, PLNT 3500

**Attributes:** Science

**BIOL 3452 Environmental Plant Physiology 3 cr**

(Lab Required) A physiological study of plant-environment interactions with emphasis on the development of strategies to survive abiotic stresses including heat, cold, drought, flooding, shade, excess light and UV light. The unique mechanisms used by plants (including the fascinating carnivorous species) to obtain nutrients in deficient environments will also be covered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 3400, the former BIOL 3450, PLNT 3400, or the former PLNT 3500 or consent of the department.

**Equip To:** BOTN 3010

**Attributes:** Science

**BIOL 3470 Environmental Physiology of Animals 1 3 cr**

(Lab Required) This course is intended to acquaint students with some of the major environmental challenges encountered by animals and stresses the diversity of physiological solutions to these problems in aquatic and terrestrial organisms. Areas covered may include thermal biology, circulation, gas exchange and buoyancy regulation. Laboratories explore related subjects in various animals. This course may not be held for credit with the former BIOL 3462.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2200 or BIOL 2210; or consent of department.

**Mutually Exclusive:** BIOL 3462, ZOO 3540

**Attributes:** Science

**BIOL 3472 Environmental Physiology of Animals 2 3 cr**

(Lab Required) This course is intended to acquaint students with the control and integration of organ systems and body functions of animals, and their biochemical and physiological adaptations to environmental perturbations. Areas covered may include neuroendocrinology, excretion, and water, salt, and acid-base balance. Laboratories explore related subjects in various animals. This course may not be held for credit with BIOL 3460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 2200 or BIOL 2210 or consent of department.

**Mutually Exclusive:** BIOL 3460, ZOO 3530

**Attributes:** Science

**BIOL 3500 Genetics 2 3 cr**

(Lab required) The course complements Genetics I (BIOL 2500, BIOL 2501) and deals with various aspects of linkage and crossing over, gene function, allelism, mutation and repair, the use of bacteria and viruses as genetic tools, basics of developmental genetics and extra-nuclear inheritance. May not be held with BIOL 3501.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2500, BIOL 2501, or PLNT 2520]; and one of [(one of CHEM 2710, CHEM 2711, MBIO 2710, or MBIO 2711) and (CHEM 2720 or CHEM 2721)] or [CHEM 2740 and (CHEM 2750 or MBIO 2750)] or [one of the former CHEM 2370, the former CHEM 2371, the former MBIO 2370, the former MBIO 2371, the former CHEM 2780, or the former MBIO 2780]; or consent of department.

**Equiv To:** BIOL 3501, BOTN 3460

**Attributes:** Science

**BIOL 3501 Génétique 2 3 cr**

(Laboratoire requis) Complément du cours d'introduction à la génétique BIOL 2501 (BIOL 2500). Présentation des divers aspects de la liaison génique et la recombinaison génique, de la fonction des gènes, l'allélisme, des mutations et de la réparation, de l'utilisation des bactéries et des virus comme outils génétiques, des bases de la génétique du développement et de l'hérédité extranucléaire. On ne peut se faire créditer BIOL 3501 et BIOL 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : un de [BIOL 2501 ou BIOL 2500 ou PLNT 2520]; et un de [(CHEM 2711, CHEM 2710, MBIO 2711 ou MBIO 2710) et (CHEM 2721 ou CHEM 2720)] ou (CHEM 2740 et (CHEM 2750 ou MBIO 2750)] ou [un des anciens (CHEM 2371, CHEM 2370, MBIO 2371, MBIO 2370, CHEM 2780 ou MBIO 2780)] ou autorisation professorale.

**Equiv To:** BIOL 3500, BOTN 3460

**Attributes:** Université de Saint-Boniface

**BIOL 3542 Developmental Biology 3 cr**

Principles and concepts of developmental biology will be presented including early embryo development, tissue patterning, morphogenesis, germ cell formation, stem cell biology, organ and nervous system development, growth and regeneration. Fundamental developmental concepts as well as the cellular, genetic and molecular mechanisms behind development will be covered utilizing invertebrate, vertebrate and plant examples. May not be held with the former BIOL 2540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2500, BIOL 2501, or PLNT 2520] and [one of BIOL 2520 or BIOL 2521], or consent of the department.

**Mutually Exclusive:** BIOL 2540, ZOO 2150

**Attributes:** Science

**BIOL 3550 Plant Anatomy 3 cr**

(Lab Required) A study of the anatomical aspects of the growth and development of plants cells, tissues and organs. Laboratory exercises will complement material.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2242.

**Equiv To:** BOTN 3190

**Attributes:** Science

**BIOL 3560 Comparative Animal Histology 3 cr**

(Lab Required) This course focuses on the cell and tissue organization of animals. Cell morphology and specialization, tissue types and a survey of the cellular and tissue organization of all organ systems are covered. The primary focus is on mammals but comparative aspects of other animal groups are also included. May not be held with BIOL 3561.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of BIOL 2210, BIOL 2520, or BIOL 2521.

**Equiv To:** BIOL 3561, ZOO 3060, ZOO 3061

**Attributes:** Science

**BIOL 3561 Histologie animale comparée 3 cr**

(Laboratoire requis). Étude de l'organisation cellulaire et tissulaire des animaux, de la morphologie cellulaire, de la spécialisation, des types de tissus et de l'organisation cellulaire et tissulaire de tous les systèmes. Accent mis sur les mammifères, mais des études comparatives avec d'autres groupes animaux seront aussi incluses. On ne peut se faire créditer BIOL 3561 et BIOL 3560.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: un de BIOL 2210, BIOL 2231, BIOL 2521 ou BIOL 2520.

**Equiv To:** BIOL 3560, ZOO 3060, ZOO 3061

**Attributes:** Université de Saint-Boniface

**BIOL 3600 Biological Diversity and Sustainability 3 cr**

Anthropogenic drivers of change of many components of biological diversity; the resulting impacts on ecosystem capacity to provide on-going goods and services that are essential constituents of well-being and ultimately sustainability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGEC 2370] and [one of STAT 1000, STAT 1001, or STAT 1150].

**Attributes:** Science

**BIOL 3890 Special Topics in Biology 3 cr**

Biology encompasses a broad array of ideas and special topic areas. In this course, students can pursue a specific topic in detail through lectures, seminars and research projects. Normally taken by declared Honours and Major students in Biological Sciences. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of department.

**Attributes:** Science

**BIOL 3892 Special Topics in Biology with Laboratory 3 cr**

(Lab required) Biology encompasses a broad array of ideas and special topic areas. In this course, students can pursue a specific topic in detail through lectures, laboratories, seminars and research projects. Normally taken by declared Honours and Major students in Biological Sciences. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of department.

**Attributes:** Science

**BIOL 3980 Work Term 1 0 cr**

Work assignment in business, industry, or government for students registered in the Biological Sciences Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Equiv To:** BOTN 3980, ZOO 3980

**Attributes:** Science

**BIOL 3990 Work Term 2 0 cr**

Work assignment in business, industry, or government for students registered in the Biological Sciences Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Equiv To:** BOTN 3990, ZOO 3990

**Attributes:** Science

**BIOL 4100 Honours Thesis 6 cr**

The student will conduct a research project, chosen in consultation with a Biological Sciences faculty member acting as an advisor, and produce a thesis in which the project, the results and conclusions are presented. The student will defend the thesis at an oral examination held on completion of the thesis. This course is restricted to 3rd and 4th year Honours Biological Science students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 3100 or consent of department.

**Equiv To:** BOTN 4600

**Mutually Exclusive:** ZOO 4110

**Attributes:** Science

**BIOL 4210 Biology of Fishes 3 cr**

(Lab Required) Lectures survey organ systems, life history, and the population biology of fishes. The ecological analysis of fish communities is addressed through a field trip and a series of workshops on the analysis of field data. Evaluation is based upon work related to the field trip and examinations based upon the lecture material.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2210 or BIOL 2231.

**Equiv To:** ZOO 4170

**Attributes:** Science

**BIOL 4212 Systematics and Biogeography of Fishes 3 cr**

(Lab Required) A study of the evolutionary history, interrelationships and distribution patterns of the fish-like vertebrates. Laboratories will cover the identification of the major groups of fish-like vertebrates.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2210 or BIOL 2231; or consent of department.

**Equiv To:** ZOO 4220

**Attributes:** Science

**BIOL 4214 Biology of Amphibians and Reptiles 3 cr**

(Lab Required) Lectures consider the evolution, biology and adaptations of amphibians and reptiles. Laboratories and student presentations will deal with classification, structure, identification, and methods of field and laboratory study of these animals.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2210 or BIOL 2231; or consent of department.

**Equiv To:** ZOO 4230

**Attributes:** Science

**BIOL 4216 Biology of Birds 3 cr**

(Lab required) Biology of birds including: morphology, systematics, evolution, life histories and breeding biology, ecology, migration, and distribution of birds.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2210 or BIOL 2231.

**Equiv To:** ZOO 4240

**Attributes:** Science

**BIOL 4218 Biology of Mammals 3 cr**

(Lab required) Structure, classification, evolution, life histories, biogeography and ecology of mammals, including conservation. Techniques of studying mammals. Identification of the mammals of Manitoba. Typically offered alternating years.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [BIOL 2210 or BIOL 2231]; and [one of BIOL 2300, BIOL 2301 or AGE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001]; or consent of department.

**Equiv To:** ZOO 4250

**Attributes:** Science

**BIOL 4220 Marine Biodiversity 3 cr**

Examines key ecological principles governing the maintenance of marine biodiversity, particularly in northern ecosystems. Topics include the definitions and global patterns of biodiversity and the ecological mechanisms influencing changes in these patterns in the context of applied population, community and ecosystem ecology. The course will also emphasize practical solutions, including fisheries' harvest models and marine protected areas.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001]; or consent of department.

**Equiv To:** ZOO 4260

**Attributes:** Science

**BIOL 4262 Wildlife and Fisheries Parasitology 3 cr**

(Lab Required) Parasites of major vertebrate groups of economic importance in temperate regions. Emphasis on: identification, means of control, and how to evaluate the impact of parasites on animal populations. A major project is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 3270.

**Equiv To:** ZOO 4720

**Attributes:** Science

**BIOL 4300 Evolution and Adaptation 3 cr**

Lectures and discussion on advances in evolutionary research. Topics will include systematics, evolutionary genetics, evolution and development, co-evolution, mating systems, species ranges, eco-evolutionary dynamics, and evolution in society. This course may not be held for credit with either of BIOL 4240 or BIOL 4242.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 3300.

**Mutually Exclusive:** BIOL 4240, BIOL 4242

**Attributes:** Science

**BIOL 4310 Applications of Population Ecology in Fisheries and Wildlife 3 cr**

(Lab Required) The material introduced in BIOL 3310 is developed into the quantitative analyses of field data to form a basis for conservation and management. Topics covered include: surplus harvest models, virtual population analysis, spatial population modeling, bioeconomics, and quantitative adaptive management. Concepts are reinforced through tutorials.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 3310.

**Equiv To:** ZOO 4850

**Attributes:** Science

**BIOL 4312 Analysis of Biological Communities 3 cr**

A survey of methods and approaches to the analysis of biological and environmental data containing many variables. Offered in alternate years.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGECE 2370] and [one of STAT 1150, STAT 2000, or STAT 2001].

**Equiv To:** BOTN 4650

**Mutually Exclusive:** BIOL 7440, BOTN 7440

**Attributes:** Science

**BIOL 4314 Arctic Field Ecology 3 cr**

This hands-on field course will be held in Churchill, MB. While participating in ongoing monitoring and research, students will learn techniques for estimating wildlife abundance, distribution, behaviour, and reproductive parameters. The course is offered in Summer Term. A field trip fee will be assessed in addition to tuition fees. May not be held with BIOL 4800 when topic is Arctic Field Ecology - Churchill, MB.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGECE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001] and instructor permission.

**Mutually Exclusive:** BIOL 4800

**Attributes:** Science

**BIOL 4330 Plant Interactions 3 cr**

This course examines the ecology of interactions between plants and their biotic environment - other plants, animals and soil microbes. This is a reading course. Students will participate in discussions of key papers, examine recent and historic literature, and write a term paper examining a selected topic.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2300; or consent of department.

**Equiv To:** BOTN 4150

**Attributes:** Science

**BIOL 4362 Behavioural Ecology and Cognitive Ethology 3 cr**

(Lab Required) Examines proximate and ultimate questions relating to mating and parental behaviour, communication, social parasitism and animal intellect to provide insight into the intimate relationship between behavioural evolution and the environment. Laboratory and field exercises complement major topics considered in lectures.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 3360 or consent of department.

**Equiv To:** ZOOL 4280

**Attributes:** Science

**BIOL 4374 Aquatic Botany 3 cr**

This course examines the relationship between algae, fungi and macrophytes, and the physical, chemical and biological properties of the aquatic environment. Specific adaptations to life in water, and patterns of distribution and succession in rivers, lakes and wetlands will be covered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGECE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001]; or consent of department.

**Equiv To:** BOTN 4010

**Attributes:** Science

**BIOL 4380 Environmental Toxicology 3 cr**

(Lab required) A survey of the principles governing the dynamics of chemicals in the environment, with emphasis on the biological systems, using case histories of known pollution problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 2300, BIOL 2301, or AGECE 2370]; and one of [(one of CHEM 2710, CHEM 2711, MBIO 2710, or MBIO 2711) and (CHEM 2720 or CHEM 2721)] or [(CHEM 2740) and (CHEM 2750 or MBIO 2750)], or [one of the former CHEM 2370, the former CHEM 2371, the former MBIO 2370, the former MBIO 2371, the former CHEM 2780, or the former MBIO 2780]; and (one of STAT 1150, STAT 1000, or STAT 1001); and (one of BIOL 2410, BIOL 2411, BIOL 3470, or BIOL 3472); or consent of department.

**Equiv To:** ZOOL 4840

**Attributes:** Science

**BIOL 4400 Revegetation of Disturbed Lands 3 cr**

A physiological and ecological study of disturbed plant communities with emphasis on stresses associated with both mining activities and agricultural practices and processes of assisted recovery.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of BIOL 3400, PLNT 3400, the former BIOL 3450, or the former PLNT 3500]; and [one of BIOL 2300, BIOL 2301, or AGECE 2370] and [one of STAT 1150, STAT 1000, or STAT 1001]; or consent of department.

**Attributes:** Science

**BIOL 4460 Comparative Animal Energetics 3 cr**

Energetic strategies of animals living in ecologically diverse environments. Integration of physiological, morphological and behavioural adaptations with an emphasis on vertebrate species.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 2210 or BIOL 2231; and one of BIOL 2410, BIOL 2411, BIOL 3470 (BIOL 3462), or BIOL 3472 (BIOL 3460); or consent of department.

**Equiv To:** ZOOL 4830

**Attributes:** Science

**BIOL 4470 Physiology of Excitable Cells 3 cr**

(Lab required) Information flow in the nervous system. Discovery of electrical properties of neurons, structure and function of ion channels and synapses are emphasized. This course is restricted to students in year 3 or 4 of a Major or Honours degree program in Biological Sciences or in the B.Sc. in Biosystems Engineering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [(BIOL 2410 or BIOL 2411) and (BIOL 2420 or BIOL 2421)] or [BIOL 3470 and BIOL 3472]; or consent of department.

**Equiv To:** ZOOL 4160

**Attributes:** Science

**BIOL 4480 Comparative Endocrinology 3 cr**

The structure, control, and function of vertebrate endocrine systems. BIOL 2520, BIOL 2521, one of BIOL 2410, BIOL 2411, BIOL 3470 or BIOL 3472, and a course in biochemistry are strongly recommended as prerequisites.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of BIOL 1030 or BIOL 1031 and successful completion of 60 credit hours of university coursework.

**Equiv To:** ZOOL 4600

**Attributes:** Science

**BIOL 4500 Molecular Genetics of Plant Development 3 cr**

Analysis of plant development at the molecular level. Recent advances in model system genetics will be highlighted including seedling, root, shoot, and flower development as well as environmental responses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2500 or BIOL 2501.

**Equiv To:** BOTN 4180

**Attributes:** Science

**BIOL 4510 Evolutionary Genetics 3 cr**

(Lab Required) Evolutionary genetic processes are the foundation upon which much of understanding of biology is built. This course uses lectures, discussions, and computer-based analyses of real data sets to introduce the core concepts of theoretical population genetics and the applications of these ideas for the study of evolution. May not be held with BIOL 4890 when the topic is "Evolutionary Genetics". Registration is restricted to students in the B.Sc. Honours or Major programs, including Co-op programs, in Biological Sciences and Genetics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of BIOL 3300, BIOL 3301, or consent of department) and (one of MATH 1200, MATH 1210, MATH 1211, MATH 1220, MATH 1230, MATH 1240, MATH 1241, MATH 1300, MATH 1301, MATH 1310, MATH 1500, MATH 1501, MATH 1510, MATH 1520, the former MATH 1530, or MATH 1690).

**Mutually Exclusive:** BIOL 4890

**Attributes:** Science

**BIOL 4540 Developmental Molecular Biology 3 cr**

(Lab Required) An examination of early development with emphasis on the molecular events. Sex determination, gametogenesis and early embryogenesis will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 3542 or the former BIOL 2540; or consent of department.

**Equiv To:** ZOOL 4150

**Attributes:** Science

**BIOL 4542 Genes and Development 3 cr**

An in depth examination of selected topics in embryonic development, emphasizing the genetic control of the cell and molecular mechanisms that direct embryogenesis. The course emphasizes hypothesis testing and the evolution of development, including studies of both animal and plant development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 2520 or BIOL 2521; and BIOL 3542 (or the former BIOL 2540); or consent of department.

**Equiv To:** ZOOL 4270

**Attributes:** Science

**BIOL 4544 Advanced Developmental and Cellular Biology 3 cr**

(Lab Required) The course focuses on contemporary concepts and approaches in developmental biology, including theoretical and practical aspects. The emphasis is on the laboratory component. May not be held with the former BIOL 3540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 2520 or BIOL 2521 and BIOL 3542 or the former BIOL 2540; or consent of the department.

**Attributes:** Science

**BIOL 4554 Molecular Biology Techniques for Eukaryotes - DNA 3 cr**

(Lab Required) A techniques intensive course focusing on the understanding of molecular biology techniques, troubleshooting problems, writing reproducible laboratory experiments for publications, accurate recording of procedures in lab journals, and bioinformatics exercises from a DNA perspective. This course is designed for 4th year undergraduate and graduate students interested in understanding the theory and application of molecular methods specifically focusing on eukaryotic DNA. Students will learn essential and cutting-edge molecular biology techniques involved in gene structure, amplification, transformation, and sequencing among others. This course may not be held for credit with BIOL 4552.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2520.

**Mutually Exclusive:** BIOL 4552

**Attributes:** Science

**BIOL 4556 Molecular Biology Techniques for Eukaryotes - RNA 3 cr**

(Lab Required) This is a "hands-on" techniques course designed for the 3rd and 4th year undergraduate level. The purpose of this course is to train students in the current molecular biology techniques dealing with highly sensitive RNA molecules. The students will learn all essential steps involved to identify the messenger RNA expression of a particular target protein in plant or animal (invertebrates) systems. This course may not be held for credit with BIOL 4552.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2520.

**Mutually Exclusive:** BIOL 4552

**Attributes:** Science

**BIOL 4560 Microtechnique 3 cr**

(Lab Required) This intensive course covers a spectrum of animal tissue and cell preparation techniques for microscopy and a survey of the variety of types of microscopy. These span all types of microscopy; live cell techniques, fixation and tissue processing methods for both paraffin embedding media and plastic media, sectioning and staining imaging and image processing, introduction to histochemistry and immunocytochemistry and electron microscopy. This is a practical course with a major hands-on laboratory emphasis. This course is restricted to students in year 3 or 4 of a Major or Honours degree program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 1030 or BIOL 1031 (C+); or consent of department.

**Equiv To:** ZOOL 4140

**Attributes:** Science

**BIOL 4650 Biology and Society 3 cr**

(Lab Required) An exploration of the intersection of biology with society and the societal implications of research in areas such as genetics, biotechnology, ecology and evolution through lectures and tutorials. The course will examine how biological research is presented in the public sphere, and consider common public misunderstandings of the science. Students will examine some of the ethical issues that arise in the practice and application of biological sciences and develop skills in the communication and clarification of biological principles to the public. Students must be enrolled in third year (or higher) of a major or honours program in Biological Sciences, Biotechnology or Genetics. May not be held with BIOL 4890 when titled "Biology and Society".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: One of BIOL 2500, BIOL 2501 or PLNT 2520 (C+), or permission of instructor.

**Mutually Exclusive:** BIOL 4890

**Attributes:** Science



**BIOL 4800 Special Topics in Field Biology 3 cr**

Lectures, field studies and research projects on a selected topic. Course content to vary from year to year depending on instructor. Usually offered during the summer months.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of department.

**Equiv To:** BOTN 4800, ZOOL 4800

**Mutually Exclusive:** BIOL 4314

**Attributes:** Science

**BIOL 4890 Special Topics in Biology 3 cr**

Biology encompasses a broad array of ideas and special topic areas.

In this course, students can pursue a specific topic in detail through lectures, seminars and research projects. Normally restricted to third and fourth year Honours and Major students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of department.

**Equiv To:** BOTN 4890, ZOOL 4890

**Mutually Exclusive:** BIOL 4510, BIOL 4650

**Attributes:** Science

**BIOL 4892 Special Topics in Biology with Laboratory 3 cr**

(Lab required) Biology encompasses a broad array of ideas and special topic areas. In this course, students can pursue a specific topic in detail through lectures, laboratories, seminars and research projects. Restricted to third and fourth year Honours and Major students in Biological Sciences. Space permitting students in other programs will be permitted to register. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of department.

**Attributes:** Science

**BIOL 4980 Work Term 3 0 cr**

Work assignment in business, industry, or government for students registered in the Biological Sciences Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Equiv To:** BOTN 4980, ZOOL 4980

**Attributes:** Science

**BIOL 4990 Work Term 4 0 cr**

Work assignment in business, industry, or government for students registered in the Biological Sciences Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Equiv To:** BOTN 4990, ZOOL 4990

**Attributes:** Science

## Biosystems Engineering (BIOE)

**BIOE 0222 Precision Agriculture- Technological Tools for Decision Making 4 cr**

(Lab required) Precision agriculture is a philosophy of agricultural management that has been enabled by modern technology. This course will examine both the technology and the techniques that can be used to improve the efficiency of agricultural operations by decreasing costs, increasing profits, and decreasing hazards to the environment. Students will be introduced to current and emerging technologies for crop, livestock and business management. Students will have the opportunity to apply data generated from these technologies to support decision making required by farm managers.

**BIOE 0600 Farm Machinery 4 cr**

Operating principles of basic farm implements with emphasis on seed cleaning, seeding, tillage, haying, and harvest machines including their selection, adjustment, efficiency, and cost of operation with respect to test data.

**BIOE 0700 Agricultural Buildings and Environments 4 cr**

Factors that impact the practicality of farm buildings. Components of buildings, including materials and construction techniques. Techniques of maintaining building environments to facilitate production and/or storage.

**BIOE 0710 Materials Handling and Electrical Controls 3 cr**

Fundamental concepts and systems approach to storing, conditioning, moving, processing, and metering of agricultural produce. Principles and practices of fans, grain drying, dust control, and electrical supply. Students may not hold credit for BIOE 0710.

**BIOE 2110 Transport Phenomena 3 cr**

(Lab required) Principles of heat transfer, solar radiation, psychometrics, molecular diffusion, mass transfer and refrigeration and their application to biosystems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENG 1460.

**BIOE 2480 Impact of Engineering on the Environment 3 cr**

Students will gain an understanding of overall sustainability of industrial activities, life-cycle and risk assessment techniques for sustainability, and design improvements to enhance environmental performance of engineered systems. This course will introduce basic methodologies for conducting environmental impact assessments, including physical, chemical, ecological, social and economic impacts. May not be held with the former BIOE 4480. Registration restricted to Biosystems Engineering students.

**Mutually Exclusive:** BIOE 4480

**BIOE 2590 Biology for Engineers 3 cr**

(Lab required) Provide theories and principles of Biology to engineering students and present applications of biological principles to engineering problems. Fundamental theories involved in cell structure and function, metabolism, genetics and heredity, bacteria and virus structure and function, plant and animal structure and function are covered. An introduction to animal and plant physiology is also provided. Laboratory sessions and term assignments focus on the engineering applications of these basic theories and principles to provide a good understanding of the role of Biology in Engineering. May not be held with BIOL 1020 or BIOL 1030

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 1100 or the former CHEM 1300.

**Mutually Exclusive:** BIOL 1020, BIOL 1021, BIOL 1030, BIOL 1031

**BIOE 2600 Plant and Animal Physiology for Engineers 4 cr**

(Lab required) Plant and animal physiology as affected by environment for use in the design of agricultural machines, structures, and food processes for biological products; models of simulation of plant and animal growth. May not be held with the former AGRI 2200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 2590.

**Mutually Exclusive:** AGRI 2200

**BIOE 2790 Fluid Mechanics 4 cr**

(Lab required) Definition of fluid; fluid properties; variation of pressure in a fluid; hydrostatic forces; buoyancy; kinematics of flow; control volumes; continuity; Bernoulli's equation; energy equation; flow in closed conduits; open channel flow. Not to be held with CIVL 2790.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENG 1440 (or ENG 1441) and (MATH 1710 or MATH 1700 or MATH 1701).

**Mutually Exclusive:** CIVL 2790

**BIOE 2800 Solid Mechanics 4 cr**

(Lab required) Analysis of deformable bodies; stress and strain in three dimensions; equilibrium equations and strain-displacement relations; constitutive relations and mechanical behaviour of materials; radially symmetric and plane problems in elasticity; relevant experimental demonstrations. Not to be held with CIVL 2800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENG 1440 (or ENG 1441) and (MATH 1710 or MATH 1700 or MATH 1701).

**Mutually Exclusive:** CIVL 2800

**BIOE 2900 Biosystems Engineering Design 1 4 cr**

(Lab required) An introduction to the professional discipline of Biosystems Engineering and the philosophy of systems thinking that is used by the Biosystems engineer. Students will be introduced to several principles (i.e., safety engineering, human factors engineering and biomimicry) that should be considered during the design process, and will be given opportunity to apply these principles to design problems. The course will provide opportunity for students to develop technical communication, project management and teamwork skills. May not be held with BIOE 2580.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENG 1430.

**Equiv To:** BIOE 2580

**BIOE 3100 Agricultural Engineering Fundamentals for Agronomists 3 cr**

(Lab required) The course will provide fundamental technical competencies from the discipline of agricultural engineering for the study of agronomy. Students will be introduced to i) concepts from "smart" farming, ii) functions of machinery for production agriculture, iii) water management for production agriculture, and iv) safe storage and handling of grains and oilseeds.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 2500 (D).

**BIOE 3270 Instrumentation and Measurement for Biosystems 4 cr**

(Lab required) Basic instrumentation for measuring electrical and non-electrical quantities associated with biosystems engineering and industry; transducers for automatic control.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 2132 (or the former MATH 2110)] and ENG 1450.

**BIOE 3320 Engineering Properties of Biological Materials 4 cr**

(Lab required) Engineering properties of biological and interacting materials within the system. Relationship between composition, structure, and properties of plant, animal, and human tissues. Definition and measurement of mechanical, thermal, electromagnetic, chemical and biological properties and their variability. Use of these properties in engineering calculations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 2130 (or the former MATH 2110)] and [BIOE 2800 or CIVL 2800 or MECH 2222 (or the former MECH 2220)].

**BIOE 3400 Design of Structural Components in Machines 4 cr**

(Lab required) Design of structural components in machines; designing for axial tension and compression, connections for axial loadings, pinned trusses, bending, torsion, and combined loads; designing for welded connections; use of fluid power to enable movement of structural components. Students will use the computer as a design tool. May not be held with the former BIOE 4530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 2800 or CIVL 2800 or MECH 2222.

**Equiv To:** BIOE 4530

**BIOE 3530 Engineering Fundamentals 3 cr**

(Lab required) Principles of heat transfer, steam, psychometrics, fluid mechanics, material balances, electricity and refrigeration. Cannot be held for credit in the Price Faculty of Engineering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [MATH 1300 or equivalent] and [MATH 1500 or equivalent] or the former MATH 1680.

**BIOE 3590 Mechanics of Materials in Biosystems 4 cr**

(Lab required) In this course students will be exposed to both the theory and physical behaviour of materials when subjected to loads. The course will be delivered using a combination of lectures and hands-on labs.

The materials presented include a wide range of materials biosystems engineers may be involved with, including plastics, bone, wood, concrete, steel, other biological materials and composites.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 2800 or CIVL 2800, or MECH 2222.

**BIOE 3900 Biosystems Engineering Design 2 4 cr**

(Lab required) An introduction to the use of reverse engineering to deduce design features from previously-designed products or systems.

Considerations such as design for sustainability and design for disassembly will be discussed. Students will have opportunity to use reverse engineering principles i) to understand how components fit together to form functional systems, ii) to identify flaws and iii) to propose design improvements. Students will learn appropriate techniques for documenting the reverse engineering process. Theory of project management will also be taught and discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [BIOE 2900 or the former BIOE 2580] and ENG 2022 or the former ENG 2020].

**BIOE 4240 Graduation Project 3 cr**

Either an independent or a directed study including at least one of: a comprehensive literature review, an experimental research project, or an engineering design problem. The project is to be concluded by a formal report or thesis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOE 3270 or approval of department.

**BIOE 4390 Unit Operations 1 4 cr**

(Lab required) Equipment and systems used in handling, mixing, size reduction, separation and size enlargement of value-added food products.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOE 2790 or CIVL 2790 or MECH 2262. Pre- or Corequisites: BIOE 3320 and BIOE 3270.

**BIOE 4412 Design of Light-Frame Building Systems 4 cr**

(Lab required) Light-frame buildings as a structural and environmental system; structural loads in building systems; energy (heat), moisture and air contaminants in building systems; built-environment for building occupants. Lab activities provide students with an opportunity to construct small-scale structures. Students will be introduced to alternative building systems. May not be held with CIVL 4024.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOE 2110 and BIOE 3590.

**Mutually Exclusive:** CIVL 4024

**BIOE 4414 Imaging and Spectroscopy for Biosystems 4 cr**

(Lab required) The purpose of this course is to familiarize senior Biosystems Engineering students with the fundamentals of imaging and spectroscopy for biosystems. Techniques of image acquisition, storage, processing, and pattern recognition will be taught. Various spectroscopy techniques and their applicability to biological materials will be discussed. Analysis of data using statistical, artificial neural networks and chemometric methods will be covered. Offered in alternate years.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 3270.

**BIOE 4416 Topics in Biosystems Engineering 3 cr**

(Lab required) This course will cover contemporary topics in Biosystems Engineering. The specific topics and a detailed outline will be available at the time of registration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the department.

**BIOE 4420 Crop Preservation 4 cr**

(Lab required) Biological and physical deterioration during storage. Methods of preserving and storing cereals, oilseeds, and other agricultural crops.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 2110.

**BIOE 4440 Bioprocessing for Biorefining 4 cr**

(Lab required) This course will provide students with an understanding of the principles involved in the design of proper conditions for processing of biomaterials for production of high-quality biofuels and bioproducts. The content of this course is built on the principles of physics, transport phenomena, thermodynamics, reaction, kinetics, fermentation, and industrial unit operations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 2110. Pre- or co-requisite: BIOE 3320.

**BIOE 4460 Air Pollution Assessment and Management 4 cr**

(Lab required) Air pollutant sources and characteristics, their impact on the environment, their behaviour in the atmosphere. Methods of sampling and measurement and the basic technological alternatives available for separation/removal and control. Particular problems of regional interest are discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisites: BIOE 2790 or CIVL 2790 or MECH 2262 or the former MECH 2260.

**BIOE 4560 Structural Design in Wood 4 cr**

(Lab required) Design using wood as a structural material in light-frame buildings. Consideration of design constraints associated with sawn lumber as well as based composite materials. Emphasis on use of computer based design aids.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 3770 or BIOE 3590.

**BIOE 4590 Management of By-Products from Animal Production 4 cr**

(Lab required) Topics covered include solid and liquid manure, manure characteristics, manure collection, storage, land application and utilization, biological treatment, design of equipment and facilities for manure handling. Environment issues, such as odour and water pollution associated with manure management will also be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOE 2790 or CIVL 2790 or MECH 2262 or the former MECH 2260.

**BIOE 4600 Design of Water Management Systems 4 cr**

(Lab required) To introduce the basic theoretical principles in the design of irrigation and drainage systems. Topics covered include the determination of irrigation depth and interval, evapotranspiration, measurement and analysis of precipitation, design of sprinkler and drip irrigation systems, selection of pumps, surface and subsurface drainage design, water quality issues, salinity management, and the environmental impact of water management practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Co-requisite: SOIL 4060 or CIVL 3730 or consent of instructor.

**BIOE 4610 Design of Assistive Technology Devices 4 cr**

(Lab required) Application and design of technology for individuals with disabilities; emphasizing the development of the requisite knowledge, skills, and attitudes to evaluate, design, and implement client-centred assistive technology. A multi-disciplinary approach to learning and applying knowledge will be emphasized with engineering and medical rehabilitation students collaborating on a design project.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1412.

**BIOE 4620 Remediation Engineering 4 cr**

(Lab required) The theoretical basis for the engineering design of different remediation technologies to treat contaminated soil and groundwater will be introduced. Methods for site characterization, monitoring of progress in remediation, and modeling of the remediation process will be presented. Different methods such as soil washing, air sparging, bioremediation, phytoremediation, constructed wetlands, electrokinetic remediation, reactive barriers will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 2790 or CIVL 2790 or MECH 2262 or the former MECH 2260.

**BIOE 4640 Bioengineering Applications in Medicine 4 cr**

(Lab required) This course surveys bioengineering applications and medicine from a clinical engineering perspective. Topics include: clinical engineering practice; device development legislation; biomedical sensors; biosensors; biomaterials and biocompatibility; as well as the principles of and design for medical imaging equipment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 1410 and BIOL 1412 and BIOE 3320.

**BIOE 4650 Textiles in Healthcare and Medical Applications 4 cr**

This course provides students with an introduction to medical textiles and healthcare products used in current practices, as well as fundamentals for designing textile products and devices that improve the health and quality of life of human beings. The course includes both basic topics related to healthcare and medical textiles (i.e., materials and structures, nanofibers for medical uses, comfort and health problems with textiles, biocompatibility and biostability issues) and applications of textile products for healthcare and medical end uses (i.e., protective and hygiene textiles, external devices, tissue engineering and intelligent/smart textiles).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 2590. Pre- or Co-requisite: BIOE 3320.

**Equiv To:** TXSC 3500, TXSC 4500

**BIOE 4900 Biosystems Engineering Design 3 4 cr**

An opportunity for the Biosystems Engineering student to practice fundamental engineering competencies (project management, technical communication) in the preparation of a preliminary design for the client. Students will be expected to demonstrate professionalism as a part of a design team. May not be held with BIOE 3580.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 3900.

**Equiv To:** BIOE 3580

**BIOE 4950 Biosystems Engineering Design 4 4 cr**

An opportunity for the Biosystems Engineering student to validate a conceptual solution to an engineering problem through fabrication and testing of a prototype. Students will be expected to employ project management skills to ensure completion of both prototype and an engineering report for a client by the end of the semester. May not be held with BIOE 4580.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 4900.

**Equiv To:** BIOE 4580

## Biotechnology (BTEC)

**BTEC 3980 Work Term 1 0 cr**

Work assignments in business, industry or government for students registered in the Biotechnology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

**BTEC 3990 Work Term 2 0 cr**

Work assignments in business, industry or government for students registered in the Biotechnology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

**BTEC 4000 Research Project in Biotechnology 6 cr**

(Lab Required) Students can carry out independent biotechnology based research in their area of interest under the supervision of a faculty member or an approved external biotechnology professional. Results will be presented as an interim oral report and a written journal style paper. Registration restricted to Year 4 Honours Biotechnology students. Not to be held with any other Research Project courses such as MBIO 4530 or CHEM 4710.

**Mutually Exclusive:** CHEM 4710, CHEM 4711, MBIO 4530, MBIO 4531

**Attributes:** Science

**BTEC 4980 Work Term 3 0 cr**

Work assignments in business, industry or government for students registered in the Biotechnology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

**BTEC 4990 Work Term 4 0 cr**

Work assignments in business, industry or government for students registered in the Biotechnology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

## Canadian Studies (CDN)

**CDN 1000 Introduction to Canada 3 cr**

A multidisciplinary introduction to the main political, economic, social, cultural and geographic features that have shaped Canada's past and current realities. May not be held with the former CDN 1130.

**Mutually Exclusive:** CDN 1130

**Attributes:** Humanities, Recommended Intro Courses

**CDN 3730 Canadian Identity: An Interdisciplinary Approach 3 cr**

An interdisciplinary lecture/seminar (art, economics, history, literature) course which will explore Canadian identity. Themes to be studied include the Aboriginal past, French/British colonization, land/regions and ethnic diversity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of 24 credit hours of courses at the 1000-level or above.

**Attributes:** Humanities

**CDN 4410 Seminar in Canadian Studies 6 cr**

A seminar course whose content may vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Humanities

## Catholic Studies (CATH)

**CATH 1190 Introduction to Catholic Studies 3 cr**

An initiation into diversity, richness, and significance of Roman Catholicism in its many different forms and expressions, seeking to highlight the resources and techniques available for pursuing an interdisciplinary study of Catholicism as a field of intellectual inquiry.

**Attributes:** Humanities, Written English Requirement

**CATH 2000 Special Topics in Catholic Studies 3 cr**

The subject matter of this course will vary from year to year, but it will deal with a special topic of current interest in the interdisciplinary program in Catholic Studies. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190] or written consent of program coordinator.

**Mutually Exclusive:** CATH 2700

**Attributes:** Humanities

**CATH 2010 Literature and Catholic Culture 1 3 cr**

The course will focus on the portrayals of Catholic Culture in literature of the 20th Century prior to Vatican II Council. Students will also study the formal features of poetry, drama, and prose focusing on the Catholic Tradition.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190 or ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (the former ENGL 1310) and ENGL 1340] or written consent of instructor.

**Attributes:** Humanities, Written English Requirement

**CATH 2020 Literature and Catholic Culture 2 3 cr**

The course will focus on the portrayals of Catholic Culture in literature of the 20th and 21st Century following Vatican II Council. Students will also study the formal features of poetry, drama, and prose involving the Catholic Tradition.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (the former ENGL 1310) and ENGL 1340] or written consent of instructor.

**Attributes:** Humanities, Written English Requirement

**CATH 2100 Field Studies in Catholic Culture 6 cr**

Offered as part of the Summer Session, this course consists of on-campus study followed by travel to major sites and museums.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none, but CATH 1190 is recommended.

**Attributes:** Humanities

**CATH 2200 Catholicism and Human Sexuality 3 cr**

This course explores the Catholic Church's understanding of sexual expression with a focus on topics such as reciprocity and performance, fidelity, romantic love, sexual identities, and intimacy with special attention given to the works of Pope John Paul II and other contemporary Catholic thinkers. Students may not hold credit for both CATH 2200 and CATH 2000 when titled "Catholicism and Sexual Expression."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190] or written consent of instructor.

**Attributes:** Humanities

**CATH 2300 The Jesuits: Their Legacy and Influence 3 cr**

The Society of Jesus (the Jesuit order) has aroused admiration and respect as well as fear and suspicion throughout its eventful history. The Jesuits have left an indelible mark on the Catholic Church as well as the modern world itself in their roles as explorers, intellectuals, artists, scientists, and teachers. This course focuses on Jesuit contributions to science, education, the fine arts, politics, and social reform since the order's foundation in 1534. Students may not hold credit for both CATH 2300 and CATH 2000 when titled "The Jesuits: Their Legacy and Influence."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190] or written consent of instructor.

**Attributes:** Humanities

**CATH 2400 Mystics, Saints, and Sinners: The Quest for Holiness in the Catholic Church 3 cr**

This course will explore the Roman Catholic notion of sanctity as it developed over the course of history. From martyr to mystic and ascetic to activist, variations of holiness will be examined in relation to the regions, periods, and interests that shaped them. It provides both a chronological and an interdisciplinary overview of sanctity from the New Testament to the present with a special focus on the lives of the saints, relics, shrines, and canonization treatises.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190] or written consent of instructor.

**Attributes:** Humanities

**CATH 2500 Reshaping the Catholic Landscape in Canada 3 cr**

A survey of Catholic identity in Canada as it has shifted from the arrival of French missionaries in the 17th century until today. Emphasis will be placed on the roles that early Catholic immigrants from Europe played in the development of both the Church and the national character of Canada as well as how recent immigrants from South America, the Caribbean, Asia, and Africa continue to shape them.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190] or written consent of instructor.

**Attributes:** Humanities

**CATH 2600 Pilgrimage and the Localization of Catholic Devotion 3 cr**

The historical and contemporary fascination with holy places continues to permeate Catholic tradition. This course focuses on the identification and analysis of regions in which localized piety has either once existed or thrives today. It also places a strong emphasis on how the quest for sacred space remains a fundamental part of wider devotion within the Church.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190] or written consent of instructor.

**Attributes:** Humanities

**CATH 2700 Catholicism and the Paranormal 3 cr**

A critical introduction into the Catholic Church's historical and contemporary reactions to the supernatural with a focus on topics such as apparitions, levitation, ghosts and possession, mystical visions, Eucharistic miracles, bilocation, the occult, stigmata, as well as other unexplained religious phenomena. Students may not hold credit for both CATH 2700 and CATH 2000 when titled "Catholicism and the Paranormal."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190] or written consent of instructor.

**Mutually Exclusive:** CATH 2000

**Attributes:** Humanities

**CATH 3900 Catholic Social Teaching 3 cr**

An introduction to Catholic social teaching with a dual focus on critical theory and praxis. Students will engage the Church's position on issues such as human dignity, solidarity with minority and oppressed populations, the common good, subsidiarity, rights and responsibilities, as well as the preferential option for the poor.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CATH 1190 and an additional 3 credit hours of CATH courses] or written consent of instructor.

**Attributes:** Humanities

# Chemistry (CHEM)

## **CHEM 1018 Chemistry - The Central Science 3 cr**

An atomic understanding of our world and ourselves impinges on every aspect of human life and culture. In this course students will learn the principles of chemistry that provide the deepest understanding of topics such as human health, the environment, energy, consumer products, fine arts, agriculture, technology, foods, industry, the history of science and more. The course will cover the classification of matter, chemical change as well as fundamental chemistry calculations. CHEM 1018 may not be used for credit in a Chemistry honours, joint honours, or major program. Not available to students who have previously obtained credit in (grade of C or better) CHEM 1100 or CHEM 1101 or the former CHEM 1300 or the former CHEM 1301.

**Mutually Exclusive:** CHEM 1100, CHEM 1101, CHEM 1300, CHEM 1301

**Attributes:** Science, Recommended Intro Courses

## **CHEM 1100 Introductory Chemistry 1: Atomic and Molecular Structure and Energetics 3 cr**

This course provides a basic understanding of the fundamentals of chemistry. By the end of this course, students will understand the periodic table, energy in chemistry, atomic and molecular structures, and the concept of chemical reactivity. May not be held with CHEM 1101, the former CHEM 1300, or the former CHEM 1301.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of Chemistry 40S (50%), CHEM 1018, CSKL 0100 (P), or the former CHEM 0900 (P)] and [one of Applied Mathematics 40S (50%), Pre-calculus Mathematics 40S (50%), the former Mathematics 40S (300) (50%), MATH 1018, or MSKL 0100].

**Equiv To:** CHEM 1101

**Mutually Exclusive:** CHEM 1018, CHEM 1300, CHEM 1301

**Attributes:** Science, Recommended Intro Courses

## **CHEM 1110 Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties 3 cr**

This course builds upon students' foundation in chemistry to give them a better understanding of chemical reactivity and physical properties. May not be held with CHEM 1111, the former CHEM 1310, or the former CHEM 1311.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 1100, CHEM 1101, the former CHEM 1300, or the former CHEM 1301.

**Equiv To:** CHEM 1111

**Mutually Exclusive:** CHEM 1310, CHEM 1311

**Attributes:** Science, Recommended Intro Courses

## **CHEM 1120 Introduction to Chemistry Techniques 3 cr**

This course builds understanding in chemistry through active learning in the lab. By performing lab experiments, students will gain skills in making observations, safe handling of chemicals, handling laboratory equipment, quantitative analysis, data processing, and scientific communication. These skills are fundamental for student success in chemistry. In addition, students will be given a broader appreciation of chemistry in the world by introducing them to chemical sustainability, chemical responsibility and chemical applications. May not be held with CHEM 1121, CHEM 1122, CHEM 1126, the former CHEM 1310, or the former CHEM 1311.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(Chemistry 40S (70%) or CHEM 1018) and (one of Pre-Calculus Mathematics 40S (70%), Applied Mathematics 40S (70%), MATH 1018, or MSKL 0100 (B))] or [one of CHEM 1100, CHEM 1101, the former CHEM 1300, the former CHEM 1301, CSKL 0100 (P), or the former CHEM 0900 (P)].

**Equiv To:** CHEM 1121

**Mutually Exclusive:** CHEM 1122, CHEM 1126, CHEM 1310, CHEM 1311

**Attributes:** Science, Recommended Intro Courses

## **CHEM 1122 Introduction to Chemistry Techniques for Engineering 1 1.5 cr**

For Price Faculty of Engineering students only. This course builds understanding in chemistry through active learning in the lab. By performing lab experiments, students will gain skills in making observations, safe handling of chemicals, handling laboratory equipment, quantitative analysis, data processing, and scientific communication. These skills are fundamental for student success in chemistry. In addition, students will be given a broader appreciation of chemistry in the world by introducing them to chemical sustainability, chemical responsibility and chemical applications. May not be held with CHEM 1120, CHEM 1121, the former CHEM 1310, or the former CHEM 1311.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(Chemistry 40S (70%) or CHEM 1018) and (Pre-Calculus Mathematics 40S (70%), Applied Mathematics 40S (70%), MATH 1018, or MSKL 0100 (B))] or [one of CHEM 1100, CHEM 1101, the former CHEM 1300, the former CHEM 1301, CSKL 0100 (P), or the former CHEM 0900 (P)].

**Mutually Exclusive:** CHEM 1120, CHEM 1121, CHEM 1310, CHEM 1311

**Attributes:** Science

## **CHEM 1126 Introduction to Chemistry Techniques for Engineering 2 1.5 cr**

For Price Faculty of Engineering students only. This course builds understanding in chemistry through active learning in the lab. By performing lab experiments, students will gain skills in making observations, safe handling of chemicals, handling laboratory equipment, quantitative analysis, data processing, and scientific communication. These skills are fundamental for student success in chemistry. In addition, students will be given a broader appreciation of chemistry in the world by introducing them to chemical sustainability, chemical responsibility and chemical applications. May not be held with CHEM 1120, CHEM 1121, the former CHEM 1310 or the former CHEM 1311.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisite: CHEM 1122, the former CHEM 1300, or the former CHEM 1301.

**Mutually Exclusive:** CHEM 1120, CHEM 1121, CHEM 1310, CHEM 1311

**Attributes:** Science

**CHEM 1130 Introduction to Organic Chemistry 3 cr**

Structures, properties and reactions of organic molecules. May not be held with the former CHEM 1320, CHEM 2100, CHEM 2101, the former CHEM 2210, or the former CHEM 2211.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 1100, CHEM 1101, the former CHEM 1300, or the former CHEM 1301.

**Mutually Exclusive:** CHEM 1320, CHEM 2100, CHEM 2101, CHEM 2210, CHEM 2211

**Attributes:** Science, Recommended Intro Courses

**CHEM 2100 Organic Chemistry 1: Foundations of Organic Chemistry 3 cr**

An introduction to the concepts of organic reactivity and bonding in organic molecules. Preparation and properties of functionalized organic molecules. May not be held with CHEM 1130, the former CHEM 1320, CHEM 2101, the former CHEM 2210, or the former CHEM 2211.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)] or (the former CHEM 1310, or the former CHEM 1311).

**Equiv To:** CHEM 2101

**Mutually Exclusive:** CHEM 1130, CHEM 1320, CHEM 2210, CHEM 2211

**Attributes:** Science

**CHEM 2110 Organic Chemistry 2: Foundations of Organic Synthesis 3 cr**

An introduction to fundamental concepts of organic reactions and synthetic strategies. The application of functional group interconversions to organic synthesis will be discussed. May not be held with CHEM 2111, the former CHEM 2220, or the former CHEM 2221.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 2100, CHEM 2101, the former CHEM 2210, or the former CHEM 2211.

**Equiv To:** CHEM 2111

**Mutually Exclusive:** CHEM 2220, CHEM 2221

**Attributes:** Science

**CHEM 2122 Experimental Organic Chemistry 3 cr**

This course will introduce organic chemistry synthetic methods, purification techniques and product analyses. As well, infrared, <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy theory and applications as applicable to organic chemistry will be taught. Students will gain experience conveying information through different media as well as chemical literacy skills. May not be held with CHEM 2123, the former CHEM 2220, or the former CHEM 2221.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)] or (the former CHEM 1310, or the former CHEM 1311).

**Equiv To:** CHEM 2123

**Mutually Exclusive:** CHEM 2220, CHEM 2221

**Attributes:** Science

**CHEM 2240 Applied Chemistry for Engineers 3 cr**

Bonding, surface chemistry, phase rule, electrochemistry, materials and descriptive inorganic chemistry of selected elements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 1100, CHEM 1101, the former CHEM 1300, or the former CHEM 1301.

**Attributes:** Science

**CHEM 2300 Inorganic Chemistry 1: Structure and Applications 3 cr**

Overview of chemical bonding, structure and reactivity across the Periodic Table, illustrated by examples highlighting inorganic aspects of materials science and biochemistry. This course will cover an overview of periodic trends and their relationships to some properties of the elements, aspects of chemical bonding, reactivity of some inorganic molecules and materials, with examples of applications of inorganic chemistry in a variety of settings. May not be held with CHEM 2301, the former CHEM 2380, the former CHEM 2381, the former CHEM 2400, or the former CHEM 2401.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)] or (the former CHEM 1310, or the former CHEM 1311).

**Equiv To:** CHEM 2301

**Mutually Exclusive:** CHEM 2380, CHEM 2381, CHEM 2400, CHEM 2401

**Attributes:** Science

**CHEM 2510 Introduction to Analytical Chemistry 3 cr**

This course will introduce students to the theoretical principles on which quantitative analytical methods are based, and will prepare students to plan and perform experimental work and to interpret the results. May not be held with the former CHEM 2470, the former CHEM 2471, or CHEM 2511.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)] or (the former CHEM 1310, or the former CHEM 1311).

**Equiv To:** CHEM 2511

**Mutually Exclusive:** CHEM 2470, CHEM 2471

**Attributes:** Science

**CHEM 2520 Introduction to Analytical Chemistry Techniques 2 cr**

Practical laboratory designed to introduce students to the art of traditional/classical wet analytical chemistry techniques. Experiments focus on quantitative analytical chemistry determinations using gravimetric, titrimetric and spectrophotometric methods. May not be held with the former CHEM 2470, the former CHEM 2471, or CHEM 2521.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)], or (the former CHEM 1310, or the former CHEM 1311).

**Equiv To:** CHEM 2521

**Mutually Exclusive:** CHEM 2470, CHEM 2471

**Attributes:** Science

**CHEM 2560 Water Quality Analysis for Engineers 3 cr**

(Lab Required) Principles and applications of chemical and instrumental methods for the analysis of water quality. This course is restricted to students in Civil Engineering.

**Attributes:** Science

**CHEM 2600 Physical Chemistry 1 3 cr**

An exploration of the underlying principles of atomic and molecular spectroscopy and the application of such tools to probe chemical and physical properties of matter on a microscopic scale. Aspects of ultraviolet, visible, vibrational, rotational and nuclear magnetic resonance spectroscopies are explored. May not be held with the former CHEM 2260, the former CHEM 2261, the former CHEM 2280, the former CHEM 2281, or CHEM 2601.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126) or (the former CHEM 1310, or the former CHEM 1311)] and [one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, the former MATH 1530, or MATH 1690].

**Equip To:** CHEM 2601

**Mutually Exclusive:** CHEM 2260, CHEM 2261, CHEM 2280, CHEM 2281

**Attributes:** Science

**CHEM 2700 Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy 3 cr**

An introductory course dealing with the kinds of molecules encountered in biochemistry, and the concept of metabolic energy as a product of catabolism and a requirement for biosynthesis. Also offered as MBIO 2700. May not be held with the former CHEM 2360, the former CHEM 2361, CHEM 2701, CHEM 2730, the former CHEM 2770, the former CHEM 2860, the former MBIO 2360, the former MBIO 2361, MBIO 2700, MBIO 2701, MBIO 2730, or the former MBIO 2770.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126) or (the former CHEM 1310, or the former CHEM 1311)] and [BIOL 1030 or BIOL 1031].

**Equip To:** CHEM 2701, MBIO 2700, MBIO 2701

**Mutually Exclusive:** CHEM 2360, CHEM 2361, CHEM 2730, CHEM 2770, CHEM 2860, MBIO 2360, MBIO 2361, MBIO 2730, MBIO 2770

**Attributes:** Science

**CHEM 2710 Biochemistry 2: Catabolism, Synthesis, and Information Pathways 3 cr**

An introductory course dealing with the basic metabolic processes that occur in living cells, including the production and use of metabolic energy, the breakdown and synthesis of biomolecules; the synthesis of DNA, RNA and proteins; and the regulation of these processes. Also offered as MBIO 2710. May not be held with the former CHEM 2370, the former CHEM 2371, CHEM 2711, CHEM 2750, the former CHEM 2780, the former MBIO 2370, the former MBIO 2371, MBIO 2710, MBIO 2711, MBIO 2750, or the former MBIO 2780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 2700, CHEM 2701, the former CHEM 2360, the former CHEM 2361, the former CHEM 2860, MBIO 2700, MBIO 2701, the former MBIO 2360, or the former MBIO 2361] and [one of CHEM 2100, CHEM 2101, the former CHEM 2210, or the former CHEM 2211].

**Equip To:** CHEM 2711, MBIO 2710, MBIO 2711

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2750, CHEM 2780, MBIO 2370, MBIO 2371, MBIO 2750, MBIO 2780

**Attributes:** Science

**CHEM 2720 Principles and Practices of the Modern Biochemistry Laboratory 3 cr**

This course will provide an introduction to the practical and theoretical foundations of the most commonly used techniques in the modern biochemistry laboratory. May not be held with the former CHEM 2370, the former CHEM 2371, CHEM 2721, CHEM 2740, the former CHEM 2780, the former MBIO 2370, the former MBIO 2371, or the former MBIO 2780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)] or (the former CHEM 1310, or the former CHEM 1311).

**Equip To:** CHEM 2721

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2740, CHEM 2780, MBIO 2370, MBIO 2371, MBIO 2780

**Attributes:** Science

**CHEM 2730 Elements of Biochemistry 1 3 cr**

Basic concepts of biochemistry including the properties of biomolecules (amino acids and proteins, enzymes, carbohydrates, lipids, and nucleic acids) and aspects of energy production in cells. Primarily for students in Agricultural and Food Sciences and four-year Biological Sciences programs in Science. May not be used as part of an Honours, Major, or Minor program in Chemistry. May not be used as part of an Honours or Major program in Microbiology. This course is also given in Microbiology as MBIO 2730. May not be held with the former CHEM 2360, the former CHEM 2361, CHEM 2700, CHEM 2701, the former CHEM 2770, the former CHEM 2860, the former MBIO 2360, the former MBIO 2361, MBIO 2700, MBIO 2701, MBIO 2730, or the former MBIO 2770.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 1110, CHEM 1111, CHEM 1130, the former CHEM 1310, the former CHEM 1311, or the former CHEM 1320] and [six credit hours of university level BIOL courses or (HEAL 1500 and HEAL 1502)].

**Equip To:** MBIO 2730

**Mutually Exclusive:** CHEM 2360, CHEM 2361, CHEM 2700, CHEM 2701, CHEM 2770, MBIO 2360, MBIO 2361, MBIO 2700, MBIO 2701, MBIO 2770

**Attributes:** Science

**CHEM 2740 Introduction to the Biochemistry Laboratory 3 cr**

This course is intended primarily for students in Agricultural and Food Sciences and four-year Biological Sciences programs who would benefit from hands-on experience of the most commonly used techniques in the modern biochemistry laboratory. The course will provide practical training in the use of micropipettors and spectrophotometers for the quantitation and analysis of proteins and enzymes, carbohydrates and DNA. Students will learn the application of various chromatographic and centrifugation-based techniques for biomolecule purification and analysis with an emphasis on topics of specific relevance to agriculture and food sciences. May not be used as part of an Honours, Major, or Minor program in Chemistry or in Microbiology. May not be held with the former CHEM 2370, the former CHEM 2371, CHEM 2720, CHEM 2721, the former CHEM 2780, the former MBIO 2370, the former MBIO 2371, or the former MBIO 2780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of CHEM 1110, CHEM 1111, CHEM 1130, the former CHEM 1310, the former CHEM 1311, or the former CHEM 1320.

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2720, CHEM 2721, CHEM 2780, MBIO 2370, MBIO 2371, MBIO 2780

**Attributes:** Science



**CHEM 2750 Elements of Biochemistry 2 3 cr**

The continuation of CHEM 2730/MBIO 2730, dealing with nitrogen and lipid metabolism, representative biosynthetic pathways, and synthesis and importance of DNA, RNA and proteins. Primarily for students in Agricultural and Food Sciences and four-year Biological Sciences programs in Science. May not be used as part of an Honours, Major, or Minor program in Chemistry. May not be used as part of an Honours or Major program in Microbiology. This course is also given in Microbiology as MBIO 2750. May not be held with the former CHEM 2370, the former CHEM 2371, CHEM 2710, CHEM 2711, the former CHEM 2780, the former MBIO 2370, the former MBIO 2371, MBIO 2710, MBIO 2711, MBIO 2750, or the former MBIO 2780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of CHEM 2730, CHEM 2700, CHEM 2701, the former CHEM 2770, the former CHEM 2360, the former CHEM 2361, the former CHEM 2860, MBIO 2730, MBIO 2700, MBIO 2701, the former MBIO 2770, the former MBIO 2360, or the former MBIO 2361.

**Equip To:** MBIO 2750

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2710, CHEM 2711, CHEM 2780, CHEM 2860, MBIO 2370, MBIO 2371, MBIO 2710, MBIO 2711, MBIO 2780

**Attributes:** Science

**CHEM 3100 Organic Chemistry 3: Advanced Organic Synthesis 3 cr**

The course consists of a detailed discussion of the reactions that facilitate functional group interconversions in organic synthesis. The opportunity to explore specific topics in considerable detail will develop a solid foundation for strategies in organic synthesis. The concept of retrosynthesis will be used to further develop these strategies. May not be held with the former CHEM 3390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 2110, CHEM 2111, the former CHEM 2220, or the former CHEM 2221.

**Mutually Exclusive:** CHEM 3390

**Attributes:** Science

**CHEM 3120 Advanced Organic Chemistry Laboratory Techniques 2 cr**

This course will develop advanced techniques of organic chemistry synthetic methods as well as introduce advanced physical organic methods in the studying of thermodynamics and/or kinetics of organic reactions. The application of <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy to the analysis of reaction mixtures and purified products will be taught. Students will further refine their skills in the analysis and accurate reporting of chemical characterization data. May not be held with the former CHEM 3580 or the former CHEM 4690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 2110 or CHEM 2111) and (CHEM 2122 or CHEM 2123)] or (the former CHEM 2220, or the former CHEM 2221).

**Mutually Exclusive:** CHEM 3580, CHEM 4690

**Attributes:** Science

**CHEM 3300 Inorganic Chemistry 2: Reactivity and Properties 3 cr**

Advanced chemistry of the elements with emphasis on chemical reactivity, electronic structure and physical properties of inorganic compounds. May not be held with the former CHEM 3380 or the former CHEM 3400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 2300, CHEM 2301, the former CHEM 2380, the former CHEM 2381, the former CHEM 2400, or the former CHEM 2401.

**Mutually Exclusive:** CHEM 3380, CHEM 3400

**Attributes:** Science

**CHEM 3320 Inorganic Chemistry Laboratory 2 cr**

Laboratory with focus on synthesis, reactivity and characterization of inorganic compounds. This course will explore a range of inorganic compounds using various synthetic methods, characterization tools and property measurements. Data recording, data analysis and report writing are integral parts of this course. May not be held with CHEM 3331, the former CHEM 3380, or the former CHEM 3400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 2300, CHEM 2301, the former CHEM 2380, the former CHEM 2381, the former CHEM 2400, or the former CHEM 2401.

**Mutually Exclusive:** CHEM 3331, CHEM 3380, CHEM 3400

**Attributes:** Science

**CHEM 3500 Instrumental Analysis 3 cr**

A course dealing with the theory of standard instruments used for chemical and biochemical analyses. An introduction to the interpretation of data obtained from such analyses. May not be held with the former CHEM 3590 or ENVR 3550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [(CHEM 2510 or CHEM 2511) and (CHEM 2520 or CHEM 2521)] or (the former CHEM 2470, or the former CHEM 2471).

**Mutually Exclusive:** CHEM 3590, ENVR 3550

**Attributes:** Science

**CHEM 3520 Instrumental Analysis Laboratory 2 cr**

A course dealing with the practical use of standard instruments used for chemical and biochemical analyses. Students will learn a variety of state-of-the-art analytical techniques that will benefit their training as chemists, and learn the principles of experimental method development. May not be held with CHEM 2523, the former CHEM 3590, or ENVR 3550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [(CHEM 2510 or CHEM 2511) and (CHEM 2520 or CHEM 2521)] or (the former CHEM 2470, or the former CHEM 2471). Pre- or corequisite: CHEM 3500.

**Mutually Exclusive:** CHEM 2523, CHEM 3590, ENVR 3550

**Attributes:** Science

**CHEM 3600 Physical Chemistry 2 3 cr**

This course provides an introduction to thermodynamics and related topics in chemistry. The thermodynamics governing processes will be explored. In particular, the behaviour of real gases, ideal and non-ideal solutions and reactions involving these materials will be explored from a detailed thermodynamic perspective. May not be held with the former CHEM 2290 or the former CHEM 2291.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 2600, CHEM 2601, the former CHEM 2260, the former CHEM 2261, the former CHEM 2280, or the former CHEM 2281] and [one of MATH 1700, MATH 1701, MATH 1710, MATH 1690, or MATH 1232].

**Mutually Exclusive:** CHEM 2290, CHEM 2291

**Attributes:** Science

**CHEM 3620 Physical Chemistry Laboratory 2 cr**

This laboratory course introduces students to a wide range of experimental methods to explore the physical properties of matter and the important thermodynamic and kinetic aspects of reactions. May not be held with the former CHEM 2290 or the former CHEM 2291.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 2600, CHEM 2601, the former CHEM 2260, the former CHEM 2261, the former CHEM 2280, or the former CHEM 2281] and [one of MATH 1700, MATH 1701, MATH 1710, MATH 1690, or MATH 1232].

**Mutually Exclusive:** CHEM 2290, CHEM 2291, CHEM 3331

**Attributes:** Science

**CHEM 3700 Biophysical Chemistry 3 cr**

The application of physical chemistry to biological problems, with an emphasis on quantitative interpretation. Topics include enzyme kinetics, bioenergetics, transport processes and spectroscopy. May not be held with the former CHEM 3570, the former CHEM 3571, or CHEM 3701.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 2700, CHEM 2701, the former CHEM 2360, the former CHEM 2361, the former CHEM 2860, MBIO 2700, MBIO 2701, the former MBIO 2360, or the former MBIO 2361] and [one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, or MATH 1520].

**Equiv To:** CHEM 3701

**Mutually Exclusive:** CHEM 3570, CHEM 3571

**Attributes:** Science

**CHEM 3760 Advanced Methods for the Biochemistry Laboratory 4 cr**

A laboratory-focused course introducing students to advanced methods in the purification, structural and functional analysis of important biomolecules. Registration is restricted to students in a B.Sc. Honours or Major program in Biochemistry. Space permitting, students in B.Sc. Honours or Major programs in Chemistry or Microbiology may register with permission from the course instructor. May not be held with CHEM 3761 or the former CHEM 4700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(one of CHEM 2710, CHEM 2711, MBIO 2710, or MBIO 2711) and (CHEM 2720 or CHEM 2721)] or (one of the former CHEM 2370, the former CHEM 2371, the former MBIO 2370, or the former MBIO 2371).

**Equiv To:** CHEM 3761

**Mutually Exclusive:** CHEM 4700

**Attributes:** Science

**CHEM 3820 Integrated Chemistry Laboratory 1 2 cr**

This course will serve as an introduction to laboratory projects that are designed to be conducted in an independent manner by individual students. This course will provide an opportunity for students to get laboratory experience that is beyond what is typically offered in a discipline-specific undergraduate laboratory course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [one of CHEM 2122, CHEM 2123, the former CHEM 2220, or the former CHEM 2221] and [one of CHEM 2520, CHEM 2521, the former CHEM 2470, or the former CHEM 2471] and nine additional credit hours of CHEM courses at the 2000 level or above.

**Attributes:** Science

**CHEM 3840 Integrated Chemistry Laboratory 2 3 cr**

This course will serve as an advanced laboratory project course that is designed for independent study by individual students. This course will provide an opportunity for students to get laboratory experience that is more reflective of a research environment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 3820.

**Attributes:** Science

**CHEM 3980 Work Term 1 0 cr**

Work assignments in business, industry or government for students registered in the Chemistry Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

**CHEM 3990 Work Term 2 0 cr**

Work assignments in business, industry or government for students registered in the Chemistry Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

**CHEM 4100 Materials Chemistry 3 cr**

This course emphasizes the synthesis, structure, properties and applications of a wide variety of materials, providing insight into the chemistry behind many common and high-tech materials and devices. Specific examples include solar cells, fibre optics, batteries, polymer composites, magnetic and multiferroic materials. May not be held with CHEM 4570 when titled "Materials Chemistry".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 3300, the former CHEM 3400, or the former CHEM 3380.

**Attributes:** Science

**CHEM 4110 Introduction to Computational Chemistry 3 cr**

This course provides an introduction to modern Computational Chemistry and its application to chemical problems, with a strong focus on practical applications. May not be held with the former CHEM 3260 or the former CHEM 4660.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 2600, CHEM 2601, the former CHEM 2260, the former CHEM 2261, the former CHEM 2280, or the former CHEM 2281] and nine additional credit hours of CHEM courses at the 2000 level or above.

**Mutually Exclusive:** CHEM 3260, CHEM 4660

**Attributes:** Science

**CHEM 4126 Natural Products Chemistry and Biosynthesis 3 cr**

An advanced course describing the biosynthesis of natural products from an organic chemistry structural perspective. Natural products will be classified according to biogenic origin of precursor molecules. The latest trends in the field will also be discussed. May not be held with CHEM 4580 when titled Naturally Produced Chemistry and Biosynthesis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 2110, CHEM 2111, the former CHEM 2220, or the former CHEM 2221.

**Attributes:** Science

**CHEM 4130 Elementary Quantum Chemistry and Molecular Bonding 3 cr**

Elementary quantum chemistry and its applications to structure and bonding in molecules and solids. May not be held with the former CHEM 3360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 2600, CHEM 2601, the former CHEM 2260, the former CHEM 2261, the former CHEM 2280, or the former CHEM 2281.

**Mutually Exclusive:** CHEM 3360

**Attributes:** Science

**CHEM 4150 Symmetry, Spectroscopy, and Structure 3 cr**

Applications of symmetry in chemistry; molecular spectroscopy; structure of solids. May not be held with the former CHEM 3370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 2600, CHEM 2601, the former CHEM 2260, the former CHEM 2261, the former CHEM 2280, or the former CHEM 2281.

**Mutually Exclusive:** CHEM 3370

**Attributes:** Science

**CHEM 4170 Introduction to Polymer Chemistry 3 cr**

This course will provide a general introduction to important aspects of polymer chemistry. Specifically, students will be introduced to concepts relevant to the synthesis, characterization of physical chemistry and properties of polymers and polymer materials. Additionally, topics such as specialty polymers and advanced applications from contemporary literature will be explored. May not be held with the former CHEM 3490.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: CHEM 3600, the former CHEM 2290, or the former CHEM 2291.

**Mutually Exclusive:** CHEM 3490

**Attributes:** Science

**CHEM 4360 Signalling and Regulation of Gene Expression 3 cr**

The biochemistry of cell response to external stimuli, with emphasis on animals. Cell surface receptors and ligands; signalling to the nucleus; phosphorylation and proteolysis; transcription; gradients in cell patterning. May not be held with CHEM 4361.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 2710, CHEM 2711, the former CHEM 2370, the former CHEM 2371, MBIO 2710, MBIO 2711, the former MBIO 2370, or the former MBIO 2371.

**Equiv To:** CHEM 4361

**Attributes:** Science

**CHEM 4370 Glycobiology and Protein Activation 3 cr**

The role of carbohydrate containing biomolecules in biochemistry and their importance for understanding some genetic diseases. The importance of limited proteolysis in activation of biomolecules. May not be held with CHEM 4371.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 2710, CHEM 2711, the former CHEM 2370, the former CHEM 2371, MBIO 2710, MBIO 2711, the former MBIO 2370, or the former MBIO 2371.

**Equiv To:** CHEM 4371

**Attributes:** Science

**CHEM 4570 Topics in Inorganic Chemistry 3 cr**

A variety of topics from recent literature. This is an advanced 4000 level course. Registration requires departmental permission. This course may not be offered every year - check with department for availability.

**Attributes:** Science

**CHEM 4580 Topics in Organic Chemistry 3 cr**

Selected topics dealing with the structure and reactivity of organic compounds. This is an advanced 4000 level course. Registration requires departmental permission. This course may not be offered every year - check with department for availability.

**Attributes:** Science

**CHEM 4590 Bioanalytical Methods 3 cr**

(Lab required) This course introduces different methods used currently for the analysis of biological materials. Qualitative and quantitative aspects are explored. Instrumentation is described and practical methods are designed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 3500, the former CHEM 3590, or ENVR 3550.

**Attributes:** Science

**CHEM 4610 Advanced Chemical Techniques 6 cr**

A workshop course consisting of lectures, problem solving, and lab based advanced instrumental techniques. The course is designed to train potential research students in techniques like NMR, mass spectroscopy, and chromatography. This course is required of all final year Honours students in Chemistry. May not be held with the former CHEM 4600.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [CHEM 3300, the former CHEM 3400, or the former CHEM 3380] and [CHEM 3500 or the former CHEM 3590] and [CHEM 3600, PHYS 3670, the former CHEM 2290, or the former CHEM 2291].

**Mutually Exclusive:** CHEM 4600

**Attributes:** Science

**CHEM 4620 Biochemistry of Nucleic Acids 3 cr**

The structure of nucleic acids; synthesis and sequence determination; interaction with drugs and protein. May not be held with CHEM 4621.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 2710, CHEM 2711, the former CHEM 2370, the former CHEM 2371, MBIO 2710, MBIO 2711, the former MBIO 2370, the former MBIO 2371.

**Equiv To:** CHEM 4621

**Attributes:** Science

**CHEM 4630 Biochemistry of Proteins 3 cr**

The structure and function of proteins, their physical and chemical properties and methods for studying them. May not be held with CHEM 4631.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 2710, CHEM 2711, the former CHEM 2370, the former CHEM 2371, MBIO 2710, MBIO 2711, the former MBIO 2370, or the former MBIO 2371.

**Equiv To:** CHEM 4631

**Attributes:** Science

**CHEM 4670 Drug Design and Drug Discovery 3 cr**

An understanding of the design, synthesis and interactions of drug molecules. Emphasis will be on novel drug-like molecules in the early stages of drug discovery with special focus on brain diseases and infectious diseases.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 2110, CHEM 2111, the former CHEM 2220, or the former CHEM 2221] and [one of CHEM 2700, CHEM 2701, the former CHEM 2360, the former CHEM 2361, MBIO 2700, MBIO 2701, the former MBIO 2360, the former MBIO 2361, or the former CHEM 2860].

**Attributes:** Science

**CHEM 4680 Organometallic Chemistry 3 cr**

Chemistry of organometallic compounds of the transition metals and representative elements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of CHEM 3100, CHEM 3300, the former CHEM 3400, the former CHEM 3380, the former CHEM 3390.

**Attributes:** Science

**CHEM 4710 Research Project in Chemistry or Biochemistry 6 cr**

(Lab required) A research project in any aspect of chemistry or biochemistry, chosen in consultation with the course administrator and an appropriate supervising faculty member. Written reports and oral presentation at the end of the project will be required. The course is normally available only to final year students in chemistry programs. May not be held with CHEM 4711 or MBIO 4530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the course administrator.

**Equip To:** CHEM 4711

**Mutually Exclusive:** BTEC 4000, MBIO 4530, MBIO 4531

**Attributes:** Science

**CHEM 4800 Topics in Physical/Theoretical Chemistry 3 cr**

Selected topics related to physical chemistry properties of matter, their measurement, and computational methods for studying them. This is an advanced 4000 level course, registration only by Departmental permission. This course may not be offered every year - check with department for availability.

**Attributes:** Science

**CHEM 4802 Topics in Analytical Chemistry 3 cr**

Selected topics on the most recent and sensitive techniques described in the literature in the Analytical, Bioanalytical and Environmental areas. A selection of topics among separation, surface, ionization, spectroscopy, voltammetry and spectrometry techniques will be covered. This is an advanced 4000 level course, registration only by Department permission. This course may not be offered every year - check with department for availability.

**Attributes:** Science

**CHEM 4804 Topics in Biochemistry 3 cr**

Selected advanced topics relevant to the study of biomolecules. This is an advanced 4000 level course, registration only by Departmental permission. This course may not be offered every year - check with department for availability.

**Attributes:** Science

**CHEM 4980 Work Term 3 0 cr**

Work assignments in business, industry or government for students registered in the Chemistry Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

**CHEM 4990 Work Term 4 0 cr**

Work assignments in business, industry or government for students registered in the Chemistry Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

## Civil Engineering (CIVL)

**CIVL 2770 Civil Engineering Materials 5 cr**

(Lab required) Principles of testing; testing standards; instrumentation; data acquisition systems; mechanical properties of steel, iron, cement, concrete, asphalt, wood and composites; classification and particle size analysis of soils and aggregates.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENG 1440. Co-requisite: CIVL 2800.

**CIVL 2780 Civil Engineering Systems 4 cr**

(Lab required) Introduction to applied systems analysis approach. Use of applied systems analysis in Civil Engineering. Optimization techniques: linear programming; dynamic programming; other techniques. Evaluation: decision analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 1710 or MATH 1700).

**CIVL 2790 Fluid Mechanics 4 cr**

(Lab required) Definition of fluid; fluid properties; variation of pressure in a fluid; hydrostatic forces; buoyancy; kinematics of flow; control volumes; continuity; Bernoulli's equation; momentum equation; energy equation; flow in closed conduits; open channel flow.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENG 1440, MATH 1710 or MATH 1700.

**Mutually Exclusive:** BIOE 2790

**CIVL 2800 Solid Mechanics 1 4 cr**

(Lab required) Analysis of deformable bodies; stress and strain in three dimensions; equilibrium equations and strain-displacement relations; constitutive relations and mechanical behaviour of materials; radially symmetric and plane problems in elasticity; relevant experimental demonstrations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENG 1440, MATH 1710 or MATH 1700.

**Mutually Exclusive:** BIOE 2800

**CIVL 2830 Graphics for Civil Engineers 2 cr**

(Lab required) Orthographic Drawing: Object Orientation and Views, Space Dimensions, Surfaces, Lines, and Hidden Features. Computer-based Drawings. Applications: Steel and Reinforced Concrete Structures, Digital Terrain Models. Ethical, Legal and Professional Issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Co-requisite: CIVL 2840.

**Mutually Exclusive:** ENG 1400, MECH 2112

**CIVL 2840 Civil Engineering Geomatics 3 cr**

(Lab required) Geomatics in civil engineering, map-making, map-reading, computerized maps; leveling; distance measurement angles, directions, traverses; coordinate geometry; electronic survey instruments; global positioning system; geographic information systems; digital photogrammetric methods and data; aspects of route surveying. Not to be held with CIVL 2820.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or Co-requisite: MATH 1210, Co-requisite: CIVL 2830.

**Mutually Exclusive:** CIVL 2820

**CIVL 3590 Numerical Methods in Engineering Analysis 4 cr**

(Lab required) Variety of numerical techniques applicable to solutions of problems in civil engineering. Students may not hold credit for CIVL 3590 and MATH 2120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 1010 or COMP 1012. Pre or Co-requisite: MATH 2132 or prerequisite MATH 2100.

**Equip To:** MATH 2120, MECH 2150

**CIVL 3690 Environmental Engineering Analysis 4 cr**

(Lab required) Introduction to environmental engineering analysis concepts, basic water and wastewater quality testing. Water pollution and water quality in rivers and lakes. Design principles used for design of unit operations and processes applied in water and/or wastewater treatment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 and CHEM 1126) or CHEM 1311 or the former CHEM 1310], [ENG 2030 or ENG 2040 (or the former ENG 2010)], [STAT 2220 or (STAT 1000 and STAT 2000)].

**CIVL 3700 Environmental Engineering Design 4 cr**

(Lab required) Design principles are developed for water, solid/soil and air pollution control. Application of the principles in design projects which may include surface and groundwater remediation, solid waste management, landfilling, soil remediation and site assessment; municipal and industrial wastewater treatment; odour and air pollution abatement facilities.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3690.

**CIVL 3710 Finite Element Analysis 4 cr**

(Lab required) One-dimensional analysis of fluid flow, seepage and heat transfer; truss, beam and frame elements; two-dimensional problems; isoparametric elements and Gauss quadrature; time-dependent problems, diffusion, consolidation, and time integration methods; introduction to commercial packages; solution of problems in civil engineering (seepage, dams, pavements).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [CIVL 2790, CIVL 2800], [CIVL 3590 or MATH 2120].

**CIVL 3730 Geotechnical Materials and Analysis 4 cr**

(Lab required) Soil and rock properties: laboratory and field techniques; in situ states of stress and consolidations; constitutive models; stress beneath loaded areas and around tunnels; analysis of simple retaining structures and slopes; stability and settlement of shallow and deep foundations in soil and rock.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (GEOL 1340 or the former GEOL 2250), CIVL 2770, CIVL 2800.

**CIVL 3740 Hydraulics 4 cr**

(Lab required) Hydraulics of uniform and gradually varied flow; backwater computation and classification of surface water profiles; hydraulic jumps, spillways, and stilling basins; flow over weirs; hydraulic models; theory of turbo-machinery.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 2790.

**CIVL 3750 Hydrology 4 cr**

(lab required) Basic hydrological processes; precipitation; evapotranspiration; infiltration and runoff; analytical methods; hydrograph theory and application; application to reservoir design; project floods and flow forecasting; statistical analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or corequisite: STAT 2220 or (STAT 1000 and STAT 2000).

**CIVL 3760 Structural Analysis 4 cr**

(Lab required) Different structural forms and load distribution, analysis of cables; statically determinate curved, beams and frames; influence lines; energy methods and deflections of structures; flexibility and stiffness methods; computer-aided structural analysis; introduction to structural dynamics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 2800.

**CIVL 3770 Design of Steel Structures 4 cr**

(Lab required) Introduction to design of steel structures; loading calculations based on building codes; structural configurations; design of beams, columns, beam-columns and connections based on limit state design.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 2770, CIVL 3760.

**CIVL 3790 Transportation Engineering 1 4 cr**

(lab required) Introduction to transportation. Overview of Canada and U.S. transport systems. Fundamentals of transport systems analysis. Introduction to sequential demand modeling. Analysis and evaluation of uninterrupted flow on highways. Basics of geometric design of highways. Basics of design of at-grade intersections. Introduction to computer applications in transportation engineering. Basics of pavement engineering and design.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 2840, CIVL 2770, CIVL 2780, (STAT 2220 or (STAT 1000 and STAT 2000)).

**CIVL 4000 Uncertainty Analysis in Civil Engineering Systems 4 cr**

(Lab required) Fundamentals of uncertainty, risk, reliability and decision making in Civil Engineering applications. Mathematical basis for analyzing the effects of uncertainty on Civil Engineering design. Data driven modelling and analysis of multi-variable Civil Engineering systems. Computer-based numerical and simulation methods to evaluate uncertainty in Civil Engineering applications. Risk analysis using Bayesian Decision Theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 3590, MATH 2130, and STAT 2220.

**CIVL 4020 Masonry Design and Construction 4 cr**

(Lab required) Introduction to the building codes that govern masonry design. Advanced design procedures for masonry members and structures. Single-story and multi-story building design.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3760.

**CIVL 4022 Properties and Design of Concrete Mixtures 4 cr**

(Lab required) Constituent materials (cement, admixtures, etc.) of concrete; performance-based design and control of concrete mixtures; fresh, hardened and durability properties of concrete.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 2770.

**CIVL 4024 Sustainable Building Design: Principles of Best Practice 4 cr**

(Lab required) Best practices in sustainable design; current standards that govern building envelope components, cladding systems, membranes, interface details and indoor air quality. Industry challenges; presents fundamental principles of building science and demonstrates their application to the design, repair and maintenance of buildings; building systems; how environments affect material performance. May not be held with BIOE 4412 or BIOE 4700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3760, Pre or Corequisite: CIVL 3770.

**Mutually Exclusive:** BIOE 4412, BIOE 4700

**CIVL 4030 Advanced Structural Design 4 cr**

(Lab required) Special topics in structural engineering including analysis and design of prestressed concrete structures, fibre-reinforced polymer (FRP)- reinforced concrete structures, and wood structures.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisite: CIVL 3770.

**CIVL 4032 Bridge Engineering 4 cr**

(Lab required) Fundamentals of highway bridge engineering, base knowledge of bridge construction technology and tools for structural analysis and evaluation for most common bridge types built in North America according to current standards.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3760.

**CIVL 4040 Structural Dynamics 4 cr**

(Lab required) Dynamic loads in civil engineering; overview of structural dynamics; single-degree-of-freedom systems; free-vibration, harmonic, periodic and impulsive loads; multi-degree-of-freedom systems; distributed systems; beam vibrations; steady-state vibrations of foundations; introduction to earthquake engineering; elastic waves in soils, response and design spectrums; wind vibrations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3760.

**CIVL 4050 Engineering Economics 3 cr**

Introduction to engineering economics. Time value of money and discounted cash flow calculations. Comparing alternatives. Replacement analysis and life-cycle costing. Public sector engineering economy studies. Private sector engineering economy studies. Before and after-tax analysis. Applications in cost-estimating. Applications in asset management systems. Basic accounting. Accommodating capital limitations. Dealing with inflation. Dealing with risk and uncertainty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 2220 or (STAT 1000 and STAT 2000).

**Equip To:** ENG 3000

**CIVL 4100 Engineering Management and the Environment 4 cr**

(Lab required) Teams of students apply environmental management techniques, such as: impact assessment, site assessment, and auditing to selected engineering construction projects and operations; several oral and written reports are required. Co- or

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

prerequisite: CIVL 3700.

**CIVL 4120 Water Treatment Plant Design 4 cr**

(Lab required) Design of unit processes used in potable water treatment plants: solid/liquid separation, oxidation, coagulation, filtration, adsorption and disinfection. Determination of design parameters through laboratory studies. Water treatment plants design standards and guidelines.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3690.

**CIVL 4130 Solid Waste Management 4 cr**

(Lab required) Engineering principles and the practice of integrated management of solid wastes, including characteristics, sorting, utilization and final disposal in landfill. Principles of leachate and hazardous waste management and disposal.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or Co-requisite: CIVL 3700.

**CIVL 4180 Environmental Systems 4 cr**

(Lab required) Development of a river water quality model; waste allocation modelling; modelling of the sites selection process; analysis of environmental impact using technical and non-technical (i.e. sociological, ethical, aesthetic) parameters.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 2780, CIVL 3690, CIVL 3750.

**CIVL 4200 Groundwater Contamination 4 cr**

(Lab required) Introduction to the principles of groundwater chemistry; chemical evolution of natural groundwater flow systems; sources of contamination; mass transport processes; hydrochemical behaviour of contaminants; nuclear waste disposal; non-aqueous phase organics; aquifer remediation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 2790 and (GEOL 1340 or GEOL 2250). Pre or Co-requisite: CIVL 3690.

**CIVL 4220 Geotechnical Design 4 cr**

(Lab required) Site characterization; design and construction of surface footings, deep foundations, tunnels, earth and rock support systems; design and remediation of slopes; frozen soils and foundation design; geosynthetics and geofabrics in geotechnical construction; reinforced earth; geoenvironmental issues; tailing dams, clean-up, and remediation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3730.

**CIVL 4230 Geotechnical Engineering 4 cr**

(Lab required) Case-history approach to geotechnical engineering practice from civil and mining engineering; relationship between predicted and observed behaviour; surface and shallow footings; propped walls and bulkheads; rock and soft ground tunneling; deep foundations; rock and soil slopes; culverts; geoenvironmental problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3730.

**CIVL 4232 Geotechnical Earthquake Engineering 4 cr**

(Lab required) Introduction to soil dynamics and geotechnical earthquake engineering. Behavior of soil subjected to various types of dynamic or cyclic loadings; liquefaction and lateral spreading of soil; design of shallow and deep foundations. retaining structures, slopes and pavements subject to seismic loading; design code provisions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3730.

**CIVL 4250 Groundwater Hydrology 4 cr**

(Lab required) Introduction to the theory of groundwater flow, flow nets, regional groundwater flow, well hydraulics, role of groundwater in geologic and engineering processes, multiphase flow.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 2790, GEOL 1340 ( or the former GEOL 2250), MATH 2130 (or MATH 2110), MATH 2132 (or MATH 2100).

**Mutually Exclusive:** GEOL 3450

**CIVL 4300 Design of Urban Water Systems 4 cr**

(Lab required) Water supply and the design of water distribution systems. Urban hydrology and design of wastewater and stormwater collection systems. Manitoba specific applications will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 2790. Pre-or Corequisites: CIVL 3750.

**CIVL 4330 Graduation Project 4 cr**

The student will undertake an original study involving engineering design, procedure, or experimental investigation that emphasizes the student's initiative and judgement. The student must demonstrate an ability to plan, conduct and formally report on the study by written thesis and oral presentation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Completion of 120 credit hours, ENG 2010.

**CIVL 4332 Civil Engineering Thesis Project 4 cr**

The student will undertake an original study involving engineering design, procedure, or experimental investigation that emphasizes the student's initiative and judgement. The student must demonstrate an ability to plan, conduct and formally report on the study by written thesis and oral presentation. May not be held with CIVL 4330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Completion of 120 credit hours, and [ENG 2030 or ENG 2040 (or the former ENG 2010)].

**Equiv To:** CIVL 4330

**CIVL 4350 Hazardous Waste Treatment 4 cr**

(Lab required) Sources and classification of hazardous and industrial wastes. Overview of the waste management problem. Theory and applications of various physical, chemical, and thermal, waste treatment processes. Waste elimination options and strategies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3690.

**CIVL 4360 Water Resources Planning and Management 4 cr**

(Lab required) Introduction to the theory and application of water resources planning and management as a constrained optimization problem with multiple conflicting objectives. Water laws including international, inter-provincial and local regulations will be discussed. The process for planning a water resource project, including identifying the problems and opportunities, resource and demand forecasting, plan formulation and evaluation, and optimization will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 2780, CIVL 3590. Pre-or co-requisite: CIVL 3750.

**CIVL 4380 Infrastructure Engineering and Construction Management 4 cr**

(Lab required) Infrastructure engineering; drainage systems, maintenance engineering and management. Construction and project management; workplace health and safety, construction site field trips, construction equipment, temporary facilities, project management. Elements of law for civil engineers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENG 3000 or CIVL 4050.

**CIVL 4390 Reinforced Concrete Structures 4 cr**

(Lab required) Limit state design of reinforced concrete; analysis and design of beams and one-way slabs subjected to bending and shear; bond, cracking and deflection considerations; column design; isolated footings.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 2770, CIVL 3760.

**CIVL 4400 Transportation Engineering 2 4 cr**

(Lab required) Fundamentals of traffic control for highways. Capacity and level of service analysis on urban streets. Urban supplement to geometric design guide for Canadian roads. Modelling vehicle performance.

Elements of railway engineering. Design for trucks. Transportation systems management. Application of intelligent transportation systems. Basic pavement design methods. Introduction to pavement management systems. Highway accidents and design for safety. Legislative and policy framework for transportation engineering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3790.

**CIVL 4410 Transportation Systems 4 cr**

(Lab required) Contemporary approaches to transportation planning. Data for transportation planning. Advanced demand analysis and modelling. Illustrative transport planning studies. Planning and design for public passenger transportation. Planning and design for barrier-free transportation and transport of disabled persons. Goods movement and trucking studies. Planning and design for motor carrier operations. Planning and design for grain handling and transportation. Transport planning in developing countries. Evaluating transport plans and projects. Transport and the environment. Transport and energy. Vehicle operating costs and engineering unit cost models.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3790.

**CIVL 4420 Highway Pavement Design 4 cr**

(Lab required) Soil classification and properties; soil-moisture-density-strength relationships; earthwork operations and specifications; soil stabilization; granular bases; surface drainage; structural design of flexible and rigid pavements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisites: CIVL 3790.

**CIVL 4460 Technology, Society, and the Future 3 cr**

Impact of technology and technological change on society - past, present, future; specific technologies, e.g. construction, machine power, computers, communications, medical, military; the process of technological change; invisible effects of technology; technology and resource use; sustainable development, limits to growth and the role of technology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of the courses from the list of Written English for Engineering Students, or the former ENGL 1310, or the former ENGL 1320.

**CIVL 4470 Watershed Processes 4 cr**

(Lab required) Rainfall-runoff processes, flood routing; characteristics and mechanics of flow in (natural) channels; computer modelling of watershed hydrology and hydraulics; influence of man-made structures; river morphology, sediment transport prediction, design of a stable channel; river ice processes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3750. Pre or co-requisite: CIVL 3740.

**CIVL 4500 Contemporary Topics in Civil Engineering 4 cr**

This course will cover contemporary topics in Civil Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the department head.

**CIVL 4590 Design Project 6 cr**

An interdisciplinary project-based course involving engineering design, teamwork and delivered in studio format. Students are expected to work in pre-assigned teams under the guidance of professional engineers on a pre-determined project. Lecture material will cover project management, construction, environmental and economic issues. Each team will be required to give an oral presentation of their design project.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENG 2030 or ENG 2040 (or the former ENG 2010)], CIVL 2840, CIVL 3690, CIVL 3730, CIVL 3740, CIVL 3750, CIVL 3770, and CIVL 3790.

## Classical Studies (CLAS)

### CLAS 1270 Introduction to Ancient Greek Culture 3 cr

Ancient archaeological and literary evidence (in English translation) is the basis for a survey of the major social, political, religious, intellectual, artistic and literary institutions and achievements of the Greeks from the Bronze Age to the early Roman Imperial Period. The Greeks are studied in the context of the ancient Mediterranean world but also with reference to their continuing contributions to world civilization.

**Attributes:** Humanities, Recommended Intro Courses

### CLAS 1280 Introduction to Ancient Roman Culture 3 cr

Ancient archaeological and literary evidence (in English translation) is the basis for a survey of the major social, political, religious, intellectual, artistic and literary institutions and achievements of the Romans, from the period of the monarchy to the onset of the Middle Ages. The Romans are studied in the context of the ancient Mediterranean world but also with reference to their continuing contributions to world civilization.

**Attributes:** Humanities, Recommended Intro Courses

### CLAS 1520 Greek and Roman Mythology 3 cr

A survey of Greek and Roman divine and heroic myths with attention to the nature and definition of myth, Greek and Roman legends, the relationship between myth and religion, the sources of myth (literary and artistic), and the influence of classical myth on subsequent artists and writers. Students may not hold credit for both CLAS 1520 and the former CLAS 2520.

**Mutually Exclusive:** CLAS 2520

**Attributes:** Humanities

### CLAS 2140 Greek History: Pre-Classical Greece, 1200-479 BC 3 cr

This course covers the crucial formative centuries which prefigured the Classical period of Greek history. It focuses upon the Dark Age (ca. 1200-700), when the political framework of later Greece was established, and the subsequent cultural renaissance of the seventh and sixth centuries BC.

**Attributes:** Humanities

### CLAS 2150 Greek History: Classical Greece, 479-323 BC 3 cr

This course covers the heyday of imperial, democratic Athens, her crushing defeat by Sparta, now allied with Persia, and the ensuing crisis of the city-state which culminated in Greek subjection to Macedonian kings, Philip and Alexander.

**Attributes:** Humanities

### CLAS 2160 Roman History: The Roman Republic, 753-30 BC 3 cr

This course covers the history of Rome from its supposed foundation in 753 BC to the end of the Republic in 30 BC. The course considers not only the events of Roman Republican history but also how historians of ancient Rome interpreted these events.

**Attributes:** Humanities

### CLAS 2170 Roman History: The Roman Empire, 30 BC-AD 337 3 cr

This course covers the history of Rome under emperors, from the ascension of Augustus to the death of Constantine, the first Christian emperor, in AD 337. An important theme in the course is the rise of Christianity.

**Attributes:** Humanities

### CLAS 2180 Ancient Greece and Rome through Film 3 cr

Using film as an entry point for the discussion of the ancient Greeks and Romans, this course explores myth, ancient literary genres, and cultural practices. Included will be films that directly engage with their source material, are modern reinterpretations, and that respond to universal themes or narrative patterns. May not be held with CLAS 2500 when taught as Ancient Greece and Rome through Film.

**Mutually Exclusive:** CLAS 2500

**Attributes:** Humanities

### CLAS 2210 Women in Ancient Greece and Rome 3 cr

This course analyzes the changing roles of women in ancient Greek and Roman society (roughly 800 BCE to 400 CE). Using ancient texts, inscriptions, artworks, and archaeological remains, students will examine women's roles in family life, marriage practices, religion, politics, and the economy. Although the majority of ancient evidence about women is created by men and concerns the upper classes, the course will also seek evidence of female viewpoints and the lives of lower-class women.

**Attributes:** Humanities

### CLAS 2460 Field Studies in Greek Archaeology and History 6 cr

Offered as part of the Summer Session, the course consists of three weeks of on-campus study followed by three weeks of travel to major sites and museums. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none, but one or more of CLAS 1270 or CLAS 1280 or CLAS 2140 or CLAS 2150 or CLAS 2670 is recommended.

**Attributes:** Humanities

### CLAS 2490 Field Studies in Roman Archaeology and History 6 cr

Offered as part of the Summer Session, the course consists of three weeks of on-campus study followed by three weeks of travel to major sites and museums. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none, but one or more of CLAS 1270 or CLAS 1280 or CLAS 2160 or CLAS 2170 or CLAS 2680 is recommended.

**Attributes:** Humanities

### CLAS 2500 Aspects of Classical Culture and Languages 3 cr

The content of this course will vary, being devoted each time to surveying a special area of Classical civilization such as athletics, technology, warfare, death, slavery, education, or reception in modern film or literature. Ancient textual and archaeological evidence will form the basis of discussion. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** CLAS 2180

**Attributes:** Humanities

### CLAS 2612 Greek Literature in Translation 3 cr

A survey in English of selected works of such major figures in Greek literature as Homer, Aeschylus, Sophocles, Euripides, Aristophanes, Herodotus, Thucydides, and Plato. The course includes discussion of the influence of these and other works on the arts and literature of the world. Students may not hold credit for both CLAS 2612 and the former CLAS 3610.

**Equiv To:** CLAS 3610

**Attributes:** Humanities, Written English Requirement



**CLAS 2622 Latin Literature in Translation 3 cr**

A survey in English of selected works of such major figures in Latin literature as Vergil, Ovid, Terence, Livy, Cicero, Horace and Seneca. The course includes discussion of the influence of these and other works on the arts and literature of the world. Students may not hold credit for both CLAS 2622 and the former CLAS 3620.

**Equip To:** CLAS 3620

**Attributes:** Humanities, Written English Requirement

**CLAS 2670 Greek Art and Archaeology 3 cr**

A survey, illustrated with slides, of the Minoan, Mycenaean, and classical Greek civilizations. The relevant archaeological sites and artistic works will be studied.

**Attributes:** Humanities

**CLAS 2680 Roman Art and Archaeology 3 cr**

A survey, illustrated with slides, of the civilization and art of the Roman world. The Etruscan civilization and archaeological sites of Hellenistic Greece as they influence the art of Republican and Imperial Rome will be studied.

**Attributes:** Humanities

**CLAS 2710 Greek and Latin Elements in English 3 cr**

A systematic study of the contribution of the classical languages to modern English, including the vocabulary of the sciences. The course is intended as a practical means of enhancing English vocabulary while it also emphasizes that the linguistic contributions are a reflection of the broad historical and cultural influences of classical antiquity on the modern world.

**Attributes:** Humanities

**CLAS 3250 Aegean and Italian Prehistory 3 cr**

This course provides a detailed archaeological and historical view of Mediterranean culture and society from the Neolithic period of the sixth millennium BC through the early centuries of the first millennium BC. The course ends with a look ahead to the Early Iron Age.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CLAS 1270, CLAS 2140, CLAS 2150, ANTH 2060, FAAH 1030, HIST 1200, HIST 1201, HIST 1350] or written consent of department head.

**Attributes:** Humanities

**CLAS 3260 Hellenistic Civilization: History and Archaeology 3 cr**

The Hellenistic period spans the years from the death of Alexander the Great in 323 BC to the death of the Ptolemaic queen Cleopatra VII in 31 BC. This course explores both the political and, more generally, the cultural history of the period using both textual and archaeological sources.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CLAS 1270, CLAS 1280, CLAS 2140, CLAS 2150, FAAH 1030, HIST 1200, HIST 1201, HIST 1350] or written consent of department head.

**Attributes:** Humanities

**CLAS 3264 Pompeii and Herculaneum 3 cr**

This course will study the art and archaeology of Pompeii, Herculaneum, and other sites destroyed by Mount Vesuvius in 79 C.E., with attention to social history, artistic developments, and daily life. Students may not hold credit for both CLAS 3264 and the former CLAS 3730 when titled "Pompeii and Herculaneum."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CLAS 1270, CLAS 1280, CLAS 2160, CLAS 2170, CLAS 2680, FAAH 1030, HIST 1200, HIST 1201, HIST 1350] or written consent of department head.

**Attributes:** Humanities

**CLAS 3270 The World of Late Antiquity: History and Archaeology 3 cr**

This course examines the later Roman Empire, beginning with the reign of Constantine in the early fourth century and ending in the mid sixth century. It combines historical and archaeological sources for the study of political, religious and social developments within the period.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CLAS 1270, CLAS 1280, CLAS 2170, CLAS 2680, FAAH 1030, HIST 1200, the former HIST 1201, HIST 1203, HIST 1350] or written consent of department head.

**Attributes:** Humanities

**CLAS 3650 Religion in Ancient Greece 3 cr**

The religious beliefs and practices of the Greeks from the prehistoric period through the beginnings of the Hellenistic period as related to their political, social, intellectual, and domestic institutions; based on the study of both literary and archaeological evidence.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CLAS 1270, CLAS 1520, CLAS 2140, CLAS 2150, CLAS 2670, CLAS 3670, RLGN 3640, or the former CLAS 2520] or written consent of department head.

**Attributes:** Humanities

**CLAS 3660 Religion in Ancient Rome 3 cr**

The religious beliefs and practices of the Romans from earliest times until the reign of Constantine as related to their political, social, intellectual, and domestic institutions; based on the study of both literary and archaeological evidence from Italy and the rest of the Roman world.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CLAS 1280, CLAS 1520, CLAS 2160, CLAS 2170, CLAS 2680, CLAS 3670, RLGN 3640, or the former CLAS 2520] or written consent of department head.

**Attributes:** Humanities

**CLAS 3670 Religion in the Hellenistic and Roman Mediterranean 3 cr**

This course explores the wide variety of religious traditions, practices, and beliefs of the Mediterranean region in the Hellenistic and Roman period (c. 300 BCE to 300 CE). This period is exemplified by a great deal of continuity, but it was also a time of experimentation, innovation, and cultural entrepreneurship. Also offered by Religion as RLGN 3640. Students may not hold credit for both CLAS 3670 and RLGN 3640.

**Equip To:** RLGN 3640

**Attributes:** Humanities

**CLAS 3680 Studies in a Classical Literary Genre 1 3 cr**

The content of this course will vary, being devoted each time to a particular type of Greek and Roman literature such as epic, tragedy, comedy, satire, rhetoric, the novel, historical writings, scientific writing, etc. Lectures and discussions of the literature and its influence will be based on readings in English translation. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Humanities

**CLAS 3682 Greek and Roman Epic 3 cr**

The core readings in this course will consist of contemporary English translations of a substantial portion of the Greek and Latin epic corpus, including complete or partial works by Homer, Apollonius Rhodius, Vergil, Ovid, Lucan and Statius. The classical epics will be studied with reference to their place in literary and cultural history. Students may not hold credit for both CLAS 3682 and CLAS 3680 when titled "Greek and Roman Epic Poetry."

**Attributes:** Humanities

**CLAS 3684 Greek and Roman Tragedy 3 cr**

This course examines the tragic drama of fifth-century Athens and imperial Rome (in translation), with particular emphasis on the extant plays of Aeschylus, Sophocles, Euripides, and Seneca in their respective historical, intellectual and cultural contexts. Students may not hold credit for both CLAS 3684 and CLAS 3680 when titled "Greek and Roman Tragedy."

**Attributes:** Humanities

**CLAS 3710 Aspects of Classical Culture 1 3 cr**

The content of this course will vary, being devoted each time to the investigation of a special area of Classical civilization such as athletics, technology, the erotic, the occult, cuisine, law, medicine, architecture, education. Lectures and discussions will be based on the study of both archaeological and literary evidence. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CLAS 1270 or CLAS 1280] or written consent of department head.

**Attributes:** Humanities

## Computer Science (COMP)

**COMP 1010 Introductory Computer Science 1 3 cr**

(Lab Required) An introduction to computer programming using a procedural high level language. May not be held with COMP 1011 or COMP 1012 or COMP 1013.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: any grade 12 or 40S Mathematics, or equivalent.

**Equiv To:** COMP 1011

**Mutually Exclusive:** COMP 1012, COMP 1013

**Attributes:** Science, Recommended Intro Courses

**COMP 1012 Computer Programming for Scientists and Engineers 3 cr**

(Lab Required) An introduction to computer programming suitable for solving problems in science and engineering. Students will implement algorithms for numerical processing, statistical analysis and matrix operations. Not to be held with COMP 1010, COMP 1011 or COMP 1013.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Mathematics 40S or equivalent. Co-requisite: MATH 1230 or MATH 1500 or MATH 1501 (or equivalent).

**Equiv To:** COMP 1013

**Mutually Exclusive:** COMP 1010, COMP 1011

**Attributes:** Science

**COMP 1020 Introductory Computer Science 2 3 cr**

(Lab Required) More features of a procedural language, elements of programming. May not be held with COMP 1021.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 1010 or COMP 1011; or COMP 1012 or COMP 1013; or High School Computer Science 40S (75%) and any grade 12 or 40S Mathematics, or equivalent.

**Equiv To:** COMP 1021

**Attributes:** Science, Recommended Intro Courses

**COMP 1500 Computing: Ideas and Innovation 3 cr**

An introduction to the topics of Computer Science and problem solving. Students will learn concepts in computer programming. May not be used to fulfill computer science requirements in a Computer Science Honours, Joint Honours, Major, General or Minor program. May not be taken once in a declared Computer Science Honours, Joint Honours, Major, General or Minor program. May be used as an elective if taken prior to entry.

**Attributes:** Science, Recommended Intro Courses

**COMP 1600 Navigating Your Digital World 3 cr**

Topics related to digital society such as security, encryption and data storage, issues of social and ethical importance, and current events.

May not be used to fulfill computer science requirements in a Computer Science Honours, Joint Honours, Major, General or Minor program.

May not be taken once in a declared Computer Science Honours, Joint Honours, Major, General or Minor program. May be used as an elective if taken prior to entry. May not be held with the former COMP 1270.

**Mutually Exclusive:** COMP 1270, COMP 1271

**Attributes:** Science, Recommended Intro Courses

**COMP 2080 Analysis of Algorithms 3 cr**

Methods of analyzing the time and space requirements of algorithms. Average case and worst case analysis. Models of computation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MATH 1240, MATH 1241 or COMP 2130; and one of COMP 2140, or the former COMP 2061. STAT 1000 or STAT 1001 or STAT 1150 is strongly recommended.

**Attributes:** Science

**COMP 2130 Discrete Mathematics for Computer Science 3 cr**

An introduction to the set theory, logic, integers, combinatorics and functions for today's computer scientists.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 1020 or COMP 1021, and one of: MATH 1210, MATH 1211, MATH 1220, MATH 1300, MATH 1301, MATH 1310; and one of: MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, or MATH 1690.

**Mutually Exclusive:** MATH 3120

**Attributes:** Science

**COMP 2140 Data Structures and Algorithms 3 cr**

(Lab Required) Introduction to the representation and manipulation of data structures. Topics will include lists, stacks, queues, trees, and graphs. May not be held with COMP 2061.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of COMP 1020, COMP 1021.

**Equiv To:** COMP 2061

**Attributes:** Science

**COMP 2150 Object Orientation 3 cr**

Design and development of object-oriented software. Topics will include inheritance, polymorphism, data abstraction and encapsulation. Examples will be drawn from several programming languages.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2160; and one of COMP 2140 or COMP 2061.

**Attributes:** Science

**COMP 2160 Programming Practices 3 cr**

(Lab Required) Introduction to issues involved in real-world computing. Topics will include memory management, debugging, compilation, performance, and good programming practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 1020 (C+) or COMP 1021 (C+).

**Attributes:** Science

**COMP 2190 Introduction to Scientific Computing 3 cr**

An applied computational course introducing topics such as approximation by polynomials, solution of non-linear equations, linear systems, simulation and computational geometry. May not hold with COMP 2191.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: One of COMP 1020 or COMP 1021, or COMP 1012 or COMP 1013; and one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, or MATH 1690. Prerequisite or concurrent registration: One of MATH 1220, MATH 1300, MATH 1301, or MATH 1310.

**Equip To:** COMP 2191

**Attributes:** Science

**COMP 2280 Introduction to Computer Systems 3 cr**

(Lab Required) Data representation and manipulation, machine-level representation of programs, assembly language programming, and basic computer architecture. Not available to students who have previously completed ECE 3610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 2140, COMP 2160, and one of MATH 1240, MATH 1241 or COMP 2130.

**Mutually Exclusive:** ECE 3610

**Attributes:** Science

**COMP 2980 Workterm 1 0 cr**

Work assignment in business, industry, or government for students registered in the Computer Science Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail)

**Attributes:** Science

**COMP 3010 Distributed Computing 3 cr**

An introduction to the development of client server and peer-to-peer systems through web applications, distributed programming models, and distributed algorithms.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2150 or ECE 3740.

**Attributes:** Science

**COMP 3020 Human-Computer Interaction 1 3 cr**

Human-computer interaction: human factors and usability, user-centered design, prototyping, usability evaluation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of COMP 2140 or COMP 2061. A course in cognitive psychology, such as PSYC 2480, is recommended.

**Attributes:** Science

**COMP 3030 Automata Theory and Formal Languages 3 cr**

An introduction to automata theory, grammars, formal languages and their applications. Topics: finite automata, regular expressions and their properties; context-free grammars, pushdown automata and properties of context-free languages; Turing machines and their properties.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2080.

**Attributes:** Science

**COMP 3040 Technical Communication in Computer Science 3 cr**

This course is designed to help students become more effective and confident writers in the context of the computing profession. Students will be introduced to a broad range of written and oral presentation styles used in the computing workplace.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students must be enrolled in third year (or higher) of a majors or honours program in the Department of Computer Science.

**Attributes:** Science

**COMP 3090 Digital Logic 2 3 cr**

Design and implementation of digital circuits. Minimization and state reduction, asynchronous circuits, arithmetic circuits, implementation using modern hardware techniques. May not to be held with ECE 2220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2280.

**Mutually Exclusive:** ECE 2220

**Attributes:** Science

**COMP 3170 Analysis of Algorithms and Data Structures 3 cr**

Fundamental algorithms for sorting, searching, storage management, graphs, databases and computational geometry. Correctness and analysis of those algorithms using specific data structures. An introduction to lower bounds and intractability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of COMP 2140 or COMP 2061; and COMP 2080.

**Attributes:** Science

**COMP 3190 Introduction to Artificial Intelligence 3 cr**

Principles of artificial intelligence: problem solving, knowledge representation and manipulation; the application of these principles to the solution of 'hard' problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of COMP 2140 or COMP 2061.

**Attributes:** Science

**COMP 3290 Introduction to Compiler Construction 3 cr**

Introduction to the standard compiler phases: scanning, parsing, symbol-table management, code generation, and code optimization. The emphasis is on the simpler techniques for compiler construction such as recursive descent.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 2140 (or COMP 2061) and COMP 2280 (or ECE 3610). COMP 2160 is recommended.

**Attributes:** Science

**COMP 3350 Software Engineering 1 3 cr**

Introduction to software engineering. Software life cycle models, system and software requirements analysis, specifications, software design, testing and maintenance, software quality.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 2150 or ECE 3740.

**Attributes:** Science

**COMP 3370 Computer Organization 3 cr**

Principles of computer systems architecture, organization and design. Performance, instruction sets, processors, input/output, memory hierarchies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2280 or ECE 3610.

**Attributes:** Science

**COMP 3380 Databases Concepts and Usage 3 cr**

An introduction to database systems including the relational, hierarchical, network and entity-relationship models with emphasis on the relational model and SQL.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of COMP 2140 or COMP 2061.

**Attributes:** Science

**COMP 3430 Operating Systems 3 cr**

(Lab Required) Operating systems, their design, implementation, and usage.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of COMP 2140 or COMP 2061; and COMP 2280 or ECE 3610. COMP 2160 is recommended.

**Attributes:** Science

**COMP 3440 Programming Language Concepts 3 cr**

An introduction to major concepts involved in the design of modern programming languages. The imperative, functional, and logical families and differences between them. Facilities for high level data and control structures, modular programming, data typing, and other topics will be covered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of COMP 2140 or COMP 2061.

**Attributes:** Science

**COMP 3490 Computer Graphics 1 3 cr**

An introductory course in computer graphics including topics such as raster graphics, two and three dimensional transforms, and simple rendering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2140; and either COMP 2190, or both: MATH 1300 (or MATH 1220, MATH 1310, MATH 1301, MATH 1210 or MATH 1211) and MATH 1500 (or MATH 1230, MATH 1501, MATH 1510 or MATH 1520).

**Attributes:** Science

**COMP 3820 Introduction to Bioinformatics Algorithms 3 cr**

An introduction to problems in molecular biology and computational solutions. Focus on design and analysis of efficient algorithms.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 2080. Suggested prerequisite: MBIO 1410. Suggested concurrent requirement: COMP 3170.

**Attributes:** Science

**COMP 3980 Workterm 2 0 cr**

Work assignment in business, industry, or government for students registered in the Computer Science Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2980 (P).

**Attributes:** Science

**COMP 4020 Human-Computer Interaction 2 3 cr**

Advanced issues in the field of human-computer interaction. Topics will be selected from current research and development issues in the field of HCI.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3020. A course in cognitive psychology such as PSYC 2480 is recommended.

**Attributes:** Science

**COMP 4050 Project Management 3 cr**

Introduction to the issues involved in managing large, complex software projects.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3350.

**Attributes:** Science

**COMP 4060 Topics in Computer Science 3 cr**

This course will examine topics of interest at the fourth-year level.

Specific topics will vary from year to year. Topics will be selected from current research in computer science.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Departmental permission.

**Attributes:** Science

**COMP 4140 Introduction to Cryptography and Cryptosystems 3 cr**

Description and analysis of cryptographic methods used in the authentication and protection of data. Classical cryptosystems and cryptoanalysis, the Advanced Data Encryption Standard (ADES) and Publickey cryptosystems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of COMP 3170, MATH 2170, or the former MATH 2500.

**Attributes:** Science

**COMP 4180 Intelligent Mobile Robotics 3 cr**

Topics include artificial intelligence, computer vision, human-robot interaction, and multi-robot systems. These abstract components are grounded in the problem of developing a team of intelligent mobile robots. All topics are covered with specific emphasis on applied problems, e.g. real-time performance. Not to be held with the former COMP 4060 –“Mobile Robotics”.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 2160 and COMP 3190.

**Attributes:** Science

**COMP 4190 Artificial Intelligence 3 cr**

Reasoning with temporal knowledge; causal reasoning; plausible reasoning; nonmonotonic reasoning; abductive reasoning.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3190.

**Attributes:** Science

**COMP 4200 Expert Systems 3 cr**

Organization of expert systems; knowledge representation in expert systems; inference; knowledge engineering; tools for building expert systems; limitations of expert systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3190.

**Attributes:** Science

**COMP 4300 Computer Networks 3 cr**

(Lab required) This course examines the principles of computer networks, including network architectures, algorithms, protocols, and performance. May not be held with the former COMP 3720 or the former COMP 4720 or ECE 3700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2280 and COMP 3010.

**Mutually Exclusive:** COMP 3720, COMP 4720, ECE 3700

**Attributes:** Science

**COMP 4340 Graph Theory Algorithms 1 3 cr**

Spanning trees, connectivity, planar graphs, directed graphs, networks, colouring problems and tours are studied and their applications to computer science will be highlighted.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3170.

**Mutually Exclusive:** MATH 2070, MATH 2071, MATH 2400, MATH 3370

**Attributes:** Science

**COMP 4350 Software Engineering 2 3 cr**

Advanced treatment of software development methods. Topics will be selected from requirements gathering, design methodologies, prototyping, software verification and validation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3350.

**Attributes:** Science

**COMP 4360 Machine Learning 3 cr**

Learning strategies; evaluation of learning; learning in symbolic systems; neural networks, genetic algorithms. May not be held with ECE 4450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3190 or [STAT 2400, and MATH 2740, and DATA 2010].

**Mutually Exclusive:** ECE 4450

**Attributes:** Science

**COMP 4380 Database Implementation 3 cr**

Implementation of modern database systems including query modification/optimization, recovery, concurrency, integrity, and distribution.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3380.

**Attributes:** Science

**COMP 4420 Advanced Design and Analysis of Algorithms 3 cr**

Algorithm design with emphasis on formal techniques in analysis and proof of correctness. Computational geometry, pattern matching, scheduling, numeric algorithms, probabilistic algorithms, approximation algorithms and other topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 3170 and (STAT 1000 or STAT 1001 or STAT 1150).

**Attributes:** Science

**COMP 4430 Operating Systems 2 3 cr**

Design and implementation of modern operating systems. Detailed analysis of an open source modern operating system and hands-on experience with its kernel and major components.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 2160 and COMP 3430.

**Attributes:** Science

**COMP 4490 Computer Graphics 2 3 cr**

Methods in computer graphics including topics such as representation of curves and surfaces, viewing in three dimensions, and colour models.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3490.

**Attributes:** Science

**COMP 4510 Introduction to Parallel Computation 3 cr**

An overview of the architectures of current parallel processors and the techniques used to program them. Not to be held with ECE 4530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 3370 and COMP 3430.

**Mutually Exclusive:** ECE 4530

**Attributes:** Science

**COMP 4520 Undergraduate Honours Project 3 cr**

A research based project on a specific area of computer science. Students must find a faculty supervisor and write a proposal in their penultimate term. If acceptable, the defined research is to be carried out in the student's final term. Permission to take the course is given on an individual basis. Available to 4th Year students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: departmental permission.

**Attributes:** Science

**COMP 4550 Real-Time Systems 3 cr**

An introduction to the theory and practice of real-time systems. Topics include the design of real-time systems, scheduling, event based processing, and real-time control. This course may not be held for credit if a student has previously completed both of ECE 4240 and ECE 3760.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 3430 and COMP 3370.

**Mutually Exclusive:** ECE 3760, ECE 4240

**Attributes:** Science

**COMP 4560 Industrial Project 3 cr**

Students will work in teams on an industrial project. Projects are supplied by the Department.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 3350 and departmental permission.

**Attributes:** Science

**COMP 4580 Computer Security 3 cr**

(Lab Required) Computer security and information management. This course will examine state-of-the-art knowledge about the issues relevant to data and computer security.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3430 and COMP 3010.

**Attributes:** Science

**COMP 4620 Professional Practice in Computer Science 3 cr**

Background and rationale to view Computer Science in a professional context. Examination of professional ethics, intellectual property, and privacy considerations important to Computer Scientists. May not be held with the former COMP 3620. This course is restricted to students in a Computer Science Major, Honours, or Joint Honours program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 6 credit hours of COMP courses at the 3000 or 4000 level.

**Equiv To:** COMP 3620

**Attributes:** Science

**COMP 4690 Computer Systems and Architecture 3 cr**

Investigation of today's modern computer architecture and system design concepts, including requirements, specifications, and implementation. Instruction sets, instruction-level parallelism, speculative execution, multi-threaded architectures, memory hierarchy, multiprocessors, storage design and implementation, and interconnection networks.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3370.

**Attributes:** Science

**COMP 4710 Introduction to Data Mining 3 cr**

Introduction to data mining concepts and their applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3380 or consent of department.

**Attributes:** Science

**COMP 4740 Advanced Databases 3 cr**

Parallel, distributed, object-oriented, object-relational, and XML databases; other emerging database technologies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3380.

**Attributes:** Science

**COMP 4980 Workterm 3 0 cr**

Work assignment in business, industry, or government for students registered in the Computer Science Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3980 (P).

**Attributes:** Science

**COMP 4990 Workterm 4 0 cr**

Work assignment in business, industry, or government for students registered in the Computer Science Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment (Pass/Fail).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 4980 (P).

**Attributes:** Science

## Data Science (DATA)

**DATA 2010 Tools and Techniques for Data Science 3 cr**

(Lab required) An introduction to the field of data science with an emphasis on the fundamental tools and techniques that underlie the field of data science.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of MATH 1240, MATH 1241, or COMP 2130] and [one of MATH 1220, MATH 1210 (B), MATH 1211 (B), MATH 1300, or MATH 1301] and [one of MATH 1232, MATH 1700, MATH 1701, or MATH 1710]. Pre- or corequisites: COMP 2140 and STAT 2150.

**Attributes:** Science

**DATA 3010 Data Science with Real World Data Sets 3 cr**

(Lab Required) This course will expose students to real-world data sets in the study of data science.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: DATA 2010.

**Attributes:** Science

**DATA 4010 Data Science Capstone Project 6 cr**

A project course where students apply the knowledge and skills acquired in earlier coursework to a substantial data science problem. It will enable the development of soft skills, and explicit consideration of important topics including Ethics, Communication, Data Privacy, Data Presentation and Insight Delivery, all of which are key elements for a training in Data Science, beyond the technical content. This course is restricted to Faculty of Science students in the Data Science Major or Major Co-op. Students are expected to take this course in their final year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: DATA 3010 and permission of the instructor.

**Attributes:** Science

## Dental Diagnostic and Surgical (DDSS)

**DDSS 1100 Periodontology 1 1 cr**

A pre-clinical laboratory and didactic course designed to (1) introduce students to periodontal examination procedures and to basic non-surgical periodontal therapy, (2) develop skills related to periodontal instrumentation and treatment, and (3) present fundamental concepts of periodontal anatomy, physiology and microbiology in health and disease. May not be held with DDSS 1020.

**Mutually Exclusive:** DDSS 1020

**DDSS 1110 Radiology 1 1 cr**

A series of lectures which introduces the student to: the elementary principles of dental radiology; radiation physics, radiation biology, imaging techniques, x-ray equipment and radiation protection. May not be held with DDSS 1140.

**Mutually Exclusive:** DDSS 1140

**DDSS 2100 Periodontology2 2 cr**

A basic didactic course with emphasis on (1) diagnosis, classification, treatment and prevention of different forms of plaque-induced periodontal diseases, (2) oral-systemic disease associations; (3) non-plaque induced gingival alterations, (4) periodontal treatment of medically compromised patients. May not be held with DDSS 2120.

**Mutually Exclusive:** DDSS 2120

**DDSS 2110 Radiology 2 1 cr**

A series of lectures in the theoretical and practical principles of radiographic interpretation of common oral pathologic conditions as well as selected examples of pathologic conditions exhibiting important radiographic principles. May not be held with DDSS 2180.

**Mutually Exclusive:** DDSS 2180

**DDSS 2122 Oral Pathology 5 cr**

A series of lectures emphasizing recognition, description, etiopathogenesis, clinical and/or radiographic features, biologic behaviour, treatment and/or management of oral and paraoral conditions. May not be held with DDSS 2010.

**Mutually Exclusive:** DDSS 2010

**DDSS 2130 Pain and Anxiety Control 1 1 cr**

A series of lectures to introduce the student to: local anaesthetics, local anaesthesia techniques, avoidance and management of complications and selection of appropriate drugs and techniques. May not be held with DDSS 2020.

**Mutually Exclusive:** DDSS 2020

**DDSS 3102 Periodontology 3 3 cr**

This combined lecture and clinical course is designed to provide experience which will allow students to apply previous didactic learning to the clinical environment in the field of Periodontology. The classroom sessions provide description and discussion of periodontal treatment modalities and techniques, including non-surgical, surgical intervention, and implant treatment. Inter-relationships with other clinical disciplines also receive considerable attention. May not be held with the former DDSS 3220.

**Mutually Exclusive:** DDSS 3220

**DDSS 3112 Oral Diagnosis and Radiology 1 2 cr**

This course includes a lecture component covering history-taking, clinical examination, diagnosis and treatment of soft and hard tissue lesions, emergency treatment, dental treatment of patients with systemic disease, and clinical experience. May not be held with DDSS 3200.

**Mutually Exclusive:** DDSS 3200

**DDSS 3120 Pain and Anxiety Control 2 1 cr**

This course consists of lectures/seminars and clinical experience in: physiology of pain psychology of anxiety, management of medical emergencies, parenteral injections, and therapeutics of the various modalities of pain and anxiety control. May not be held with DDSS 3230.

**Mutually Exclusive:** DDSS 3230

**DDSS 3132 ORAL AND MAXILL SURGERY 1 2 cr**

This course consists of lectures, seminars and clinics, covering all aspects of oral and maxillofacial surgery with an emphasis on those procedures performed by the general practitioner. May not be held with DDSS 3210.

**Mutually Exclusive:** DDSS 3210

**DDSS 3142 Medicine 2 cr**

Lectures or seminars describing the basic mechanisms, symptoms, diagnosis and management of various disease processes included in internal medicine and their dental correlations. May not be held with DDSS 3030.

**Mutually Exclusive:** DDSS 3030

**DDSS 3152 Temporomandibular Disorders and Orofacial Pain 2 cr**

The course reviews the foundational clinical sciences in pain biology, and function of the masticatory muscles and TMJ. It discusses the contemporary classification, diagnosis and management of Temporomandibular disorders and related orofacial pain disorders. May not be held with DDSS 3190.

**Mutually Exclusive:** DDSS 3190

**DDSS 3162 Pharmacology and Therapeutics 3 cr**

A discussion of the basic pharmacodynamics, pharmacokinetics, mechanisms of actions, doses and adverse effects of therapeutic agents prescribed and administered by dentists. This will include antibiotics, analgesics, anxiolytics, anti-viral and anti-fungal agents. Subsequently drugs used in the management of systemic diseases will be discussed including mechanisms of actions and adverse effects, with particular focus on those which are dentally-related. May not be held with the former ORLB 3320 or the former ORLB 3060 or the former ORLB 3310.

**Mutually Exclusive:** ORLB 3060, ORLB 3310, ORLB 3320

**DDSS 4112 Oral Diagnosis and Radiology 2 2 cr**

(Formerly DDSS 4200) This clinical course is designed to give the student clinical experience with: treatment planning, diagnostic techniques, differential diagnosis, emergency treatment and non-surgical management related to oral pathologic conditions. May not be held with DDSS 4200.

**Mutually Exclusive:** DDSS 4200

**DDSS 4122 Oral & Maxillofacial Surgery 2 1 cr**

(Formerly DDSS 4210) This course consists of lectures, seminars and clinics covering all aspects of oral and maxillofacial surgery with an emphasis on those procedures performed by the general practitioner. May not be held with DDSS 4210.

**Mutually Exclusive:** DDSS 4210

**DDSS 4150 Hospital Dentistry 1 cr**

(Formerly DDSS 4130) This course is designed to provide the student with a familiarization with hospital protocol, reinforcement of understanding in medicine, surgery, pharmacology and therapeutics, the dental treatment of medically compromised patients at the Health Sciences Centre, and handicapped patients in other institutional settings. May not be held with DDSS 4130. Course evaluated on a pass/fail basis.

**Mutually Exclusive:** DDSS 4130

## Dental Hygiene (HYGN)

**HYGN 1232 Oral and Dental Anatomy 3 cr**

This course consists of a self-study CD and laboratory work dealing with the normal development, morphology, structure, and functions of the dentition and related structures.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisites: HYGN 1234 and HYGN 1236.

**HYGN 1234 Preclinical Dental Hygiene 2 cr**

This introductory course teaches the necessary dental hygiene skills in laboratory and preclinical settings. Students are introduced to foundational assessment and implementation skills necessary to begin client care at the novice level.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisites: HYGN 1232 and HYGN 1236.

**HYGN 1236 Dental Hygiene Theory and Practice 1 4 cr**

This introductory course provides the necessary foundational knowledge requisite for preclinical experience and early client care. It includes the theory and principles underlying the practice of dental hygiene based on the four phases of the Dental Hygiene Process of Care and the concept of Professionalism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisites: HYGN 1232 and HYGN 1234.

**HYGN 1238 Dental Hygiene Clinical Practice I 3 cr**

The course focus is on the cognitive, psychomotor and affective knowledge and skills requisite to the dental hygiene process of care. It includes the principles underlying the practice of dental hygiene and facilitates the development of a self-directed and self-aware professional.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HYGN 1234 and HYGN 1236. Corequisite: HYGN 1242.

**HYGN 1242 Dental Hygiene Theory and Practice II 4 cr**

A continuation of foundational knowledge requisite for clinical care on less complicated clients that includes the theory and principles underlying the practice of dental hygiene based on the Dental Hygiene Process of Care.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HYGN 1234 and HYGN 1236. Corequisite: HYGN 1238.

**HYGN 1262 Dental Radiology 3 cr**

An introduction to the production of x-rays, radiation biology, radiation protection, imaging materials, imaging techniques, recognition of radiographic landmarks and structures, and quality control of radiographs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisites: HYGN 1234 and HYGN 1238.

**HYGN 1270 Biology of the Head and Neck 3 cr**

Anatomy, physiology, histology and embryology of the head and neck.

**HYGN 1280 Microbiology and Infectious Diseases 3 cr**

A study of different types of microorganisms. Infectious diseases will be discussed in terms of reservoirs, transmission, pathogenesis, treatment and prevention. Emphasis will be given to common communicable diseases, the oral microflora and its role in disease and health.

**HYGN 1292 Dental Hygiene Preclinical Restorative Techniques 2 cr**

A study of the principles and techniques of restorative dentistry. Introduction information on restorative dentistry specialties.

**HYGN 1320 Dental Materials 2 cr**

A study of the properties of materials used in the oral environment for restorative, prosthetic, orthodontic and preventive purposes. Laboratory demonstrations and exercises are designed to demonstrate the correct preparation and handling of dental materials.

**HYGN 1340 Communications 2 cr**

This course provides an introduction to basic principles of communication in relation to everyday and professional interactions. The students are sensitized to the process of communication, its complexities and its related dynamics. Particular attention is given to enabling students to develop effective professional communication skills that have the potential to promote client compliance and harmonious working relationships.

**Attributes:** Written English Requirement

**HYGN 1352 Community Health I 3 cr**

An introductory, participatory course in community oral health promotion intended to inspire a sense of community responsibility in students as health professionals responding to community needs through classroom teaching, interviews and debates.

**HYGN 1360 Periodontology I 2 cr**

A study of the normal tissues of the periodontium, and an introduction to periodontal diseases, their etiology, epidemiology and treatment, especially as these relate to dental hygiene practice. A critical analysis of periodontal cases is included.

**HYGN 2100 Dental Hygiene Portfolio 2 cr**

This two credit hour course houses the evaluation component of the programmatic portfolio of student competencies that all students commence at enrolment and complete prior to graduation.

**HYGN 2280 Pharmacology 2 cr**

Drugs used in clinical practice; a general knowledge of drugs by groups with emphasis on agents such as local anesthetics, analgesics, and antibiotics used extensively in the practice of dentistry.

**HYGN 2300 Pathology 3 cr**

A study of the principles of general and oral pathology involving pathologic mechanisms, disorders of physiologic systems, and pathologic conditions and diseases affecting oral and para-oral structures.

**HYGN 2312 Dental Hygiene Clinical Practice II 4 cr**

This competency-based clinical course amalgamates theoretical knowledge and clinical skills in both general clinical and community based clinical settings. Students provide care to clients with moderate oral health needs. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HYGN 1238 and HYGN 1242. Corequisite: HYGN 2314.

**HYGN 2314 Dental Hygiene Theory and Practice III 4 cr**

Learning, motivation, and behaviour modification theories are applied to oral health promotion. Dental hygiene care plans are developed using a human needs model and process of care. Ethics, jurisprudence and practice standards are discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HYGN 1238 and HYGN 1242. Corequisite: HYGN 2312.

**HYGN 2316 Dental Hygiene Clinical Practice III 4 cr**

This course advances the student's clinical dental hygiene skills to a level of minimal competency. Students provide dental hygiene care to clients with high oral health needs to facilitate their attainment of optimal oral health. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HYGN 2312 and HYGN 2314. Corequisite: HYGN 2318.

**HYGN 2318 Dental Hygiene Theory and Practice IV 5 cr**

The oral health needs of persons with disabilities and the development of dental hygiene care plans to address those needs are discussed as well as issues of access to dental hygiene care, employment, quality assurance, and professional growth and development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HYGN 2312 and HYGN 2314. Corequisite: HYGN 2316.

**HYGN 2340 Periodontology II 2 cr**

Continuation of the study of etiology, diagnosis and treatment of periodontal disease.

**HYGN 2350 Biology of Oral Tissues 2 cr**

Consideration of physiology of the oral environment and its microflora in relation to health, dental caries and periodontal diseases.

**HYGN 2362 Community Health II 3 cr**

Student abilities to deliver community oral health education/promotion programs, with attention given to barriers and strategies used to meet the unique needs of target populations less likely to have optimal oral health are further developed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HYGN 1352.

**HYGN 2370 Nutrition in Dentistry 2 cr**

An examination of the fundamentals of nutrition and the relationship between nutrition and health within the context of the health professions. The focus is on nutritional strategies used to promote health and in the treatment of common health conditions. The primarily on-line content is followed up with a combination of oral health specific patient/clinical exercises for Dental Hygiene students. May not be held with HNSC 2170 or ORLB 2330, HNSC 2170, or the former ORLB 2150 or the former PHRM 2420.

**Mutually Exclusive:** HNSC 2170, ORLB 2150, ORLB 2330, PHRM 2420

**HYGN 2380 Pain Management 2 cr**

This course is designed to enhance the dental hygiene student's knowledge of the mechanisms of pain control through the administration of topical and local anesthetic agents. Emphasis will be placed on the pharmacology of dental anesthetic agents and their interaction with the client's current conditions and medications.

**HYGN 4412 Dental Hygiene Practice Management and Leadership 3 cr**

This course is designed to provide the student with the necessary knowledge and skills to facilitate the transition to the practice environment. The focus of the course is leadership, workplace dynamics, management, developing alternate practice settings and working with third party payers. Oral health care management in a variety of organizations such as community health agencies, private practice, research and industry will all be discussed.

**HYGN 4460 Community Health Independent Study 3 cr**

This course is a practicum and/or independent study course focusing on the design and/or implementation and evaluation of the health promotion program process in; the field. Students may choose to host an oral health awareness raising event for the public, provide community-based oral health promotion activity at a selected site, develop a small-scale oral health promotion program for an underserved population group or a similar community-based project.



**HYGN 4470 Community Health Independent Study II 3 cr**

This course is a continuation of HYGN 4460 (Community Health Independent Study) and provides a further opportunity for the student to build on the previous independent study course or focus on the design and/or implementation and evaluation of an additional health promotion program. In either case, students may choose from oral health awareness raising event for the public, community-based oral health promotion activity, small-scale oral health promotion programming or similar community oral health project.

**HYGN 4492 Current Issues in Dental Hygiene 3 cr**

This seminar course focuses on current topics concerning the profession of dental hygiene in Canada and Internationally. Exploration of global topics will enable the student to glean a broad view of the profession.

**HYGN 4500 Advanced Oral Pathology 3 cr**

A web-based CD-ROM distance education course designed to present the clinical and pathobiologic aspects of diseases that affect oral and maxillofacial tissues or present with significant oral manifestations of systemic diseases. This course is presented in conjunction with the University of Manitoba and the University of British Columbia.

**HYGN 4510 Microbiology and Immunology 3 cr**

This Web CT course is offered in conjunction with the University of British Columbia. Microbiological and immunological concepts that are the scientific basis for understanding human response in health and disease will be explored. This course builds on knowledge acquired from dental hygiene entry-to-practice level education and dental hygiene practice.

**HYGN 4520 Advanced Independent Study I 3 cr**

This course will enable the degree-completion student to explore issues or areas of interest in dental hygiene with the mentorship of a dental hygiene faculty member. Dependent upon the extent of the project, students may enroll in either three or six hours of study.

**HYGN 4530 Teaching Practicum 3 cr**

This course provides students with a seminar course in clinical teaching methodologies and the opportunity to practice teach within an undergraduate dental hygiene program under the supervision and mentorship of dental hygiene faculty members.

**HYGN 4540 Advanced Teaching Practicum 3 cr**

This course is a continuation of HYGN 4530 (Teaching Practicum) and provides the opportunity to extend the practice teaching experience into a second term, thus strengthening the individual's skills as a dental hygiene educator. This experience will occur under the supervision and mentorship of dental hygiene faculty members.

**HYGN 4550 Advanced Independent Study II 3 cr**

This course is a continuation of HYGN 4520 (Advanced Independent Study) and provides the opportunity for the student to pursue a more complex project which cannot be completed within the first course. Students will have selected their project topic in HYGN 4520 and will continue their exploration and write-up of this topic with the guidance of a dental hygiene faculty mentor.

## Dentistry (DENT)

**DENT 1202 Early Clinical Experience 3 cr**

A series of lectures and clinical participation sessions designed to introduce the student to clinical dentistry and the relevance of basic science courses in the dental curriculum. May not be held with DENT 1010. Course evaluated on a pass/fail basis.

**Mutually Exclusive:** DENT 1010

**DENT 1210 Dental Practice Management 1 1 cr**

This course is an introduction to the Dental Practice Management curriculum which is distributed throughout the four year program. It comprises the modules on the Essentials of Effective Leadership and Strategic Leadership; Managing the Workplace and Conflict Resolution; Essentials of Interpersonal Communication Skills; and Team Building.

**DENT 2202 Introduction to Comprehensive Care 4 cr**

This course is an introduction to an integrated, patient-centered program with patient needs as the primary focus. The course introduces students to clinical protocol and patient record documentation and communication. Students receive experience in comprehensive treatment planning as well as basic treatments in periodontics, operative dentistry, and pain control. Course evaluated on a pass/fail basis. May not be held with DENT 2430.

**Mutually Exclusive:** DENT 2430

**DENT 2440 IDDP ORIENTATN 6 cr****DENT 3210 Dental Practice Management 3 1 cr**

This course is the third in a series of Dental Practice Management courses distributed throughout the four-year program. It comprises the modules on managerial decision-making and negotiations; operations management; self-assessment in practice; and effective management of patient and employees.

**DENT 4202 Interdisciplinary Patient Centred Care Case Studies 2 cr**

(Formerly DENT 4020) Lectures and development of portfolio case designed to enable the student to obtain, organize and critically evaluate information in order to facilitate treatment planning. May not be held with DENT 4020.

**Mutually Exclusive:** DENT 4020

**DENT 4210 Dental Practice Management 4 2 cr**

(Formerly RSTD 4170) The management, evaluation, economics, organization, design, location, selection and marketing of a dental practice are covered by lectures and seminars. In addition, ethical considerations of dental practice, the options available to new dental graduates and the role of professional associations are discussed. May not be held with RSTD 4170.

**Mutually Exclusive:** RSTD 4170

**DENT 4222 General Practice Dentistry 10 cr**

This course is designed to consolidate the theoretical and clinical building blocks of all previous dental courses into the development of a comprehensive dental care methodology. Clinical instruction and experience will facilitate the senior dental students in developing effective patient management tools and advance their technical skills to the level of a novice general dentist. May not be held with the former DENT 4030.

**Mutually Exclusive:** DENT 4030

**DENT 4232 General Practice Seminars 2 cr**

Topics relating to General Practice Dentistry are reviewed and reinforced in preparation for clinical practice and National Board Examinations. This course supports the General Practice Dentistry (DENT 4222) program with procedure reviews as needed. May not be held with DENT 4030.

**Mutually Exclusive:** DENT 4030

**DENT 4240 Dental Jurisprudence 1 cr**

(Formerly RSTD 4160) This course provides an overview of the Canadian legal system. It defines and discusses legal concepts relevant to dentistry including issues in negligence, contracts, confidentiality, business and human rights. Identifying a dentist's legal responsibilities to patients, peers, employees, profession and society will underlie the entire course. May not be held with RSTD 4160.

**Mutually Exclusive:** RSTD 4160

## Economics (ECON)

**ECON 1010 Introduction to Microeconomic Principles 3 cr**

This course introduces students to the study of microeconomics. Topics include: demand and supply, price determination, market structure and resource allocation; the behaviour of consumers and firms; and market intervention by government. Selected economic topics are examined such as: welfare programs, environmental regulation, the economics of discrimination, pay equity, and taxation. Students may not hold credit for ECON 1010 and any of: ECON 1011 or ECON 1210 or ECON 1211 or ECON 1220 or ECON 1221 or the former ECON 1200 or the former ECON 1201.

**Equiv To:** ECON 1011

**Mutually Exclusive:** ECON 1200, ECON 1201, ECON 1210, ECON 1211, ECON 1220, ECON 1221

**Attributes:** Social Science, Recommended Intro Courses

**ECON 1020 Introduction to Macroeconomic Principles 3 cr**

This course introduces students to the study of macroeconomics. Topics include: aggregate performance and policy; the determinants of national income, employment and the price level, the role of monetary and fiscal policies in stabilizing the economy and promoting economic growth. Students may not hold credit for ECON 1020 and any of: ECON 1021 or ECON 1210 or ECON 1211 or ECON 1220 or ECON 1221 or the former ECON 1200 or the former ECON 1201.

**Equiv To:** ECON 1021

**Mutually Exclusive:** ECON 1200, ECON 1201, ECON 1210, ECON 1211, ECON 1220, ECON 1221

**Attributes:** Social Science, Recommended Intro Courses

**ECON 1210 Introduction to Canadian Economic Issues and Policies 3 cr**

A survey of some major principles underlying, and influences acting upon the Canadian economy and its regions. Students may not hold credit for ECON 1210 and any of: ECON 1211 or ECON 1010 or ECON 1011 or ECON 1020 or ECON 1021 or the former ECON 1200 or the former ECON 1201.

**Equiv To:** ECON 1211

**Mutually Exclusive:** ECON 1010, ECON 1011, ECON 1020, ECON 1021, ECON 1200, ECON 1201

**Attributes:** Social Science, Recommended Intro Courses

**ECON 1220 Introduction to Global and Environmental Economic Issues and Policies 3 cr**

A survey of some major principles and policies characterizing the world economy and the environment. Students may not hold credit for ECON 1220 and any of: ECON 1221 or ECON 1010 or ECON 1011 or ECON 1020 or ECON 1021 or the former ECON 1200 or the former ECON 1201.

**Equiv To:** ECON 1221

**Mutually Exclusive:** ECON 1010, ECON 1011, ECON 1020, ECON 1021, ECON 1200, ECON 1201

**Attributes:** Social Science, Recommended Intro Courses

**ECON 2010 Microeconomic Theory 1 3 cr**

This course builds on ECON 1010 to examine in greater detail microeconomic concepts of supply, demand, and industry structure. The course also includes the study of externalities, public goods, information asymmetries, and risk and uncertainty. Students may not hold credit for ECON 2010 and any of: ECON 2451, the former ECON 2450, or the former ECON 2700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

**Prerequisite:** [ECON 1010 or ECON 1011 or the former ECON 1200 or the former ECON 1201] or [ECON 1210 (or ECON 1211) and ECON 1220 (or ECON 1221)].

**Equiv To:** ECON 2450, ECON 2451, ECON 2700

**Attributes:** Social Science

**ECON 2020 Macroeconomic Theory 1 3 cr**

A study of classical macroeconomic models of the determination of economic aggregates such as national income, consumption, investment, government spending, exports, imports, and economy-wide variables such as the interest rate, the foreign exchange rate, the price level and inflation, and the unemployment rate. The influence of fiscal and monetary policies on the aggregate economy is examined. Students may not hold credit for ECON 2020 and any of: ECON 2471, the former ECON 2470, or the former ECON 2800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

**Prerequisite:** [ECON 1020 or ECON 1021 or the former ECON 1200 or the former ECON 1201] or [ECON 1210 (or ECON 1211) and ECON 1220 (or ECON 1221)].

**Equiv To:** ECON 2470, ECON 2471, ECON 2800

**Attributes:** Social Science

**ECON 2030 Mathematical Economics 1 3 cr**

Introduction to mathematical methods used in economic analysis including differentiation, matrix algebra, comparative statics, and optimization. Students may not hold credit for both ECON 2030 and the former ECON 2530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

**Prerequisite:** [six credit hours of 1000 level Economics] and [MATH 1230 or MATH 1500 or MATH 1501 or MATH 1520].

**Equiv To:** ECON 2530

**Attributes:** Social Science

**ECON 2040 Quantitative Methods in Economics 3 cr**

An introduction to statistical methods relevant to Economics, which include: descriptive statistics; probability and probability distributions; hypothesis testing; and ordinary least squares regression. The use of contemporary econometric software is required. Students may not hold credit for both ECON 2040 and the former ECON 3170.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

**Prerequisite:** six credit hours of 1000 level Economics.

**Equiv To:** ECON 3170

**Attributes:** Mathematics Requirement, Social Science

**ECON 2050 Economic Analytics Using Computer-based Methods 3 cr**

This computer-based course will introduce basic economic analytics such as index numbers, cost-revenue-profit relationships, demand/supply dynamics, decision-making using probability models, investment decisions, time-value of money, seasonal adjustment of data, forecasting, measures of poverty/inequality, and optimization methods such as linear programming. Students will also gain proficiency in numerical computation such as Excel, an important analytical tool used in business, government, and academic research for managing and analyzing data. Students may not hold credit for both ECON 2050 and the former ECON 2610 when titled "Measurement and Computation in Economics."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of 1000 level Economics.

**Mutually Exclusive:** ECON 2610

**Attributes:** Social Science

**ECON 2310 Canadian Economic Problems 6 cr**

Application of economic theory to a broad range of problems such as agriculture, trade, foreign ownership, regional disparities, competition policy, education. Students may not hold credit for both ECON 2310 and ECON 2311.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of 1000 level Economics.

**Equiv To:** ECON 2311

**Attributes:** Social Science

**ECON 2350 Community Economic Development 3 cr**

A study of the economic development problems of northern and Indigenous communities in Manitoba. Students may not hold credit for ECON 2350 and any of: INDG 3120 or the former NATV 3120 or the former NATV 4310.

**Mutually Exclusive:** INDG 3120, NATV 3120, NATV 4310

**Attributes:** Social Science

**ECON 2362 Economics of Gender 3 cr**

This course will use both neo-classical and feminist economic theory to explore how gender differences may lead to different economic outcomes for men and women, both within families and in the marketplace. Topics covered may include gender aspects of production (both inside and outside the household), leisure, marriage and divorce, fertility, childcare, education, migration, aging and development. Students may not hold credit for both ECON 2362 and the former ECON 2360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 1010 or ECON 1011 or ECON 1210 or ECON 1211 or the former ECON 1200 or the former ECON 1201.

**Mutually Exclusive:** ECON 2360

**Attributes:** Social Science

**ECON 2390 Introduction to Environmental Economics 3 cr**

The economics of management of water, air and land resource quality, and the economics of conservation. The economic implications of environmental standards, licensing, criteria and pollution charges will be illustrated by current issues. Students may not hold credit for both ECON 2390 and ABIZ 2390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 1010 or ECON 1011 or the former ECON 1200 or the former ECON 1201] or [ECON 1210 (or ECON 1211) and ECON 1220 (or ECON 1221)].

**Equiv To:** ABIZ 2390

**Attributes:** Social Science

**ECON 2400 Introduction to Energy Economics 3 cr**

A study of the economic relationships in energy production, consumption, demand and supply, pricing and conservation, energy policy and the development of new and renewable energy sources.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of 1000 level Economics.

**Attributes:** Social Science

**ECON 2410 The Manitoba Economy 3 cr**

Application of economic theory to the historical development and present structure of the provincial economy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none.

**Attributes:** Social Science

**ECON 2510 The Economy of Ukraine 3 cr**

A study of the Ukrainian economy in Eastern Europe: socioeconomic history, state and structure of the Ukrainian economy within the former Soviet Union, prospects and problems of economic restructuring.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none.

**Attributes:** Social Science

**ECON 2520 Economics of Sports and Leisure 3 cr**

Economic analysis of current issues in professional and amateur sports, and leisure.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none.

**Attributes:** Social Science

**ECON 2540 Political Economy 1: Production and Distribution 3 cr**

A study of the theories, institutions, policies and relations of power in national and global economic society with reference to the production of market and non-market goods and services and the distribution of necessary and surplus output. Particular attention will be given to the role of the state in the regulation of markets and the distribution of surplus.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of 1000 level Economics.

**Attributes:** Social Science

**ECON 2550 Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment 3 cr**

A study of the theories, institutions, policies and relations of power in national and global economic society with reference to economic growth, international trade and finance, economic fluctuations, inflation and unemployment. Particular attention will be given to the role of the state in the regulations of macroeconomic activity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of 1000 level Economics.

**Attributes:** Social Science

**ECON 2610 Special Topics in Economics 3 cr**

This course will vary from year to year depending on the needs of students and the interests and availability of instructors. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of 1000 level Economics] or written consent of instructor.

**Mutually Exclusive:** ECON 2050, ECON 2670

**Attributes:** Social Science

**ECON 2620 Special Topics in Economics 6 cr**

This course will vary from year to year depending on the needs of students and the interests and availability of instructors. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of 1000 level Economics] or written consent of instructor.

**Attributes:** Social Science

**ECON 2630 An Introduction to the World's Economies 6 cr**

An examination of the world's economies from a broad-based economics perspective (including economic theories, institutional perspectives and historical evidence) to explain the development and limits of the world's changing and differing economies, and economic growth patterns in the light of the private business sector, labour relations and the role of the state. Students may not hold credit for both ECON 2630 and ECON 2620 Special Topics in Economics when titled Introduction to the World's Economies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of 1000 level Economics.

**Attributes:** Social Science

**ECON 2670 Income Distribution 3 cr**

An introduction to how income, and its accumulation as wealth, is distributed between individuals, as well as between classes of economic actors. Measures of income inequality, wealth and poverty are introduced. Empirical data and theories aimed at explaining the distribution of income and broad trends that have emerged over time are reviewed. Redistributive policies undertaken by governments and various normative approaches to the economic analysis of income inequality are also examined, with an emphasis on modern policy options and challenges. Students may not hold credit for both ECON 2670 and ECON 2610 when offered with the topic "Income Distribution".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of 1000 level Economics] or written consent of instructor.

**Mutually Exclusive:** ECON 2610

**Attributes:** Social Science

**ECON 3010 Microeconomic Theory 2 3 cr**

This course uses basic calculus and optimization techniques to study consumer and firm behaviour, demand and supply theory, monopoly, monopolistic competition, oligopoly, and the Edgeworth Box analysis of an exchange economy. Students may not hold credit for ECON 3010 and any of: ECON 2461, the former ECON 2460, or the former ECON 3700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 2010 (C+) or ECON 2451 (C+) or the former ECON 2450 or the former ECON 2700] and [MATH 1230 or MATH 1500 or MATH 1501 or MATH 1520].

**Equiv To:** ECON 2460, ECON 2461, ECON 3700

**Attributes:** Social Science

**ECON 3020 Macroeconomic Theory 2 3 cr**

Theories of national income, employment, inflation, balance of payments, stabilization policy, and economic growth within the framework of macroeconomic models of an open economy with particular attention to empirical evidence from Canada, the U.S., and other countries. This course requires the use of calculus. Students may not hold credit for ECON 3020 and any of: ECON 2481, the former ECON 2480, or the former ECON 3800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 2020 (C+) or ECON 2471 (C+) or the former ECON 2470 or the former ECON 2800] and [MATH 1230 or MATH 1500 or MATH 1501 or MATH 1520].

**Equiv To:** ECON 2480, ECON 2481, ECON 3800

**Attributes:** Social Science

**ECON 3030 Mathematical Economics 2 3 cr**

Mathematical methods used in economic analysis. Topics will include optimization with constraints, exponential and logarithmic functions, integrals, dynamic analysis, basic differential equations, and Hamiltonians. Students may not hold credit for both ECON 3030 and the former ECON 3730.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 2030 or the former ECON 2530] or written consent of instructor.

**Equiv To:** ECON 3730

**Attributes:** Social Science

**ECON 3040 Introduction to Econometrics 3 cr**

This course builds on ECON 2040 by introducing: multivariate ordinary least squares regression using matrices; heteroscedasticity; and autocorrelation. Additional topics may include: instrumental variables; binary choice models; and panel data models. Students may not hold credit for ECON 3040 and either ABIZ 3080 or the former ECON 3180.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 2040 (C+) or the former ECON 3170 (C+)] or [six credit hours of 1000 level Economics and STAT 2000 or STAT 2001].

**Equiv To:** ABIZ 3080, ECON 3180

**Attributes:** Social Science

**ECON 3160 Managerial Economics 3 cr**

An introduction to the economic foundations of managerial decision making, which includes pricing strategies, boundaries of the firm, investment in human capital, and incentive contract design. Also offered by Management as GMGT 3160. May not be held with GMGT 3160.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 1010 (or ECON 1011) and ECON 1020 (or ECON 1021), or the former ECON 1200, or the former ECON 1201] and [MATH 1230 or MATH 1500 (or MATH 1501) or MATH 1510 or MATH 1520].

**Equiv To:** GMGT 3160

**Attributes:** Social Science

**ECON 3362 Labour Economics 1 3 cr**

An introduction to labour economics, including labour supply, labour demand and the determination of wages and employment. Students may not hold credit for both ECON 3362 and the former ECON 3360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 2010 or ECON 2451 or the former ECON 2450 or the former ECON 2700.

**Mutually Exclusive:** ECON 3360

**Attributes:** Social Science

**ECON 3364 Labour Economics 2 3 cr**

Analysis of topics in labour economics such as unemployment, immigration, gender discrimination and the impact of unions. Students may not hold credit for both ECON 3364 and the former ECON 3360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 3362.

**Mutually Exclusive:** ECON 3360

**Attributes:** Social Science

**ECON 3374 Public Expenditure Analysis and Policy Evaluation 3 cr**

The study of the role of government in the economy, government budget and expenditure evaluation issues, benefit-cost analysis, as well as government intervention regulation, public pricing, and ownership issues. Students may not hold credit for both ECON 3374 and the former ECON 3370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 2010 or ECON 2451 or the former ECON 2450 or the former ECON 2700.

**Mutually Exclusive:** ECON 3370

**Attributes:** Social Science

**ECON 3376 Taxation, Tax Policy and Inter-government Public Finance Issues 3 cr**

A study of the principles of taxation, tax policy in Canada and elsewhere, government deficit and debt issues and fiscal federalism with emphasis on inter-governmental finance issues. Students may not hold credit for both ECON 3376 and the former ECON 3370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: in ECON 2010 or ECON 2451 or the former ECON 2450 or the former ECON 2700.

**Mutually Exclusive:** ECON 3370

**Attributes:** Social Science

**ECON 3392 An Introduction to Development Economics 3 cr**

The definition and major challenges of development and an introduction to theories of growth and development. Students may not hold credit for both ECON 3392 and the former ECON 3390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 2010 or ECON 2451 or the former ECON 2450 or the former ECON 2700] and [ECON 2020 or ECON 2471 or the former ECON 2470 or the former ECON 2800] or written consent of instructor.

**Mutually Exclusive:** ECON 3390

**Attributes:** Social Science

**ECON 3394 Development Economics: Problems and Policies 3 cr**

Processes and problems of development policies to accelerate change. Economic relations between developed and developing regions. Students may not hold credit for both ECON 3394 and the former ECON 3390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 2010 or ECON 2451 or the former ECON 2450 or the former ECON 2700] and [ECON 2020 or ECON 2471 or the former ECON 2470 or the former ECON 2800] and [ECON 3392 or ECON 2630] or written consent of instructor.

**Mutually Exclusive:** ECON 3390

**Attributes:** Social Science

**ECON 3610 Special Studies 3 cr**

This reading course will vary from year to year depending on the needs of students and the interests of instructors. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Social Science

**ECON 3620 Special Studies 6 cr**

This reading course will vary from year to year depending on the needs of students and the interests of instructors. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Social Science

**ECON 3640 Economics of the Financial System 3 cr**

Flows of funds through the financial system; savings and investment and asset choices of households and firms; intermediation by financial institutions; arbitrage between and within countries, government financial policy, with special reference to Canada. Students may not hold credit for ECON 3640 and any of: ECON 3641 or FIN 3460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 2010 or ECON 2451 or ECON 3010 or ECON 2461 or the former ECON 2450 or the former ECON 2460 or the former ECON 2700 or the former ECON 3700.

**Equiv To:** ECON 3641

**Mutually Exclusive:** FIN 3460

**Attributes:** Social Science

**ECON 3650 Monetary Macroeconomics and Policy 3 cr**

Demand for and supply of money; term structure of interest rates; tools of central banking; design and conduct of monetary policy. Students may not hold credit for both ECON 3650 and ECON 3651.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 2020 or ECON 2471 or ECON 3020 or ECON 2481 or the former ECON 2470 or the former ECON 2480 or the former ECON 2800 or the former ECON 3800.

**Equiv To:** ECON 3651

**Attributes:** Social Science

**ECON 3670 International Trade 3 cr**

A study of the theory of international trade and modern trade issues including the effect of economic integration on growth, distribution, national policy and the environment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 2010 or ECON 2451 or the former ECON 2450 or the former ECON 2700. ECON 3010 or ECON 2461 or the former ECON 2460 is recommended.

**Attributes:** Social Science

**ECON 3680 International Finance 3 cr**

A study of the theory of international financial markets and issues in open economy macroeconomics focusing on the balance of payments, exchange rates and the effects of international financial integration on national economies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 2020 or ECON 2471 or the former ECON 2470 or the former ECON 2800. ECON 3020 or ECON 2481 or the former ECON 2480 is recommended.

**Attributes:** Social Science

**ECON 3690 Economic Issues of Health Policy 3 cr**

The structure, functioning and financing of the Canadian health care delivery system and the demand for health care in Canada.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of 1000 level Economics.

**Attributes:** Social Science

**ECON 3692 Economic Determinants of Health 3 cr**

The objective of this course is to provide an economics perspective on the epidemiological transition from infectious to chronic disease. This course will contrast the biomedical, consumer choice and political economy approaches and their policy implications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 1010 or ECON 1011 or ECON 1210 or ECON 1211 or the former ECON 1200 or the former ECON 1201.

**Attributes:** Social Science

**ECON 3710 Sustainable Development: Issues and Policy 3 cr**

An examination of the theory and practice of economic sustainability, ecological sustainability, and social sustainability, with emphasis on analysing current issues and designing policies to achieve sustainable development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of 1000 level Economics.

**Attributes:** Social Science

**ECON 3720 Urban and Regional Economics and Policies 3 cr**

An introduction to the study of the determinants of the spatial distribution of economic activity among urban centres and regions. Particular attention will be paid to such contemporary Canadian problems as regional disparities, urban and environmental decay, and urban renewal, and the policy issues involved in dealing with these problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 2010 or ECON 2451 or the former ECON 2450 or the former ECON 2700.

**Attributes:** Social Science

**ECON 3742 Industrial Organization and Firm Strategy 3 cr**

Market structure and firms' strategic decisions will be analyzed. Topics may cover monopoly pricing strategies such as price discrimination; non-pricing strategies such as advertising, quality decisions and differentiated products; dynamic oligopoly models; mergers; anti-competitive behaviour; and auctions. This course assumes students have a sound background in economic theory, as well as single-variable calculus and basic statistics. Students may not hold credit for both ECON 3742 and the former ECON 3740.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 2010 or ECON 2451 or the former ECON 2450 or the former ECON 2700] or written consent of instructor.

**Mutually Exclusive:** ECON 3740

**Attributes:** Social Science

**ECON 3810 Alternative Approaches to Macroeconomic Analysis 3 cr**

A survey of Post-Keynesian, Cambridge, Marxian, and institutionalist approaches to macroeconomic fluctuations, contrasting their theoretical and policy frameworks with those of mainstream macroeconomics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 2020 (C+) or ECON 2471 (C+) or the former ECON 2470 or the former ECON 2800.

**Attributes:** Social Science

**ECON 4010 Advanced Microeconomic Theory 3 cr**

An intensive study of advanced microeconomic analysis using optimization techniques involving multivariate calculus. Topics will include consumer theory, producer theory, general equilibrium, intertemporal choice, risk and insurance markets, and asymmetric information (moral hazard and adverse selection).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 3010 (B) or ECON 2461 (B) or the former ECON 2460 or the former ECON 3700.

**Attributes:** Social Science

**ECON 4012 Topics in Advanced Microeconomic Theory 3 cr**

An intensive review of selected topics in advanced microeconomic theory. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 3010 (B) or ECON 2461 (B) or the former ECON 2460 or the former ECON 3700.

**Attributes:** Social Science

**ECON 4020 Topics in Advanced Macroeconomic Theory 3 cr**

An intensive review of selected topics in advanced macroeconomic theory. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 3020 (B) or ECON 2481 (B) or the former ECON 2480 or the former ECON 3800.

**Attributes:** Social Science

**ECON 4040 Seminar in Applied Econometrics 3 cr**

An applied course with a research component that incorporates real-world data and contemporary econometric software with an emphasis on the application of econometrics to a range of microeconomic and macroeconomic problems. Topics may include: endogeneity; instrumental variables; generalized method of moments; generalized least squares; limited dependent variable models; univariate and multivariate time series models; and panel data models. Students may not hold credit for ECON 4040 and any of: ABIZ 4120 or the former ECON 4120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 3040 (C+) or the former ECON 3180.

**Equip To:** ABIZ 4120, ECON 4120

**Attributes:** Social Science

**ECON 4042 Topics in Econometrics 3 cr**

This is a theoretical course that addresses more advanced econometric topics with the intent of preparing students for graduate-level studies in econometrics. Standard topics will be examined in more depth. Students may not hold credit for both ECON 4042 and the former ECON 4130.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 3040 (C+) or the former ECON 3180.

**Equip To:** ECON 4130

**Attributes:** Social Science

**ECON 4050 History of Economic Thought 1 3 cr**

A seminar course on the history of economic thought up to 1870.

Attention is given to the evolution and significance of major theoretical concepts and approaches, the people who developed them and the attendant social, intellectual and economic context. Students may not hold credit for both ECON 4050 and the former ECON 4410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Mutually Exclusive:** ECON 4410

**Attributes:** Social Science

**ECON 4052 History of Economic Thought 2 3 cr**

A seminar course on the history of economic thought since 1870.

Attention is given to the evolution and significance of major theoretical concepts and approaches, the people who developed them, and the attendant social, intellectual and economic context. Students may not hold credit for both ECON 4052 and the former ECON 4410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 4050.

**Mutually Exclusive:** ECON 4410

**Attributes:** Social Science

**ECON 4140 Evaluation of Economic Policy and Programs 3 cr**

This is a course in applied micro-economic policy analysis using the techniques of cost-benefit analysis as its foundation. Students will learn the welfare foundations of cost-benefit analysis, techniques for decision-making under conditions of risk and uncertainty, and how these techniques may be applied to public policy. The course will include examples from all areas of public policy, including health, education, social services criminal justice, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Social Science

**ECON 4430 Theories of Economic Development 6 cr**

A study of theories, problems, and policies of economic growth and development both for advanced and underdeveloped countries.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor. ECON 2020 (or the former ECON 2800) and ECON 3020 (or the former ECON 3800) are recommended but not required.

**Attributes:** Social Science

**ECON 4490 Special Studies 3 cr**

This readings course will vary from year to year depending on the needs of students and the interests of instructors. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Social Science

**ECON 4500 Special Studies 6 cr**

This readings course will vary from year to year depending on the needs of students and interests of instructors. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Social Science

**ECON 4610 Economics and Society Field Placement Seminar 3 cr**

A seminar to be taken concurrently with ECON 4620 in which each student will relate theory and practice. This course is also offered as GPE 4510 and LABR 4510. Students may not hold credit for ECON 4610 and either GPE 4510 or LABR 4510. Intended for students in the Economics Single Advanced Major (Economics and Society Stream) or Honours (Economics and Society Stream).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Associate Head (Economics and Society Stream). Corequisite: ECON 4620.

**Equiv To:** GPE 4510, LABR 4510

**Attributes:** Social Science

**ECON 4620 Economics and Society Field Placement 6 cr**

An educationally directed field experience in which the student will undertake specific tasks and assignments in some aspects of Community Economic Development and/or economic policy. Field placement options include community-based organizations, government departments and agencies, policy and research organizations, unions, and other employers. This course is also offered as GPE 4520 and LABR 4520. Students may not hold credit for ECON 4620 and either GPE 4520 or LABR 4520. Intended for students in the Economics Single Advanced Major (Economics and Society Stream) or Honours (Economics and Society Stream).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Associate Head (Economics and Society Stream). Corequisite: ECON 4610.

**Equiv To:** GPE 4520, LABR 4520

**Attributes:** Social Science

**ECON 4820 Workshop on Canadian Economic Policy 6 cr**

In depth examination of policy issues on selected topics such as unemployment, inflation, international trade, transfer payments, health care, the environment. A major research paper will be expected of all students. Registration is restricted to students who have formally declared an Advanced Major in Economics or Honours Economics. Students may not hold credit for ECON 4820 and any of: ECON 4822 or the former ECON 4830.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 2040 (or the former ECON 3170) and ECON 3040 (or the former ECON 3180)] and [ECON 2010 (or ECON 2451 or the former ECON 2450 or the former ECON 2700) and [ECON 3010 (or ECON 2461 or the former ECON 2460 or the former ECON 3700)] and [ECON 2020 (or ECON 2471 or the former ECON 2470 or the former ECON 2800)] and [ECON 3020 (or ECON 2481 or the former ECON 2480 or the former ECON 3800)].

**Equiv To:** ECON 4830

**Attributes:** Social Science

**ECON 4822 Economic Research and Communication 6 cr**

This is the capstone course for students in their final year of the B.A. (Adv.) major in Economics. The aim of this course is to develop some of the research, analytical, and writing skills that will allow students to utilize knowledge and quantitative skills acquired in previous economics courses. Students may not hold credit for ECON 4822 and any of: ECON 4820 or the former ECON 4830. Registration is restricted to students who have formally declared an Advanced Major in Economics or Honours Economics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [ECON 3040 (or the former ECON 3180)] and [ECON 3010 (or ECON 2461 or the former ECON 2460 or the former ECON 3700)] and [ECON 3020 (or ECON 2481 or the former ECON 2480 or the former ECON 3800)] and completion of 90 credit hours at the time of registration.

**Equiv To:** ECON 4820, ECON 4830

**Attributes:** Social Science

## Education Admin, Fndns & Psych (EDUA)

**EDUA 1560 Adult Learning and Development 3 cr**

A study of the extensive knowledge of lifespan development and its importance for adult education practitioners. With a focus on development, learning and change, emphasis is placed on the importance of context and individual differences in adult learning.

**EDUA 1570 Foundations of Adult Education 3 cr**

An introduction to the field of Education from a local and global perspective. Attention will be given to historical movements in adult education, philosophical perspectives, participation and motivation, transformative perspectives on adult learning, and current and future perspectives on adult education. Not to be held with EDUA 5300.

**Equiv To:** EDUA 5300

**EDUA 1580 Program Planning in Adult Education 3 cr**

An introduction to the theory and practice of program planning in adult education. Attention is given to the context in which learning is to take place, the structuring of adult learning opportunities, and the logistics of successful programming.

**EDUA 1590 Facilitating Adult Education 3 cr**

A study of theoretical and practical aspects of facilitation in adult education.

**EDUA 3000 Canadian School Systems and Their Public Purposes 3 cr**

The purpose of the course is to explore with teacher candidates the ways in which schooling and teachers work is shaped by, and shapes, particular administrative, social, political, economic, historical, legal, organizational, and professional contexts. May not be held with EDUA 2810.

**Equiv To:** EDUA 2810

**EDUA 3002 Contested Spaces in Education 3 cr**

An examination of educational ideas and practices that are often contested in the context of a diverse society. The course also focuses on understanding schooling through historical, philosophical, sociological, and cross-cultural perspectives. May not be held with EDUA 1810.

**Equiv To:** EDUA 1810

**EDUA 3404 Indigenous Education 3 cr**

A study of fundamental issues, philosophies, and models of Indigenous education. Within a multi-modal and interactive setting, cultural, spiritual, social, and political perspectives regarding Indigenous education will be critically explored. May not be held with the former EDUA 1500 or the former EDUA 3400.

**Equiv To:** EDUA 1500, EDUA 3400

**EDUA 3420 Cross-Cultural Education 3 cr**

Theory and practical applications related to understanding the complexities of culture, race, ethnicity, social inequality in classrooms, focusing on Aboriginal groups, immigration, and the needs of students in culturally diverse classrooms. May not be held with EDUA 1540.

**Equiv To:** EDUA 1540

**EDUA 3500 Recent Developments in Educational Administration and Foundations 3 cr**

Topics will vary depending on the needs and interests of students, and will include specialized topics in educational administration and foundations.

**EDUA 3502 Recent Developments in Educational Psychology 3 cr**

Topics will vary depending on the needs and interested of teacher candidates, and will include specialized topics in educational psychology not studied in regular program courses.

**Mutually Exclusive:** EDUA 3422

**EDUA 3506 Foundations of Moral and Religious Education 3 cr**

Examination of the theory and practice of moral and religious education, including curricular and pedagogical issues in both humanistic and religious perspectives. May not be held with EDUA 1510.

**Equiv To:** EDUA 1510

**EDUA 3508 Measurement and Evaluation 3 cr**

Theory and practical applications are stressed in the preparation, use, and interpretation of various approaches to assessing student learning. May not be held with EDUA 1502.

**Equiv To:** EDUA 1502

**EDUA 3510 Communication and Interpersonal Relationships in Education 3 cr**

The purpose of this course is to help teacher candidates increase their awareness, understanding and proficiency in communication and interpersonal relationships. Emphasis in this course is on the integration of theory, research and practice in the areas of communication and interpersonal relationships in schools. May not be held with EDUA 1550.

**Equiv To:** EDUA 1550

**EDUA 4000 Inclusive Education 3 cr**

An examination of concepts and issues related to meeting the diverse needs of all students, including methods and resources that respond to diversity in classrooms and schools. May not be held with EDUA 2800.

**Equiv To:** EDUA 2800

**EDUA 5010 Introduction to Educational Administration 3 cr**

A study of the basic concepts, tasks and processes of administration as they apply to education. Not to be held with EDUA 5011.

**Equiv To:** EDUA 5011

**EDUA 5012 Legal and Administrative Aspects of Schools for Clinicians 3 cr**

This course will involve an examination of the form, functioning and organizational aspects of schooling through the lenses of legislation, policy, and public expectations. Students will gain an understanding of The Public Schools Act and The Education Administration Act (and associated Regulations), as well as other pertinent statutes, and their individual and collective application to, and impact upon, the work of school personnel in Manitoba. May not be held for credit with EDUA 5080 where title is "Legal and Administrative Aspects of Schools for Clinicians".

**Mutually Exclusive:** EDUA 5080

**EDUA 5014 Educational Leadership 3 cr**

This course focuses on the concept of educational leadership and its relevance to the organization of schooling (primarily public schooling) in Manitoba and the lives of those people (students, teachers, parents, administrators etc.) most closely associated with school. May not be held with EDUA 5080 when titled "Educational Leadership".

**Mutually Exclusive:** EDUA 5080

**EDUA 5020 Principles of Curriculum Development 3 cr**

An examination of approaches to curriculum design. Influences on the design process, and aspects of implementation. Emphasis is given to teacher participation in creating curriculum. Not to be held with EDUA 5021.

**Equiv To:** EDUA 5021

**EDUA 5030 Management of Educational Institutions 3 cr**

A study of basic patterns of organization and the administrator's role in educational institutions. The focus is on decision making, communicating, planning and evaluating in educational institutions. Not to be held with EDUA 5031.

**Equiv To:** EDUA 5031

**EDUA 5040 Personnel Administration in Education 3 cr**

An examination of the administrator's relationships with other personnel in education, with emphasis on personnel policy, staff development and motivation. Not to be held with EDUA 5041.

**Equiv To:** EDUA 5041



**EDUA 5060 Principles of Instructional Supervision 3 cr**

An analysis of theoretical models of instruction and supervision and their application in education. Not to be held with EDUA 5061.

**Equiv To:** EDUA 5061

**EDUA 5080 Recent Developments in Educational Administration 1 3 cr**

An opportunity to examine the theoretical bases for, and application of, recent or emerging developments in educational administration.

**Mutually Exclusive:** EDUA 5012, EDUA 5014, EDUA 5302

**EDUA 5090 Recent Developments in Educational Administration 2 3 cr**

A continuation of certain topics of EDUA 5080 to extend and develop studies previously undertaken in these areas.

**EDUA 5100 Issues in the Administration of Education 3 cr**

An analysis of issues in the administration of educational organizations. Not to be held with EDUA 5101.

**Equiv To:** EDUA 5101

**EDUA 5200 Readings in Educational Foundations 3 cr**

Readings and research in selected areas of the study of education.

**EDUA 5210 Recent Developments in Educational Foundations 1 3 cr**

An opportunity to examine the theoretical bases for, and application of, recent or emerging developments in educational foundations.

**EDUA 5230 Studies in International Education 3 cr**

An examination of educational issues and practices in other countries, especially those of the third world. Emphasis will be given to teaching and administration in developing countries.

**EDUA 5302 Gender and Sexual Diversity in Education and Community 3 cr**

This course explores the various historical, political, and social struggles facing lesbian, gay, bisexual, trans\*, two-spirit, and queer (LGBT2Q) people in educational contexts and their communities. The course explores LGBT2Q experiences with, and concerns relating to, policy, curriculum, administration, school experience, support, pedagogy, and community organizations. Students in this course will learn strategies for making their learning environments more inclusive of gender and sexuality diversity. May not be held with EDUA 5080 when titled "LGBTQ Issues in Education & Community" or "Gender and Sexual Diversity in Education and Community."

**Mutually Exclusive:** EDUA 5080

**EDUA 5480 Counselling Skills 3 cr**

Emphasis will be on the development of counselling skills such as attending and listening, reflection of content and feelings, feedback and self-disclosure, focusing and summarization. This course is evaluated on a pass/fail basis. May not be held with EDUA 5481. While students from other departments including Psychology and Social Work can enrol in this course, priority will be given to Education students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: EDUA 5500 or EDUA 5501.

**Equiv To:** EDUA 5481

**EDUA 5490 Field Placement in Counselling 3 cr**

A field-based counselling situation for students to apply counselling skills under qualified professionals in the field, and supported by university instructors. This course is evaluated on a pass/fail basis. Enrolment limited. Not to be held with EDUA 5491.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: [EDUA 5500 or EDUA 5501] and [EDUA 5480 or EDUA 5481 (P)].

**Equiv To:** EDUA 5491

**EDUA 5500 Theories and Issues in Counselling 3 cr**

A study of the philosophy and theories of counselling, issues in school and community-based settings. May not be held with EDUA 5501.

**Equiv To:** EDUA 5501

**EDUA 5510 Elementary School Counselling 3 cr**

An examination of the role and functions of the counsellor in the elementary school. Not to be held with EDUA 5511.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: EDUA 5500 or EDUA 5501.

**Equiv To:** EDUA 5511

**EDUA 5520 Ethics in Counselling 3 cr**

In this course, participants will be introduced to the Codes of Ethics for counsellors. Major ethical issues related to the following topics will be discussed: informed consent, confidentiality, record-keeping, boundary issues, training and competence, clinical supervision and multicultural and diversity issues. Participants will get an opportunity to practice various ethical decision-making models.

**EDUA 5530 Secondary School Counselling 3 cr**

A study of counselling as related to secondary-school practice. Emphasis on the secondary-school counsellor's role and functions. Examination of the various counsellor services: educational, orientation, staff, etc. Not to be held with EDUA 5531.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: EDUA 5500 or EDUA 5501.

**Equiv To:** EDUA 5531

**EDUA 5540 Group Counselling 3 cr**

A study of groups, group leadership and related skill development, especially as related to a counsellor's functioning in the schools and community-based settings. May not be held with EDUA 5541.

**Equiv To:** EDUA 5541

**EDUA 5550 Psychology of Human Relationships 3 cr**

A study of interpersonal relationships. A laboratory approach is used to increase the personal sensitivity of the participants to people. Particularly suitable for teachers, school administrators, and other professionals. Not to be held with EDUA 5551.

**Equiv To:** EDUA 5551

**EDUA 5570 Family Life Education 3 cr**

A study of human sexuality and family relationships. Consideration is given to research findings, teaching resources and the methods, development, and cooperation with home and community. Not to be held with EDUA 5571.

**Equiv To:** EDUA 5571

**EDUA 5580 Career Development 3 cr**

Study and application of theories of career development, occupational choice, and decision making; evaluation and design or self-knowledge programs in counselling for decision. Not to be held with EDUA 5581.

**Equiv To:** EDUA 5581

**EDUA 5590 Career Information 3 cr**

A study of work, local employment, and training; analysis of career information; evaluation and design of career resource centres; a development study of career education.

**EDUA 5602 Introduction to Inclusive Education 6 cr**

A survey course for educators interested in inclusive education- legislative, pedagogical, attitudinal and systemic barriers to inclusion and exemplary inclusive provisions are covered. Topics include SRV, the organization and implementation of inclusive classroom, school-wide, and community supports. May not be held with the former EDUA 5600 or EDUA 5601.

**Equiv To:** EDUA 5600, EDUA 5601

**EDUA 5612 Field Experience in Inclusive Education 6 cr**

A field-based situation for full or part-time students to apply inclusive education skills under the supervision of qualified school staff and supported by professional peer mentors and university instructors. Approximately 160 hours of field-based service required. This course is evaluated on a pass/fail basis. May not be held with the former EDUA 5610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisites: [EDUA 5602 (or the former EDUA 5600) or EDUA 5601 or equivalent] and [EDUA 5632 (or the former EDUA 5630) or EDUA 5631 or equivalent] and [EDUA 5662 (or the former EDUA 5660) or EDUA 5661 or equivalent].

**Equiv To:** EDUA 5610

**EDUA 5620 Teaching Children Through Alternative and Augmented Communication 3 cr**

An examination of alternative and augmented communication issues, services, supports, and inclusive teaching and learning strategies.

**EDUA 5632 Assessment and Instruction in Inclusive Education 6 cr**

An examination of curriculum-based and classroom-based assessment to guide the instruction of students experiencing learning or behavioral difficulties in inclusive classrooms. May not be held with the former EDUA 5630 or EDUA 5631.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisites: EDUA 5602 (or the former EDUA 5600) or EDUA 5601 or equivalent.

**Equiv To:** EDUA 5630, EDUA 5631

**EDUA 5642 Inclusive Education: Transition from School to Adult Life 3 cr**

An examination of the practices for supporting students from preschool until they transition into adulthood, including the nature of support services and an analysis of factors influencing program development and effectiveness. May not be held with the former EDUA 5640 or the former EDUA 5650.

**Mutually Exclusive:** EDUA 5640, EDUA 5650

**EDUA 5652 FASD and other Neurodiverse Conditions in the Classroom 3 cr**

This course will examine how FASD and other neuro-behavioural/ developmental conditions are diagnosed, and their associated learning and behavioural characteristics. Theoretical academic frameworks and educational strategies to optimize students' success in the classroom also will be explored. May not be held with the former EDUA 5770.

**Equiv To:** EDUA 5770

**EDUA 5662 Delivering Supports for Inclusive Education 3 cr**

A critical study of the nature of learning support and an analysis of factors influencing program development and effectiveness. May not be held with the former EDUA 5660 or EDUA 5661.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisites: EDUA 5602 (or the former EDUA 5600).

**Equiv To:** EDUA 5660, EDUA 5661

**EDUA 5680 Promoting Responsible Behaviour in Educational Settings 3 cr**

The course is designed to provide teachers with an understanding of the needs of children who display maladaptive behaviours in a school setting. Conceptualization of behaviour disorders, identification/assessment procedures, and intervention strategies will be studied. The purpose of the course is to enable teachers to generate intervention strategies which are appropriate in an educational setting. Not to be held with EDUA 5681.

**Equiv To:** EDUA 5681

**EDUA 5690 Focus on Exceptionality: Gifted and Talented 3 cr**

Students will be introduced to various topics and issues in the realm of gifted education, including theoretical models; relevant research, and appropriate teaching and assessment practices.

**EDUA 5710 Readings in Educational Psychology 1 3 cr**

Directed readings and study of topics in various aspects of education from the psychological viewpoint.

**EDUA 5730 Recent Developments in Educational Psychology 1 3 cr**

An opportunity to examine the theoretical bases for, and practical application of, recent or emerging developments in this area.

**Mutually Exclusive:** EDUA 5614

**EDUA 5740 Recent Developments in Educational Psychology 2 3 cr**

An opportunity to examine the theoretical bases for, and practical application of, recent or emerging developments in this area.

**EDUA 5760 Psychology of Instruction in Educational Contexts 3 cr**

Designed primarily, although not exclusively, for classroom teachers and school personnel. A critical examination of major theoretical foundations and models of instruction. The course aims at the integration and application of traditional and emerging approaches and strategies of classroom instruction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [EDUA 1800] or [PSYC 1200], or equivalent.

**Equiv To:** EDUA 5761

**EDUA 5800 Introduction to Educational Research 3 cr**

A study of scientific inquiry in the field of education. Research and statistical methods are surveyed within the context of educational research. Particularly recommended for students interested in the evaluation and application of research findings. Not to be held with EDUA 5801.

**Equiv To:** EDUA 5801

**EDUA 5810 Theory of Test Construction 3 cr**

Particular attention is given to problems of item analysis, validity, reliability, and test evaluation in the educational setting. Norm and criterion referenced tests are considered. Not to be held with EDUA 5811.

**Equiv To:** EDUA 5811

**EDUA 5930 Observing Child Behaviour 3 cr**

The use of qualitative observation techniques, especially in educational settings, to understand children's behaviour, thinking, and motivations.

**Equiv To:** EDUA 5931

**EDUA 5940 Language and Symbolic Process 3 cr**

The focus in this course is on the role of symbolic learning in the development of the young child. A study of theories on symbol formation is intended to serve as a framework for examining the emergence of representational capacities in movement, gesture, play, drawing and three dimensional media.

## Education Curric, Tchg, & Lrng (EDUB)

### EDUB 1600 Teaching General Music 3 cr

A study of teaching music in Early and Middle Years schools. For both classroom teachers and Music specialists, the course covers all traditional areas of music instruction as well as music's role across the curriculum.

### EDUB 1610 CyberPedagogy: Technology Production in Education 3 cr

An examination of technologies in education focusing on the production, and creation of educational computer-based new media.

**Equiv To:** EDUB 1810, EDUB 1840

### EDUB 1614 K-8 Curriculum Studies 3 cr

A focused study of the philosophy, purposes and content of K-8 provincial curriculum documents; current learning theories, teaching approaches and instructional planning in both discipline-based and interdisciplinary contexts; and assessment and evaluation of student learning. Not to be held with EDUB 1840 where the course section taken was "General Curriculum."

### EDUB 2160 Teaching Music in Early/Middle Years 3 cr

The specialized study and application of curriculum, instructional approaches and techniques relevant to music education at the early and middle years levels (K-8). This course is intended for music specialists (music majors/minors, or with permission or instructor).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 1200 and EDUB 1940 or permission of instructor.

### EDUB 3010 Classroom Community and Early Years Literacy 3 cr

This course is designed to provide an introductory study of English language and literacy in Early Years education and how it relates to development of classroom communities. May not be held with EDUB 1010.

**Mutually Exclusive:** EDUB 1010

### EDUB 3012 Early Years Mathematics and Quantitative Reasoning for All Learners 3 cr

This course addresses mathematical sense making, quantitative reasoning, and practical instructional approaches in the context of the Manitoba Early Years mathematics curriculum towards a developing mathematics teacher identity. May not be held with EDUB 1000 or EDUB 1050.

**Mutually Exclusive:** EDUB 1000, EDUB 1050

### EDUB 3014 Early Years Science and Social Studies: Pedagogy and Curriculum 3 cr

Instructional approaches to helping young children construct knowledge about the natural world and the human society they inhabit. Attention is given to planning for learning in science and in social studies represented by current research, and provincial outcomes documents. May not be held with EDUB 1040 or EDUB 1060.

**Mutually Exclusive:** EDUB 1040, EDUB 1060

### EDUB 3016 Creative Collaboration in the Arts 3 cr

An exploration of art, drama, and music. An emphasis will be placed on the value of play in early childhood development, the creative process, aesthetics, constructivism and the emergent curriculum. May not be held with EDUB 1030 or EDUB 2030.

**Mutually Exclusive:** EDUB 1030, EDUB 2030

### EDUB 3018 Multi-Language Development in Early Years 3 cr

This course examines English as an Additional Language (EAL) development related to early years education. Issues to be addressed include: trends in EAL education, orienting newcomer students and parents to the school context, EAL-inclusive lesson/ unit planning, the new EAL curriculum, cooperative learning, and other related issues.

### EDUB 3050 Middle Years Learners & Learning 3 cr

This course will explore the theoretical concepts of learning and development, both for Middle Years students and teachers as adult professional learners. This is a professional inquiry into practice and learning to observe students to assess their social and emotional, cognitive, and physical development, and how this information impacts learning and classroom dynamics. May not be held with EDUA 1800.

**Equiv To:** EDUA 1800

### EDUB 3052 Middle Years: Teaching for Learning - Developing a Responsive Pedagogy 3 cr

This course focuses on effective teaching across curriculum areas with emphasis on classroom based assessment to develop a learner-responsive pedagogy. Strategies for integrating educational technologies into teaching and assessing for learning will be addressed. May not be held with EDUB 2100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3050.

**Equiv To:** EDUB 2100

### EDUB 3054 Introduction to Teaching Mathematics in Middle Years 1 3 cr

This course introduces Middle Years teacher candidates to pedagogically appropriate teaching in Mathematics. May not be held with EDUB 1140.

**Equiv To:** EDUB 1140

### EDUB 3056 Teaching English Language Arts in Middle Years 3 cr

A study of curriculum, theories, and instructional approaches and techniques relevant to teaching English Language Arts in the Middle Years. This course will include a focus on teacher candidates' literacy practices and the processes of Middle Year students' literacy learning. May not be held with EDUB 1100.

**Equiv To:** EDUB 1100

### EDUB 3058 Teaching Science in Middle Years 3 cr

This course facilitates the development of teacher candidates' view of (1) themselves as educators of science and (2) science as a learning area. The course focus is on the learning and teaching practices that contribute to engagement and learning for diverse student populations in Middle Years science. May not be held with EDUB 2130.

**Equiv To:** EDUB 2130

### EDUB 3060 Teaching Social Studies in Middle Years 3 cr

The course focus is on the learning and teaching practices that contribute to engagement and learning for diverse student populations in Middle Years social studies. Contemporary learning, teaching and assessment models and practices are investigated with integrated inquiry unit planning as the central activity. May not be held with EDUB 2110.

**Equiv To:** EDUB 2110

### EDUB 3062 Teaching the Arts in Middle Years 3 cr

A study of current arts curricula (dance, drama, music, visual arts) and pedagogical practices. Emphasis will be placed on the critical role that the arts play in creating rich classroom learning communities, as well as the role of technology in arts teaching and learning. May not be held with EDUB 1120 or EDUB 2120.

**Mutually Exclusive:** EDUB 1120, EDUB 2120

**EDUB 3064 Teaching Physical Education/Health Education in Middle Years 3 cr**

Engagement in physical activities in the gymnasium/ classroom that highlight teaching learning strategies in PE/HE pedagogy. A central theme in this course is the promotion and understanding of physical and health literacies in our classes. May not be held with EDUB 1130 or EDUB 2150.

**Mutually Exclusive:** EDUB 1130, EDUB 2150

**EDUB 3100 Senior Years: Principles and Processes for Teaching 3 cr**

A general curriculum and instruction course designed to illuminate the connections between theory and practice and offers a practical approach to planning, teaching, and learning regardless of subject area specialty. Teacher candidates will critically consider the qualities of an effective Senior Years learning environment and recognize the elements at work. May not be held with EDUB 1510.

**Equiv To:** EDUB 1510

**EDUB 3102 Senior Years: Language and Literacy Across the Curriculum 3 cr**

A deeper examination of the relationship between language, literacy and learning through an interdisciplinary approach, including how to understand language and literacy as a part of multiple sociocultural practices that are interconnected within various identities and contexts. May not be held with EDUB 2510.

**Equiv To:** EDUB 2510

**EDUB 3110 Senior Years Curriculum & Instruction: The Arts 3 cr**

A curriculum and instruction course for the clustered subject areas of Arts: Visual Arts, Dance, Drama and Music with opportunities to examine the pedagogical possibilities of their particular art form. The course will explore foundational principles for the study of curriculum, instructional strategies, and assessment in the Arts. May not be held with EDUB 1200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Corequisite: EDUB 3100.

**Equiv To:** EDUB 1200

**EDUB 3120 Senior Years Curriculum & Instruction: Languages 3 cr**

A curriculum and instruction course for the cluster subject areas for languages. This course provides an introduction to the study of curriculum, instructional strategies and assessment in teaching languages and how to make connections between research, theory, and practice in the teaching/learning of languages in the Manitoba context. May not be held with EDUB 1210, EDUB 1280, EDUB 1350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Corequisite: EDUB 3100.

**Equiv To:** EDUB 1210, EDUB 1280, EDUB 1350

**EDUB 3130 Senior Years Curriculum & Instruction: Social Sciences 3 cr**

A curriculum and instruction course for the cluster of subject areas for the Social Sciences: History, Geography, Native Studies. This course provides the foundational principles for the study of curriculum, instructional strategies and assessment in the Social Sciences. May not be held with EDUB 1230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Corequisite: EDUB 3100.

**Equiv To:** EDUB 1230

**EDUB 3140 Senior Years Curriculum & Instruction: Sciences 3 cr**

A curriculum and instruction course for the cluster of subject areas for the Natural Sciences includes: General Science, Biology, Chemistry, Physics, Mathematics, Human Ecology, Physical Education/Health Education, and Computer Science. This course provides teacher candidates with the foundational principles for the study of curriculum, instructional strategies and assessment in the Natural Sciences. May not be held with EDUB 1240, EDUB 1250, EDUB 1260, EDUB 1270.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Corequisite: EDUB 3100.

**Equiv To:** EDUB 1240, EDUB 1250, EDUB 1260, EDUB 1270

**EDUB 3310 Early Years: Practicum 1 3 cr**

Practical teaching experience for Early Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). May not be held with the former EDUB 1960. This is a pass/fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisites: [3 credit hours from: EDUA 3404 (or the former EDUA 3400), EDUB 3406 (or the former EDUB 3402), EDUB 3018] and [3 credit hours from EDUB 3010, EDUB 3012].

**Mutually Exclusive:** EDUB 1960

**EDUB 3312 Early Years: Practicum 2 3 cr**

Practical teaching experience for Early Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). May not be held with the former EDUB 1960. This is a pass/fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3310. Pre- or corequisites: [3 credit hours from EDUA 3404 (or the former EDUA 3400) or EDUB 3406 (or the former EDUB 3402)] and EDUB 3010, EDUB 3012, EDUB 3018.

**Mutually Exclusive:** EDUB 1960

**EDUB 3320 Middle Years: Practicum 1 3 cr**

Practical teaching experience for Middle Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). May not be held with the former EDUB 1970. This is a pass/fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisites: EDUB 3050 and [3 credit hours from: EDUA 3404 (or the former EDUA 3400), EDUB 3406 (or the former EDUB 3402), EDUB 3506 (or the former EDUB 1620), EDUB 3508 (or the former EDUB 1820), EDUA 3420, EDUA 3422, EDUB 3426, EDUB 3510].

**Equiv To:** EDUB 1970

**EDUB 3322 Middle Years: Practicum 2 3 cr**

Practical teaching experience for Middle Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). May not be held with the former EDUB 1970. This is a pass/fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3320. Pre- or corequisites: EDUB 3052 and [3 credit hours from: EDUA 3404 (or the former EDUA 3400) or EDUB 3406 (or the former EDUB 3402)] and [3 credit hours from: EDUB 3506 (or the former EDUB 1620), EDUB 3508 (or the former EDUB 1820), EDUA 3420, EDUA 3422, EDUB 3426, EDUB 3510].

**Equiv To:** EDUB 1970

**EDUB 3330 Senior Years: Practicum 1 3 cr**

Practical teaching experience for Senior Years in a Manitoba school with the guidance and under supervision of a faculty advisor and cooperating teacher(s). May not be held with the former EDUB 1980. This is a pass/fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140] and [3 credit hours from: EDUA 3404 (or the former EDUA 3400), EDUB 3406 (or the former EDUB 3402), EDUB 3506 (or the former EDUB 1620), EDUB 3508 (or the former EDUB 1820), EDUA 3420, EDUA 3422, EDUB 3426, EDUB 3510].

**Mutually Exclusive:** EDUB 1980

**EDUB 3332 Senior Years: Practicum 2 3 cr**

Practical teaching experience for Senior Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). May not be held with the former EDUB 1980. This is a pass/fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3330. Pre- or corequisites: [3 credit hours from: EDUA 3404 (or the former EDUA 3400) or EDUB 3406 (or the former EDUB 3402)] and [3 credit hours from: EDUB 3506 (or the former EDUB 1620), EDUB 3508 (or the former EDUB 1820), EDUA 3420, EDUA 3422, EDUB 3426, EDUB 3510].

**Mutually Exclusive:** EDUB 1980

**EDUB 3406 Indigenous Perspectives and the Curriculum 3 cr**

The course will focus on fostering teacher candidate pedagogical knowledge, orientations and capabilities for developing and implementing curricula for kindergarten through to Grade 12 that reflect Indigenous perspectives. May not be held with the former EDUB 1602, the former EDUB 3402 or EDUB 1840 when titled "Integrating Aboriginal Perspectives into the Manitoba Curriculum."

**Equiv To:** EDUB 1602, EDUB 3402

**Mutually Exclusive:** EDUB 1840

**EDUB 3426 La pédagogie du français de base aux niveaux intermédiaire et de la jeune enfance 3 cr**

Ce cours sera d'introduction aux principes et aux pratiques de base dans le domaine de l'enseignement et de l'apprentissage du Français comme langue seconde (FL2) ou additionnelle. Les participants au cours examineront les principes fondamentaux et la mise en pratique de l'enseignement et de l'apprentissage du français en tant que langue seconde ou additionnelle. L'accent est mis sur les pratiques pédagogiques de l'approche communicative expérientielle, telle qu'approuvée par le Ministre d'éducation du Manitoba. Puisque ce cours forme partie de la liste de cours répondant au 'Diversity Requirement' de Ministère de l'éducation, une philosophie d'ouverture et d'inclusion de la diversité sous-tendent l'essentiel de ce cours. May not be held with EDUB 1830.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 18 credit hours of French or permission of instructor.

**Equiv To:** EDUB 1830

**EDUB 3502 Recent Developments in Curriculum, Teaching and Learning 1 3 cr**

The study of emerging topics in curriculum, teaching, and learning not studied in regular program courses.

**Mutually Exclusive:** EDUB 3510

**EDUB 3504 Academic and Professional English for Multilingual Teachers 3 cr**

This course provides English language development for multilingual teachers of English as a second/additional language and other subject areas. The focus is on teacher, classroom, and professional English that can be applied in various contexts. May not be held with EDUB 1604.

**Equiv To:** EDUB 1604

**EDUB 3506 Principles and Procedures of Second Language Education 3 cr**

Examination of principles and demonstration of procedures for developing basic second language knowledge and skills in various contexts, e.g., ESL, EFL, AL, HL, IL. May not be held with the former EDUB 1620.

**Equiv To:** EDUB 1620

**EDUB 3508 Language and Content Instruction of EAL Students 3 cr**

Principles and procedures of teaching ESL/Bilingual students in subject-area classrooms, using content-based language instruction and language sensitive content instruction. May not be held with the former EDUB 1820.

**Equiv To:** EDUB 1820

**EDUB 3510 Language Awareness for Teachers 3 cr**

This course will focus on responding to students from immigrant, refugee and Indigenous backgrounds in the classroom, understanding how to teach pronunciation, grammar, word choice and subject area content. Through structural linguistics, this course aims to enhance teacher candidates' confidence in, and knowledge of, language structures necessary for teaching EAL learners. May not be held with EDUB 3502 when titled, "Language Awareness for Teachers".

**Mutually Exclusive:** EDUB 3502

**EDUB 3512 Literature for Adolescents 3 cr**

A survey of the literature available for adolescents. The course includes reading and discussion of the literature, and consideration of techniques for encouraging extensive reading. May not be held with EDUB 1710.

**Equiv To:** EDUB 1710

**EDUB 3514 Literature for Children 3 cr**

A survey of the literature available for children. The course includes reading and a discussion of the literature, and consideration of techniques for encouraging extensive reading. May not be held with EDUB 1720.

**Equiv To:** EDUB 1720

**EDUB 3516 Art Across the Curriculum 3 cr**

This course will emphasize the importance of visual learning and its potential for teaching in the various curriculum areas at all levels. Opportunities for studio work, discussion and planning will be provided. May not be held with EDUB 1730.

**Equiv To:** EDUB 1730

**EDUB 3518 Drama Across the Curriculum 3 cr**

For all students, specialist and non-specialist, who wish to develop a greater understanding and practice of drama in the classroom across the curriculum. May not be held with EDUB 1740.

**Equiv To:** EDUB 1740

**EDUB 3520 Historical Development of Physical Science up to the 20th Century 3 cr**

The major ideas and discoveries in science of the Ionians and the Greeks, the scientific revolution of the 16th and 17th centuries, and the 'modern' period of science, up to the 20th century will be explored with an emphasis on science education and scientific literacy. May not be held with EDUB 1760, PHYS 2700.

**Equiv To:** EDUB 1760, PHYS 2700

**EDUB 3522 Recent Developments in Learning and Teaching Senior Years Mathematics 3 cr**

The study of selected topics in mathematics in Senior Years. May not be held with EDUB 1800.

**Equiv To:** EDUB 1800

**EDUB 3524 Practical Work in School Science 3 cr**

This course, which is appropriate for early, middle and senior teacher candidates, will critically examine the role of practical work in the teaching and learning of school science. Topics will include: demonstrations, experiments, investigations, field experiences, simulations, data collection and interpretation, new educational technologies, assessment and laboratory safety. May not be held with EDUB 1870.

**Equiv To:** EDUB 1870

**EDUB 3526 Integration of Technological Literacy Across the K-12 Curriculum 3 cr**

Training teachers to analyze and teach about technological principles within the content area, and to develop specific teaching and learning interventions to infuse technological literacy across content areas. May not be held with EDUB 1780.

**Equiv To:** EDUB 1780

**EDUB 3528 Media Literacy 3 cr**

The role of media in society, designed to assist educators in all disciplines and levels to develop an informed and critical understanding of the mass media and its impact on teaching and learning. May not be held with EDUB 1680.

**Equiv To:** EDUB 1680

**EDUB 3530 Beyond Schools: Experiencing Teaching and Learning in Community Settings 3 cr**

This course provides a community-based field experience. Students will attend a weekly seminar and spend 20 hours a week for six weeks at a host site. The focus of the course is to consider, challenge, and broaden understandings of education, curriculum, and pedagogy within the context of social justice. Site examples: arts programs, nature reserves, youth programs. This is a pass/fail course. May not be held with EDUB 1840 when titled "Beyond Classrooms: Teaching and Learning in Community- Based Settings".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: 3 credit hours from: EDUB 3312, EDUB 3322, EDUB 3332.

**Equiv To:** EDUB 1840

**EDUB 3532 Basic Experiences in Movement and Dance Education 3 cr**

A study of teaching movements/ dance education in Early (K-4) and Middle Years (5-8) schools. For both classroom teachers and physical education specialists, the course covers all traditional areas of movement instruction as well as movements' role across the curriculum. May not be held with EDUB 1750.

**Equiv To:** EDUB 1750

**EDUB 3534 Creating Communities of Writers in Diverse Classrooms and Contexts 3 cr**

This course is designed to support teacher candidates in developing their confidence as writers and in expanding their pedagogical knowledge and approaches as teachers of writing. Open to teacher candidates in all streams and teachable areas.

**EDUB 4010 Pedagogy for Sustainable Well-being: Science, Mathematics and Social Studies 6 cr**

An exploration and critical reflection on theory, research, and practice in education for sustainability in science, mathematics, and social studies and the ways in which multiple literacies can assist children in consolidating their knowledge and understanding of sustainable well-being. Course offered off-campus. May not be held with EDUB 2040, EDUB 2050 or EDUB 2060.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3012, EDUB 3014, EDUB 3312. Corequisite: EDUB 4012.

**Mutually Exclusive:** EDUB 2040, EDUB 2050, EDUB 2060, EDUB 4013

**EDUB 4012 Pedagogy in Multiple Literacies: Children as Meaning Makers 6 cr**

A school-based course, taught in collaboration with EDUB 4010 Pedagogy for Sustainable Well-being: Science, Mathematics, and Social Studies, providing opportunities for teacher candidates to be immersed with children and teachers in curriculum inquiry related to learning languages/ literacies, learning about languages/literacies, and learning through languages. Course offered off-campus. May not be held with EDUB 2000, EDUB 2010, EDUB 2070, and EDUB 2080.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3010, EDUB 3312. Corequisite: EDUB 4010.

**Mutually Exclusive:** EDUB 2000, EDUB 2010, EDUB 2070, EDUB 2080

**EDUB 4014 Early Years: Physical Education/ Health Education 3 cr**

The focus of this course is to promote the development of movement and personal management skills for lifelong activity and fitness. Teacher candidates will learn to create activities and strategies within the gymnasium/classroom that incorporate physical activity into daily routines. May not be held with EDUB 1020 or EDUB 2020.

**Mutually Exclusive:** EDUB 1020, EDUB 2020

**EDUB 4050 Middle Years: Creating Classroom Learning Environments 3 cr**

A study of the effective teaching practices which are essential for creating positive learning environments in middle-years classroom communities. Emphasis is placed on the social processes and pedagogy, especially the use of formative assessment and integrated curriculum approaches. May not be held with EDUB 1110 or EDUB 2400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3052.

**Mutually Exclusive:** EDUB 2400

**EDUB 4052 Teaching Mathematics in Middle Years 2 3 cr**

This course focuses on advanced instructional strategies in the teaching of mathematics in the middle years. May not be held with EDUB 2140.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3054.

**Equiv To:** EDUB 2140

**EDUB 4100 Teacher and Technology 3 cr**

An introduction to educational and information technology in the classroom. Focus will be on the utilization of technology, the development of information skills for teachers and critical analyses of the potential of educational technology. May not be held with EDUB 1990.

**Equiv To:** EDUB 1990

**EDUB 4102 Themes in Senior Years 3 cr**

Themes in Senior Years is a topics course designed to expose students to current issues and topics relevant to professional thinking and practice. Topics are offered and represent those pedagogical practices that enhance and expand upon broad forms of teaching practice. Students will focus on an area of interest to experience pedagogies that promote choice and multiple modes of expression. May not hold credit for more than one topic under this course number. May not be held with EDUB 2500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3332.

**Equiv To:** EDUB 2500

**EDUB 4110 Senior Years: Teaching Art 3 cr**

The development of skills for planning, teaching, and assessing visual art in a Senior Years setting. May not be held with EDUB 2200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2200

**EDUB 4112 Senior Years: Teaching Music 3 cr**

An advanced study of curriculum, and instructional approaches and techniques relevant to the teaching of music in Senior Years. May not be held with EDUB 2240.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2240

**EDUB 4114 Senior Years: Teaching Drama & Theatre 3 cr**

An examination of the issues of arts, pedagogy, creative process and program development. May not be held with EDUB 2250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2250

**EDUB 4120 Senior Years: Teaching English Language Arts 3 cr**

An in-depth study of the curriculum and pedagogy relevant to inquiries into curriculum and pedagogy relevant to teaching English Language Arts in diverse, 21st century classrooms. May not be held with EDUB 2210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2210

**EDUB 4122 Senior Years: Teaching French 3 cr**

A course that will focus on theory and practices as well as strategies in teaching French as a Secondary Language. Students will address issues and challenges faced in FSL literacy and spend time focusing on inclusion in the FSL classroom and benefits of allophone students in the FSL classroom. May not be held with EDUB 2340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2340

**EDUB 4124 Senior Years: Teaching Languages 3 cr**

A course that will focus on theory and practices as well as strategies in teaching Heritage, Aboriginal, or International Languages. Students will address issues and challenges faced in literacy and spend time focusing on inclusion in the classroom. May not be held with EDUB 2350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2350

**EDUB 4130 Senior Years: Teaching Geography 3 cr**

Designed to prepare students to become teachers of Geography using the Manitoba Senior Years Social Sciences curriculum. May not be held with EDUB 2220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2220

**EDUB 4132 Senior Years: Teaching History 3 cr**

Designed to prepare students to become teachers of history with expertise to help students acquire historical knowledge, historical thinking, and attain the enduring understanding (topics) listed in the Manitoba Curriculum documents for history/ social studies. May not be held with EDUB 2230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2230

**EDUB 4134 Senior Years: Teaching Native Studies 3 cr**

An examination of the curricular and pedagogical issues relating to the teaching of Native Studies in Senior Years. Includes the study of trends and current issues relevant to the Canadian indigenous experience.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**EDUB 4140 Senior Years: Teaching Biology 3 cr**

An exploration of the Manitoba Science Curriculum Framework for Biology in grades 11 and 12, focusing particularly on the foundational principles underlying the learning and teaching of science in these documents, as well as the key scientific concepts in each unit of the curriculum. Following contemporary approaches to teaching and learning, particularly conceptual change and socio-scientific issues (SSI), readings and discussions will focus on content-specific issues related to teaching and learning biology at the senior level. May not be held with EDUB 2260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2260

**EDUB 4142 Senior Years: Teaching Chemistry 3 cr**

An exploration of the Manitoba Science Curriculum Framework for Chemistry in grades 11 and 12, focusing particularly on the foundational principles underlying the learning and teaching chemistry. May not be held with EDUB 2270.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2270

**EDUB 4144 Senior Years: Teaching Computer Science 3 cr**

A study of the curriculum, instructional approaches, and assessment as they pertain to teaching computer science at the secondary level. Teacher candidates will compare and contrast technical, educational, assessment and professional development aspects of computer-related secondary school courses. This involves knowing and understanding the strengths and limitations of current curriculum documents. May not be held with EDUB 2330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [ 3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2330

**EDUB 4146 Senior Years: Teaching General Science 3 cr**

An overview of the theory and practice of teaching General Science in the context of the Manitoba Curriculum Framework at the Grade 9- 10 level. General principles of science and education, conceptual development, cognitive and learning theories, and scientific literacy, are presented and discussed. Emphasis is placed on using conceptual development models to help science teachers present concepts and topics. May not be held with EDUB 2280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2280

**EDUB 4148 Senior Years: Teaching Human Ecology 3 cr**

A study of the planning and teaching of home economics. Emphasis will be placed on the new research on teaching, learning, assessment, principles of educational change, ICT, inclusivity, current brain research and how it affects learning, differentiated instruction, and multiple intelligences. May not be held with EDUB 2290.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and {3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140}.

**Equiv To:** EDUB 2290

**EDUB 4150 Senior Years: Teaching Mathematics 3 cr**

A study of the curriculum and instructional approaches to teaching mathematics, including how mathematics is learned, how to structure learning opportunities for students, and developing and expressing, pedagogically sound approaches to teaching mathematics courses in secondary schools. May not be held with EDUB 2300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2300

**EDUB 4152 Senior Years: Teaching Physical Education/Health Education 3 cr**

A course designed to prepare teacher candidates to work with students in ways that enable and encourage them to develop the commitment and capacity to lead an active healthy lifestyle. The course will also develop and enhance students' life skills to promote physical and health literacy, and health related behaviours. May not be held with EDUB 2310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2310

**EDUB 4154 Senior Years: Teaching Physics 3 cr**

An exploration of the Manitoba Science Curriculum Framework for Physics in grades 11 and 12, focusing particularly on the foundational principles underlying the learning and teaching of physics. May not be held with EDUB 2320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUB 3100 and [ 3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

**Equiv To:** EDUB 2320

**EDUB 4310 Early Years Practicum 3 3 cr**

Practical teaching experience for Early Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher (s). This is a pass/fail course. May not be held with EDUB 2960.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3312.

**Mutually Exclusive:** EDUB 2960

**EDUB 4312 Early Years Practicum 4 3 cr**

Practical teaching experience for Early Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher (s). This is a pass/fail course. May not be held with EDUB 2960.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 4310. Pre- or Corequisite: EDUA 4000.

**Mutually Exclusive:** EDUB 2960

**EDUB 4320 Middle Years: Practicum 3 3 cr**

Practical teaching experience for Middle Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher (s). This is a pass/fail course. May not be held with EDUB 2970.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3322. Pre- or Corequisite: EDUB 4050.

**Mutually Exclusive:** EDUB 2970

**EDUB 4322 Middle Years: Practicum 4 3 cr**

Practical teaching experience for Middle Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 2970.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 4320. Pre- or Corequisite: EDUA 4000.

**Mutually Exclusive:** EDUB 2970

**EDUB 4330 Senior Years: Practicum 3 3 cr**

Practical teaching experience for Senior Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 2980.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 3332. Pre- or corequisites: 6 credit hours from: EDUB 4110, EDUB 4112, EDUB 4114, EDUB 4120, EDUB 4122, EDUB 4124, EDUB 4130, EDUB 4132, EDUB 4134, EDUB 4140, EDUB 4142, EDUB 4144, EDUB 4146, EDUB 4148, EDUB 4150, EDUB 4152, EDUB 4154.

**Mutually Exclusive:** EDUB 2980



**EDUB 4332 Senior Years: Practicum 4 3 cr**

Practical teaching experience for Senior Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 2980.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 4330. Pre-or corequisite: EDUA 4000.

**Mutually Exclusive:** EDUB 2980

**EDUB 4502 Recent Developments in Curriculum, Teaching and Learning 2 3 cr**

The study of emerging topics in curriculum, teaching and learning not studied in regular program courses.

**EDUB 5012 Video Art, Culture, and Education 3 cr**

This course will focus on fostering students pedagogical, historical, theoretical, and sociological knowledge, as well as creative video skills. Students will learn about developing and implementing video across the curricula from grade 1 to grade 12 in order to incorporate video making and current viewing practices into classrooms. May not be held for credit with EDUB 1840 or EDUB 5220 where the title is 'Video Art, Culture, and Education.'

**Equiv To:** EDUB 1840

**EDUB 5014 Pedagogy and Film 3 cr**

A study of films and their relationships to contemporary educational practice. The approach will be a critical one exploring and analyzing films and their relationships to teaching, teachers, students and curricula. The emphasis is on understanding film as a powerfully educative media in its own right as well as its complex relationships with traditional school knowledge. May not be held with EDUB 5220 when titled "Pedagogy and Film: Studying the Moving Image" or EDUB 5230 when titled "Portrayal of Teaching in the Popular Media".

**Mutually Exclusive:** EDUB 5220, EDUB 5230

**EDUB 5040 Theory and Practice of Teaching Art (Elementary) 6 cr**

The theory and practice of teaching Art in the Elementary School will be examined through an inquiry into both the development of the child through his/her art expression and related curricular experiences.

**EDUB 5060 Theory and Practice of Teaching Art in the Senior Years 1 3 cr**

An overview of major aspects of Art Education in the context of Senior Years 1 curriculum through a study of current theory, a variety of studio areas and related aesthetic concepts.

**EDUB 5100 Developing Competency Skills in Enterprise Education 1 3 cr**

Promotes the development and integration of skills of creativity, innovation, self-reliance and responsibility in students, within the framework of an enterprise education/entrepreneurship paradigm. Participants develop teaching strategies and materials and learn to integrate these skills into current educational practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisite: EDUB 5110.

**EDUB 5110 Developing Competency Skills in Enterprise Education 2 3 cr**

This course continues the promotion and application of student competency skills, within the framework of an enterprise education/entrepreneurship paradigm. Participants plan and organize a school, community or business venture, develop plans for the promotion and marketing of the product or service, arrange financial support, and make a presentation of their venture plan to a panel of evaluators.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisite: EDUB 5100.

**EDUB 5120 Music in the Early Years/Middle Years School 1 3 cr**

A course to assist classroom teachers plan for music making activities based on knowledge and proficiency in the use of Orff instruments and recorder.

**EDUB 5130 Music in the Early Years/Middle Years School 2 3 cr**

A course to assist classroom teachers plan for music making activities based on knowledge and proficiency in the use of a wide range of string instruments (guitar, baritone ukulele, dulcimer, etc).

**EDUB 5140 Special Methods in Music 1 3 cr**

An advanced study of the Orff method as it applies to Early and Middle Years schools with emphasis on ensemble performance. The course is designed for the music specialist.

**EDUB 5150 Special Methods in Music 2 3 cr**

An advanced study of the Kodaly method as it applies to Early and Middle Years schools with emphasis on the contributions of the method to fine choral performance. The course is designed for the music specialist.

**EDUB 5160 School Band 3 cr**

An advanced study of the methods for initiating and continuing a band in Middle and Senior Years schools with emphasis on the contributions of a band program to Middle Years education.

**EDUB 5190 School Music Productions 3 cr**

A study of the principles and procedures for presenting school music productions.

**EDUB 5200 Readings in Curriculum, Teaching and Learning 1 3 cr**

Readings and research in special areas of curricular study related to curriculum, teaching and learning.

**EDUB 5210 Readings in Curriculum, Teaching and Learning 2 3 cr**

Readings and research in special areas of curricular study related to curriculum, teaching and learning.

**EDUB 5220 Recent Developments in Curriculum, Teaching and Learning 1 3 cr**

An opportunity to examine the theoretical bases for, and practical application of, recent or emerging developments in the area.

**Mutually Exclusive:** EDUB 5014, EDUB 5514, EDUB 5518, EDUB 5522, EDUB 5524

**EDUB 5230 Recent Developments in Curriculum, Teaching and Learning 2 3 cr**

A continuation of certain topics of EDUB 5220 to extend and develop the study previously undertaken in these areas.

**Mutually Exclusive:** EDUB 5014, EDUB 5342

**EDUB 5250 Music: Advanced Choral Methods 3 cr**

Advanced methods in choral instruction and conducting through a study of choral literature related to school music programs.

**EDUB 5330 Teaching Language and Literacy in the Content Areas 3 cr**

An examination of approaches to literacy in the content areas (science, mathematics, social studies, etc); emphasis on strategies for reading, writing, and studying, materials, and material assessment, procedures, and supporting research.

**EDUB 5342 Becoming Writers: Power, Place and Pedagogy in Teaching Writing 6 cr**

This course invites participants to engage in becoming stronger writers and more effective teachers of writing. The course is designed with the premise that to become better teachers of writing, teachers must become writers themselves. This is an intensive and experiential course that affords opportunities to write, participate in writing groups, delve into professional literature in writing craft and pedagogy, interact with guest speakers, explore place and place-writing as inquiries into power and (in) justice, and design and lead a teaching demonstration. The course is open to all, regardless of prior writing experience. May not be held with EDUA 5220 when titled 'Writing Workshop: Writing for/as Human Rights' or EDUB 5230 when titled 'Curriculum Development: Writing for/as Human Rights.'

**Mutually Exclusive:** EDUA 5220, EDUB 5230

**EDUB 5350 Current Issues in Language and Literacy 3 cr**

A special topics course designed to update students on the most recent developments in Language and Literacy Education.

**EDUB 5360 Children's Literature 3 cr**

The nature and psychology of literature for children in the elementary grades. Areas for consideration include an examination of materials, use of evaluative criteria to assess the materials, and research findings concerning development, interest and use of the material. Not to be held with EDUB 5361.

**Equiv To:** EDUB 5361

**EDUB 5370 Adolescent Literature 3 cr**

The nature and psychology of literature for students in Grades 7-12. Areas for consideration include an examination of materials, use of evaluative criteria to assess the materials, and research findings concerning development, interest and use of the material. Not to be held with EDUB 5371.

**Equiv To:** EDUB 5371

**EDUB 5380 Theory and Practice in Written Composition 3 cr**

A course designed to explore the nature of written composition and to provide practice in various types of writing.

**EDUB 5390 The Teaching of Written Composition 3 cr**

A course designed to assist teachers in organizing and implementing writing programs. Consideration will be given to motivational strategies, useful writing activities and exercises, and practice in editing and evaluation.

**EDUB 5400 Diagnostic and Remedial Techniques in Language Arts 6 cr**

Diagnosis and correction at the classroom level. Opportunities for detailed analysis of diagnostic instruments. Practical aspects include diagnosis of language arts problems, prescriptions, and correction on the basis of evaluation.

**EDUB 5470 Recent Developments in Curriculum: Mathematics and Natural Sciences 1 3 cr**

This course will provide an opportunity to examine the theoretical bases for, and practical application of, recent or emerging developments in the area.

**Equiv To:** EDUB 5471

**EDUB 5480 Recent Developments in Curriculum: Mathematics and Natural Sciences 2 3 cr**

A continuation of certain topics of EDUB 5470 to extend and develop the previous study undertaken in these areas.

**EDUB 5510 ESL Materials Development and Practicum 3 cr**

A general survey of published ESL instructional materials will form the basis for students to design learning experiences to be implemented in a supervised practicum. Students who feel they would benefit from some English as an Additional Language support and have limited prior teaching experience should take EDUB 5524 prior to the practicum course. May not be held with the former EDUB 1860.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or corequisite: EDUB 5580 or instructor's permission.

**Equiv To:** EDUB 1860

**EDUB 5512 Teacher Development and Leadership in Second Language Education 3 cr**

This course explores current approaches in the development of second language teachers and initiatives to facilitate leadership in programs inclusive of language learners.

**EDUB 5514 Assessment and Testing of ESL/EAL Learners 3 cr**

This course will examine various methods in assessment and testing of English language learners, including formative, summative and alternative assessment strategies. Attention will be paid to the following areas: initial and ongoing needs assessment, evaluating without tests, and questioning the educative value of assessment and testing. May not be held with EDUB 5220 when titled "Assessment and Testing of ESL/EAL Learners".

**Mutually Exclusive:** EDUB 5220

**EDUB 5516 Teaching Literacy, Academics, and Language (LAL) Learners 3 cr**

This course will introduce course participants to the theoretical and practical aspects of teaching K-12 LAL learners, who are new comers to Manitoba and have limited or no previous schooling experiences due to war or refugee status. These learners need to develop literacy and foundational academic skills in addition to learning English as an additional language as they usually have little or no literacy in any language. Course participants will examine LAL students' backgrounds, learn different instructional strategies and develop appropriate materials to meet diverse needs of LAL learners effectively. May not be held with EDUB 5220 when titled "Teaching Literacy, Academics, and Language (LAL) Learners".

**EDUB 5518 Intercultural Communication in Transnational Contexts 3 cr**

This course provides an introduction to theory and practice related to intercultural communication. Students will investigate the ways in which language, culture, and nonverbal communication play out in cross cultural contact. Students will become attuned to the values, beliefs, and assumptions they hold generally and about communication specifically as they interact with people unlike themselves. The course combines theory and research as well as the application of concepts, both in class and out of class, by way of activities, simulations, and interactions with people of other cultures. May not be held with EDUB 5220 when titled "Intercultural Communication in Transnational Contexts".

**Mutually Exclusive:** EDUB 5220

**EDUB 5520 Grammar in ESL Learning and Instruction 3 cr**

A survey of English grammar and its applications to teaching all levels of ESL, from beginning to very advanced. Lectures, readings, group discussions, and demonstrations are designed to develop knowledge and skills necessary to teach oral and written grammar in traditional and innovative ways.

**EDUB 5522 English as an Additional Language Teaching for Academic and Specific Purposes 3 cr**

This course provides up-to-date views of Teaching English for specific and academic purposes, including a brief history and relevant definitions. Issues related to needs assessment, curriculum development, course design, materials development, evaluation and assessment, and teacher development will be discussed, focusing on both local and international settings. May not be held with EDUB 5220 when titled "English as an Additional Language Teaching for Academic and Specific Purposes".

**Mutually Exclusive:** EDUB 5220

**EDUB 5524 Language Development for Multilingual Educators 3 cr**

Multilingual/Non-Native English-Speaking (NNES) teachers in Canada face unique challenges when teaching English, including using culturally-appropriate language registers and teaching methods, and facing discrimination in the workplace because of the varieties of English they speak. This course addresses these challenges. May not be held with EDUB 5220 when titled "Language Development for Multilingual Educators".

**Mutually Exclusive:** EDUB 5220

**EDUB 5530 ESL and Content Instruction 3 cr**

Principles and procedures of teaching ESL/bilingual students in subject-area classrooms, using content-based language instruction and language sensitive content instruction.

**EDUB 5540 Vocabulary and Pronunciation Instruction 3 cr**

Principles and procedures in teaching English vocabulary and pronunciation for effective communication (sounds, spellings, word and sentence stress, rhythm, intonation, connected speech, integration). May not be held with the former EDUB 1640.

**Equiv To:** EDUB 1640

**EDUB 5550 Library Reference and Informational Materials 6 cr**

Principles of reference and research with special emphasis on interdisciplinary investigation; the problems of access to information; types of reference sources, their evaluation and selection for library reference collections; services to library users.

**EDUB 5580 Fundamentals of ESL (English Second Language) Instruction 3 cr**

Examination of principles and demonstration of procedures for teaching ESL in Canada and EFL overseas.

**EDUB 5600 The Teaching of Social Studies in the Early and Middle Years 3 cr**

This course concentrates on the teaching of social studies in schools from Kindergarten to approximately Grade Nine, with particular reference to the implications of social studies teachers of the characteristics of students at those levels.

**EDUB 5660 Theoretical Foundations of Social Studies 3 cr**

This course examines recent developments in social studies education. It aims to familiarize students with the debates, the research and the innovations (successful and otherwise) that have characterized social studies curriculum.

**EDUB 5690 Seminar in Business Education 6 cr**

Curriculum development; methodologies; evaluation and measurement; research.

**EDUB 5760 Recent Developments in Mathematics Education 3 cr**

Reading and research in mathematics education (selected topics).

**EDUB 5770 Diagnosis and Remediation in Elementary School Mathematics 3 cr**

Diagnostic and remedial methods in elementary school mathematics. Not to be held with EDUB 5771.

**Equiv To:** EDUB 5771

**EDUB 5840 Internet Pedagogy 3 cr**

Theory and practice of teaching and learning with the Internet. Focus on instructional applications of the Internet, for all levels from K-12 as well as adult, post-secondary and training settings. Current research will be examined and monitored for its relevance to this fast-changing field.

**EDUB 5850 Theory and Practice of Designing and Developing Web-based Courses 3 cr**

Theory and practice of the design, development and evaluation of on-line web-based distance education courses for K-12 through adult/post-secondary programs.

**EDUB 5860 Project Management in Education and Training 3 cr**

Theory and practice of project management principles in education and training. Emphasis on application of concepts and procedures of educational project management including planning and proposal creation for developmental and/or research activities in educational agencies.

**EDUB 5870 Mentoring for Teachers 3 cr**

An examination of mentoring practices with particular focus on educative ways of mentoring teacher candidates and new teachers

**EDUB 5940 Instructional Product Development 3 cr**

Systematic development of an instructional product. Includes needs assessment, goal setting, writing objectives, task analyses, product development, evaluation techniques.

## Electr. and Computer Engin. (ECE)

**ECE 2160 Electronics 2E 5 cr**

(Lab required) Characteristics of integrated circuits and transistors; design of DC and AC amplifiers in the steady state.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2262.

**ECE 2220 Digital Logic Systems 5 cr**

(Lab required) Boolean algebra and logic primitives, net-work simplification techniques, physical realizations, number systems and codes; analysis and design of asynchronous and synchronous sequential circuits; applications to computation, measurements, and control.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENG 1450

**Mutually Exclusive:** COMP 3090

**ECE 2240 Numerical Methods for Electrical Engineers 4 cr**

(Lab required) Numerical methods applied to Electrical Engineering problems; mathematical models of physical systems, solutions of linear and non-linear equations, numerical differentiation and integration methods and associated errors, introduction to solution analysis. May not be held with MATH 2120. Prerequisites ECE 2262, COMP 1012, MATH 2132

**Equiv To:** MATH 2120

**ECE 2262 Electric Circuits 4 cr**

(Lab required) The application of circuit concepts; network theorems and formal methods, steady state analysis, frequency and transient response, application of the Laplace transform in the analysis of linear time-invariant networks.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENG 1450. Pre- or corequisite: MATH 2132 or [MATH 2100 and MATH 2110].

**Equiv To:** ECE 2260

**ECE 3010 Elements of Electric Machines and Digital Systems 4 cr**

(Lab required) Introduction to elementary concepts in ac circuits, electric machines, and digital sub-systems. Topics include electrical impedance, capacitors, inductors, electric motors, logic gates, decoders, multiplexing, flip flops, registers, microprocessor structures, I/O and data acquisition. Not available to students in Electrical or Computer Engineering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENG 1450, MATH 2132, and a year class designation of Year 3 or Year 4.

**Equiv To:** ECE 3680

**ECE 3540 Advanced Circuit Analysis and Design 4 cr**

(Lab required) Application of the Laplace Transform in the analysis of linear time-invariant networks, poles, zeros and frequency response; natural frequencies; general network theorems; two ports; energy and passivity; transmission lines; time and frequency domain.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2262 (or ECE 2260) and MATH 3132 (or MATH 3100).

**ECE 3580 Foundations of Electromagnetics 4 cr**

(Lab required) (Formerly ECE 2130) Fundamental laws of field theory; Maxwell's equations in integral and point form.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2240, PHYS 2152, and MATH 3132 (MATH 3100).

**Equiv To:** ECE 2130

**ECE 3590 Electromagnetic Theory 4 cr**

(Lab required) Maxwell's equations; plane electromagnetic waves; transmission line theory; electromagnetic radiation and introduction to antennas.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3580 (or the former ECE 2130.)

**ECE 3600 Physical Electronics 4 cr**

(Lab required) Basic solid state theory; properties of semi-conductors; principles of metal-semiconductor junctions, p-n junctions and transistors; optoelectronic processes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 2152 (or PHYS 1070) and MATH 3132 (or MATH 3100), and ECE 3670.

**ECE 3610 Microprocessing Systems 4 cr**

(Lab required) Fundamentals of microprocessors and microcomputers; data flow; machine programming; architectures and instructions sets; stacks, subroutines, I/O, and interrupts; interfacing fundamentals; designing with microprocessors.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2220.

**Mutually Exclusive:** COMP 2280

**ECE 3650 Electric Machines 5 cr**

(Lab required) Continuation of ECE 3720, including steady state and transient performance and introductory power systems theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3720

**ECE 3670 Electronics 3E 4 cr**

(Lab required) Continuation of ECE 2160, including device models, feedback, regulators, frequency effects, oscillators, and bistability and gates.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2160.

**ECE 3700 Telecommunication Network Engineering 4 cr**

(Lab required) This course will introduce modem concepts in telecommunications, including LANs, WANs, telephone networks, wireless and mobile networks, and Internet networks. Focus will be on design engineering, and management of networks, and on network programming for client server architectures.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2140.

**Mutually Exclusive:** COMP 3720, COMP 4300

**ECE 3720 Electric Power and Machines 4 cr**

(Lab required) Principles and applications of electric power, energy conversion and machines.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2262.

**ECE 3730 Principles of Embedded System Design 4 cr**

(Lab required) This course will introduce students to the design and implementation of embedded systems. Topics include introduction to UML and data structures, A-to-D, D-to-A, serial bus architectures, embedded computing, bus-based computer systems, program design and analysis, networks, and hardware-software co-design.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 2160, ECE 3610 and (COMP 1010 or COMP 1012).

**ECE 3740 Systems Engineering Principles 1 4 cr**

(Lab required) Complexity and other system measures and analysis, system architectures and architectural elements for embedded systems, hardware and software, incremental design elaboration. Coding, testing, debugging, verification and validation. Project planning, cost analysis and maintenance. Real-time systems, graphical user interfaces and computational models.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 2140.

**ECE 3750 Systems Engineering Principles 2 4 cr**

(Lab required) Reliability measures and analysis, software system architectures, system metrics, system verification for embedded systems. Coding practices for large scale embedded system development. Real-time systems, graphical user interfaces, and computational models.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3740.

**ECE 3760 Digital Systems Design 1 4 cr**

(Lab required) Design methodologies for the development of digital hardware, including system specification, component allocation, functional partitioning, specification refinement, implementation, verification, and testing. Hardware-software co-design.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 4240.

**Mutually Exclusive:** COMP 4550

**ECE 3770 Digital Systems Design 2 4 cr**

(Lab required) Executable system specification and a methodology for system partitioning and refinement into system-level components. Models and architectures, specification languages, translation to an HDL, system partitioning, design quality estimation, specification refinement into synthesizable models.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 4240 and MATH 3120.

**ECE 3780 Signal Processing 1 4 cr**

(Lab required) Introduction to signals and systems; spectral analysis (Fourier Series) of continuous-time periodic signals; spectral analysis of aperiodic signals (Fourier Transform); the impulse response and convolution operator; frequency analysis of linear time-invariant systems; applications to filtering, communications systems, and biological systems; A/D conversion; sampling. Laboratory periods will be used to give students hands-on experience in programming many of the techniques covered in the theoretical parts of the course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 2262 or ECE 2260 and MATH 3132 or MATH 3100.

**ECE 3790 Engineering Algorithms 4 cr**

(Lab required) Numerical algorithms, optimization, statistical description of data random number generation, string processing, geometric algorithms, algorithm machines, dynamic programming and NP complete problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Corequisite: COMP 2140 and MATH 3132 (or the former MATH 3100).

**ECE 4100 Introduction to Microelectronic Fabrication 4 cr**

(Lab required) Introduction to the fabrication of integrated circuits (ICs). Emphasis is on silicon based devices. Topics include water preparation, oxidation, thin film deposition, diffusion and ion implantation, lithography, wet and dry etching and metallization. An introduction to MEMS and micromachining technology is given.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3670.

**ECE 4150 Control Systems 4 cr**

(Lab required) Principal methods of analysis and design for feedback control systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2160 and ECE 3780.

**ECE 4160 Control Engineering 4 cr**

(Lab required) Design of control systems by frequency domain and root locus method; state equations; introduction to nonlinear analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 4150.

**ECE 4180 Introduction to Robotics 4 cr**

(Lab required) This course provides fundamental concepts of robotics, including robot classification and applications, robot kinematics, sensor and actuators, sensor interfacing, motor control, trajectory planning, and robot programming.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 4150 and (ECE 4240 or ECE 3730).

**ECE 4240 Microprocessor Interfacing 4 cr**

(Lab required) Interfacing of microcomputers to the external world: interfacing of I/O devices with minimum hardware and software; data acquisition with and without microprocessors; data communication, transmission and logging with small computers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2160 and ECE 3610.

**Mutually Exclusive:** COMP 4550

**ECE 4250 Digital Communications 4 cr**

(Lab required) Transmission of digital data; error rates, interference. Information measures, information rate and channel capacity. Coding.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 4260 and ECE 3780.

**ECE 4260 Communications Systems 4 cr**

(Lab required) Development and applications of random processes.

Analysis and comparison of modulation schemes: AM, FM, PM, PCM.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 3780 and STAT 2220.

**ECE 4270 Antennas 4 cr**

(Lab required) Radiation fundamentals, linear antennas, point source arrays, aperture antennas, antenna impedance, antenna systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3590.

**ECE 4280 Engineering Electromagnetics 4 cr**

(Lab required) Plane, cylindrical and spherical waves, introduction to scattering and diffraction, waveguides, transmission line applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3590.

**ECE 4290 Microwave Engineering 4 cr**

(Lab required) Microwave circuit analysis; passive and active devices; communication system power budget and signal-to-noise ratio calculations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3590.

**ECE 4300 Electrical Energy Systems 1 4 cr**

(Lab required) Power system component modelling and computational methods for system problems such as load flow, faults, and stability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3650.

**ECE 4310 Electrical Energy Systems 2 4 cr**

(Lab required) Generating stations. Power system stability and optimal operation. EHV-ac and HVDC power transmission. Power system protective relaying and reliability evaluation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 4150 and ECE 4300.

**ECE 4360 High Voltage Engineering 4 cr**

(Lab required) The course serves as an introduction to high voltage engineering, including basics of electrical breakdown, high voltage generation, high voltage test systems, measurement and analysis techniques as applied to power system apparatus, such as cables, insulators, transformers, and generators.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3580, ECE 3720.

**ECE 4370 Power Electronics 4 cr**

(Lab required) Thyristor device theory and operation, controlled rectifiers and line-commuted inverters, and forced commutation as applied to d/c choppers and a/c variable frequency and voltage inverters.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 3720 and ECE 2160.

**ECE 4390 Engineering Computations 4E 4 cr**

(Lab required) Development and application of numerical methods for the solution of electrical and computer engineering problems. Optimization techniques. Finite difference, finite element and boundary element methods. Solution of large systems of linear and non-linear equations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3132, ECE 2240.

**ECE 4420 Digital Control 4 cr**

(Lab required) Mathematical modelling of sampling switches. Z-transforms. Response and stability of systems involving sampling. Design of digital compensators.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 4830 and ECE 4150.

**ECE 4430 Design of RF Devices and Wireless Systems 4 cr**

(Lab required) Techniques for the system level design, simulation, fabrication, and testing of RF devices and microwave circuits, including the basics of radar and RFID technology. May not be held with ECE 4860 when titled "Design of RF Devices and Wireless Systems".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3590.

**Mutually Exclusive:** ECE 4860

**ECE 4440 Computer Vision 4 cr**

(Lab required) Image formation and sensing, image compression, degradation and restoration, geometrical and topological properties, pattern classification, segmentation procedures, line-drawing images, texture analysis, 3-D image processing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3780.

**ECE 4450 Applied Computational Intelligence 4 cr**

(Lab required) Computational intelligence and machine learning algorithms and their application in solving complex engineering problems. May not be held with COMP 4360 or ECE 4850 when titled "Applied Computational Intelligence".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3132.

**Mutually Exclusive:** COMP 4360, ECE 4850

**ECE 4520 Simulation and Modelling 4 cr**

Monte Carlo Methods, random processes, simulation of complex systems in the design of computer systems. Use of statistical interference and measures of performance in hardware and software systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STAT 2220 and COMP 2140.

**ECE 4530 Parallel Processing 4 cr**

(Lab required) This course provides an overview of parallel processing (classification of parallel processing architectures and other select topics), parallel programming strategies (embarrassingly parallel partitioning, divide-and-conquer, and other select topics), applied design and implementation of parallel software solutions (including distributed computing, shared memory computing, and GPGPU computing), and evaluation of parallel performance (time and memory complexity, speedup, efficiency, Amdahl's law, Gustafson's law).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (COMP 2140 and ECE 3790) or (ECE 2240 and ECE 3730).

**Mutually Exclusive:** COMP 4510

**ECE 4540 Wireless Networks 4 cr**

(Lab required) Introduction to wireless communications systems, network architectures, protocols and applications. Topics include mobile computing systems, signals propagation, channel modelling, modulation, and networking standards.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3700 and ECE 3780.

**ECE 4560 Modern Computing Systems 4 cr**

(Lab required) Advanced topics in computer architecture and organization, such as instruction set architecture, performance measures, pipeline processor design, data and instruction cache, data dependencies, branch prediction and penalties, superscalar architecture, multithreading, out-of-order execution, speculative execution, overlapping register windowing, and multiprocessor system design. May not be held with ECE 4850 when titled "Modern Computing Systems".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3610.

**Mutually Exclusive:** ECE 4850

**ECE 4580 Optoelectronics 4 cr**

(Lab required) Basic theory of quantum mechanics; solution of Schrodinger equations; interaction of radiation with matter; masers and lasers; propagation, modulation, excitation and detection in optical waveguides; introduction to fiber and integrated optics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3600.

**ECE 4600 Group Design Project 6 cr**

The engineering curriculum must culminate in a significant design experience which is based on the knowledge and skills acquired in earlier course work and which gives students an exposure to the concepts of team work and project management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [ENG 2030 or ENG 2040 or the former ENG 2010] and ECE 3780 and [(ECE 3580 (or the former ECE 2130), ECE 3720, ECE 3670 and ECE 3610) or (ECE 3700, ECE 3760 and ECE 3740)].

**ECE 4610 Biomedical Instrumentation and Signal Processing 4 cr**

(Lab required) Introduction to biological systems and the application of engineering principles to medical problems. Students design systems to acquire and analyze biological signals in the laboratory. Content includes introduction to relevant physiology and anatomy of cells, skeletal muscles, heart and cardiovascular systems, human balance and biomechanics, recording and analyzing biological signals (ECG, EMG, respiratory sounds), design of instrumentation amplifiers for signal conditioning, medical instrumentation safety and health hazards.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 2160 and ECE 3780.

**ECE 4740 Digital Systems Implementation 4 cr**

(Lab required) Implementation methodologies and technologies for digital systems, including VLSI implementations, PCB implementations, and rapid prototyping (FPGA). Not to be held with ECE 4500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 4240.

**ECE 4830 Signal Processing 2 4 cr**

(Lab required) Representation of discrete-time signals and systems in the time and frequency domains; the z-transform; application to various discrete-time linear time-invariant systems; design of digital filters. Laboratory periods will be used to give students hands-on experience in programming many of the techniques covered in the theoretical parts of the course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3780.

**ECE 4850 Topics in Electrical and Computer Engineering 1 4 cr**

(Lab required) This course will cover contemporary topics in Electrical and Computer Engineering via lectures and laboratory sessions. The specific topics and a detailed course outline will be available at the time of registration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the Department.

**Mutually Exclusive:** ECE 4450, ECE 4560

**ECE 4860 Topics in Electrical and Computer Engineering 2 4 cr**

(Lab required) This course will cover contemporary topics in Electrical and Computer Engineering via lectures and laboratory sessions. The specific topics and a detailed course outline will be available at the time of registration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the Department.

**Mutually Exclusive:** ECE 4430

**ECE 4870 Topics in Electrical and Computer Engineering 3 3 cr**

This lecture based course will cover contemporary topics in Electrical and Computer Engineering. The specific topics and a detailed course outline will be available at the time of registration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the Department.

**ECE 4880 Topics in Electrical and Computer Engineering 4 3 cr**

This lecture based course will cover contemporary topics in Electrical and Computer Engineering. The specific topics and a detailed course outline will be available at the time of registration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the Department.

## Engineering (ENG)

**ENG 1420 Engineering Processes for Non-Engineering Students 3 cr**

Develops a basic understanding of the engineering profession with emphasis on basic technical principles, Systems Engineering, and Project Management. Special emphasis will be placed upon the interface between management and engineering and the role management plays in the conduct of technical projects and manufacturing. NOTE: This course is not available for credit to students registered in the Price Faculty of Engineering.

**ENG 1430 Design in Engineering 3 cr**

The creative process; the design process; working in a team. The engineering profession from the perspective of students and professionals. Academic, legal and ethical considerations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [Pre-Calculus Mathematics 40S (60%) (or one of MATH 0401, MATH 1018, MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, MSKL 0100, or the former MATH 1680)] and [Physics 40S (60%) (or PHYS 0900 (P) or PSKL 0100 (P) ; or PHYS 1018, PHYS 1050, or PHYS 1051)] and [Chemistry 40S (60%) (CHEM 0900 (P) or CSKL 0100 (P); or CHEM 1018, CHEM 1100, CHEM 1301, or the former CHEM 1300)] or their equivalents.

**Attributes:** Recommended Intro Courses

**ENG 1440 Introduction to Statics 3 cr**

(Lab required) Statics of particles; rigid bodies, equilibrium of rigid bodies; analysis of structures; distributed forces. Not to be held with ENG 1441 .

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [Pre-Calculus Mathematics 40S (60%) (or one of MATH 0401, MATH 1018, MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, MSKL 0100, or the former MATH 1520 or the former MATH 1680)] and [Physics 40S (60%) (or PHYS 0900 (P) or PSKL 0100 (P) or PHYS 1018, PHYS 1050, or PHYS 1051)] and [Chemistry 40S (60%) CHEM 0900(P) or CSKL 0100 (P) or CHEM 1018, CHEM 1100, CHEM 1301, or the former CHEM 1300)] or their equivalents.

**Equiv To:** ENG 1441

**Attributes:** Recommended Intro Courses

**ENG 1450 Introduction to Electrical and Computer Engineering 3 cr**

(Lab required) Part I: Current, voltage, energy, potential, power Ohm's law; independent sources; capacitor, inductor, ideal diode, op-amp; Kirchoff's law; simple circuits (Resistive, RC, RL, OP-Amp; Diode); introduction to ac theory (Sinusoidal waveform, phase relations of voltage and current waveforms for R,L,C. RL and RC circuits). Part II: Applications (Digital Logic, motors).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [Pre-Calculus Mathematics 40S (60%) (or one of MATH 0401, MATH 1018, MATH 1230, MATH 1500 , MATH 1501, MATH 1510, MATH 1520, MSKL 0100, or the former MATH 1520 or the former MATH 1680)] and [Physics 40S (60%) (or PHYS 0900 (P) or PSKL 0100 (P) or PHYS 1018, PHYS 1050 or PHYS 1051)] and [Chemistry 40S (60%) (or CHEM 0900 (P) or CSKL 0100 (P) or CHEM 1018, CHEM 1100 or CHEM 1301 or the former CHEM 1300)] or their equivalents.

**Attributes:** Recommended Intro Courses

**ENG 1460 Introduction to Thermal Sciences 3 cr**

(Lab required) Properties of pure substances; first law for closed systems; first law for open systems; second law; examples of power cycles and refrigeration cycles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [Pre-Calculus Mathematics 40S (60%) (or one of MATH 0401, MATH 1018, MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1524, MSKL 0100, or the former MATH 1520 or the former MATH 1680)] and [Physics 40S (60%) (or PHYS 0900 (P) or PSKL 0100 (P) or PHYS 1018, PHYS 1050 or PHYS 1051)] and [Chemistry 40S (60%) (or CHEM 0900 (P) or CSKL 0100 (P) or CHEM 1018, CHEM 1100 or CHEM 1301 or the former CHEM 1300)] or their equivalents.

**Attributes:** Recommended Intro Courses

**ENG 1900 Occupational Health and Safety Awareness 3 cr**

Occupational health and safety will be discussed from the perspectives of various professions to understand 1) the issues relevant to individual professions and 2) how these individual perspectives may conflict. The overall goal for the course is to ensure that the student gains an appreciation for the importance of occupational health and safety to society.

**ENG 2022 Engineering CAD Technology for Biosystems 3 cr**

(Lab required) Instruction in the use of current CAD technology for conveying design through the use of graphics. Students will gain knowledge in technical drawing, 3D modelling techniques, production technology, and visual communication. Registration restricted to students in Engineering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 2900 or the former BIOE 2580.

**Mutually Exclusive:** MECH 2112

**ENG 2030 Engineering Communication: Strategies for the Profession 3 cr**

Students work in a team-based environment to produce deliverables comparable to the engineering workplace. In-class tutorials focus on the sharpening of individual students' writing skills through an analytical, problem-solving and critical thinking approach. Students are exposed to a variety of communicative scenarios and emphasis is placed on development of a repertoire of skills necessary for effective communication in the engineering profession. Not to be held with the former ENG 2010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENG 1430 and one of the courses from the list of Written English Courses for Engineering Students.

**Mutually Exclusive:** ENG 2010

**ENG 2040 Engineering Communication: Strategies, Practice and Design 3 cr**

This team-based course focuses on a rhetorical approach, communication strategies and guided practice in the design of engineering communications. May not be held with the former ENG 2010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENG 1430 and one of the courses from the list of Written English Courses for Engineering Students.

**Mutually Exclusive:** ENG 2010

**ENG 3000 Engineering Economics 3 cr**

This course offers an introduction to the economic aspects of the engineering discipline. It covers applied economic concepts such as: time value of money, taxation in cash flows, breakeven points, inflation of goods, cost/benefit ratios, income and depreciation, and general microeconomic concepts. The focus includes analysis techniques such as: cash flow analysis, cost-based analysis, rate of return analysis, sensitivity analysis, replacement analysis, and risk mitigation. Concepts are introduced in the context of sustainability and project management fundamentals in a professional practice setting. May not be held with CIVL 4050.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 1510 (or MATH 1230, or MATH 1500, or MATH 1501).

**Equiv To:** CIVL 4050

**ENG 3020 Technology, Society and the Future 3 cr**

Impact of technology and technological change on society-past, present, future; specific technologies, e.g. construction. machine power, computers, communications, medical, military: the process of technological change; invisible effects of technology; technology and resource use; sustainable development, limits to growth and the role of technology. May not be held with CIVL 4460 or ANTH 2430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of the courses from the list of Written English Courses for Engineering Students, or the former ENGL 1310.

**Equiv To:** CIVL 4460

**Mutually Exclusive:** ANTH 2430

**ENG 4010 Practicing Professional Engineering in Manitoba 3 cr**

An introduction to the practice of professional engineering in Manitoba, including culture, professional organization and regulation, employability aspects, engineering ethics and law.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Must be enrolled in the Internationally-Educated Engineers Qualification Program (IEEQ).

**Mutually Exclusive:** ENG 4020

**ENG 4012 IEEQ CO-OP ASSIGNMENT 1 cr**

Professional work assignment in business, industry, or government for cooperative education students in the IEEQ Program. Requires submission of a written report covering the work completed during a minimum 16-week work period. (Pass/Fail grade only).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: enrolled in IEEQ Program with 80% of courses complete, including ENG 4010; good academic standing.

**ENG 4020 Professional Engineering Practice in Manitoba 4 cr**

(Lab required) An introduction to the practice of professional engineering in Manitoba. Professional culture, organization and regulation; industry topics; engineering ethics and law. Emphasis on professional communication development. Restricted to students enrolled in the IEEQ Program. May not be held with ENG 4010.

**Mutually Exclusive:** ENG 4010

**ENG 4100 Contemporary Topics in Engineering Practice 4 cr**

This course will cover contemporary topics relating to the practice of professional engineering. The specific topics and a detailed outline will be available prior to the start of the registration period for the session in which the course will be offered. As the course content will vary from year to year, students may take this course more than once for credit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the Centre for Engineering Professional Practice and Engineering Education.



**ENG 4110 Operational Excellence 4 cr**

(Lab required) Methodical application of operational excellence and engineering principles and theory to address real industry problems, with emphasis on the data and fact-based engineering method of problem solving. Grounded in the Plan-Do-Study-Act system. Covers the seven step problem solving method (problem definition, examine the current situation, root cause analysis, action planning and testing, study the results, standardize the changes, and draw conclusions), applied concepts (Lean Six Sigma Management) and the fundamentals of teamwork, team dynamics and change management. It is expected that students will be challenged in terms of their understanding of the method, concepts, analytics, and the tools, and their application to solving 'real' operational problems. Students must attend both lecture and tutorial. Students will be required to attend meetings at industrial partner facilities. May not be held with MECH 4342 where the topic is Operational Excellence.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Co-requisites: STAT 2220 or (STAT 1000 and STAT 2000).

**Mutually Exclusive:** MECH 4342

**ENG 4800 Co-operative Work 1 1 cr**

Work assignment in business, industry, or government for the Price Faculty of Engineering co-operative education stream students. Requires submission of a written report covering the work completed during the four-month professional assignment. It is assumed that courses ENG 4800, ENG 4810, ENG 4820, ENG 4830, ENG 4840 will be taken in order. Those registering for this course must have applied for and been accepted into the Price Faculty of Engineering co-operative stream. Not to be held with BIOE 2000, CIVL 2900, ECE 4720, MECH 2050 or ENG 4012. This course is graded on a pass/fail basis.

**Equiv To:** BIOE 2000, CIVL 2900, ECE 4720, ENG 4012, MECH 2050

**ENG 4810 Co-operative Work 2 1 cr**

Work assignment in business, industry, or government for the Price Faculty of Engineering co-operative education stream students. Requires submission of a written report covering the work completed during the four-month professional assignment. It is assumed that courses ENG 4800, ENG 4810, ENG 4820, ENG 4830 and ENG 4840 will be taken in order. Those registering for this course must have applied for and been accepted into the Price Faculty of Engineering co-operative education stream. Not to be held with: BIOE 3000, CIVL 3910, ECE 4720, or MECH 3050. This course is graded on a pass/fail basis.

**Equiv To:** BIOE 3000, CIVL 3910, ECE 4720, MECH 3050

**ENG 4820 Co-operative Work 3 1 cr**

Work assignment in business, industry, or government for the Price Faculty of Engineering co-operative education stream students. Requires submission of a written report covering the work completed during the four-month professional assignment. It is assumed that courses ENG 4800, ENG 4810, ENG 4820, ENG 4830 and ENG 4840 will be taken in order. Those registering for this course must have applied for and been accepted into the Price Faculty of Engineering co-operative education stream. Not to be held with: BIOE 4000, CIVL 4920, ECE 4720, or MECH 4050. This course is graded on a pass/fail basis.

**Equiv To:** BIOE 4000, CIVL 4920, ECE 4720, MECH 4050

**ENG 4830 Co-operative Work 4 1 cr**

Work assignment in business, industry, or government for the Price Faculty of Engineering co-operative education stream students. Requires submission of a written report covering the work completed during the four-month professional assignment. It is assumed that courses ENG 4800, ENG 4810, ENG 4820, ENG 4830, ENG 4840 will be taken in order. Those registering for this course must have applied for and been accepted into the Price Faculty of Engineering co-operative education stream. Not to be held with: CIVL 4930, ECE 4720, or MECH 4060. This course is graded on a pass/fail basis.

**Equiv To:** CIVL 4930, ECE 4720, MECH 4060

**ENG 4840 Co-operative Work 5 1 cr**

Work assignment in business, industry, or government for the Price Faculty of Engineering co-operative education stream students. Requires submission of a written report covering the work completed during the four-month professional assignment. It is assumed that courses ENG 4800, ENG 4810, ENG 4820, ENG 4830 and ENG 4840 will be taken in order. Those registering for this course must have applied for and been accepted into the Price Faculty of Engineering co-operative education stream. Not to be held with: CIVL 4940. This course is graded on a pass/fail basis.

**Equiv To:** CIVL 4940

## English (ENGL)

**ENGL 0930 English Composition 3 cr**

Designed to help students write better essays. Course focuses on effective expression; sentence, paragraph, and essay construction; and the writing process. A great deal of writing is required; instructors address the particular needs of individual students. Students may not enter English courses numbered above the 1000 level directly from this course. This course is not designed to teach English as a second language. This course does not satisfy the Humanities requirement.

**Attributes:** Recommended Intro Courses, Written English Requirement

**ENGL 0940 Writing About Literature 3 cr**

Designed to supplement and to complement ENGL 0930, the course may be taken by itself. The course focuses on writing about literature through the study of the short story and poetry. Students may not normally enter English courses numbered above the 1000 level directly from this course. This course is not designed to teach English as a second language. This course does not satisfy the Humanities requirement.

**Attributes:** Recommended Intro Courses, Written English Requirement

**ENGL 1200 Representative Literary Works 6 cr**

An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose and drama from various historical periods. Texts for each section will be announced. Students may not hold credit for both ENGL 1200 and ENGL 1201. English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted.

**Equiv To:** ENGL 1201

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**ENGL 1300 Literature since 1900 6 cr**

An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose and drama from Canada, Britain, the United States and other countries. Texts for each section will be announced. Students may not hold credit for both ENGL 1300 and ENGL 1301. English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted.

**Equiv To:** ENGL 1301

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**ENGL 1340 Introduction to Literary Analysis 3 cr**

This course is intended to provide students with reading, writing, and analytic skills required for literary studies.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**ENGL 1400 Thematic Approaches to the Study of Literature 3 cr**

An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose, and drama from various thematic perspectives. Texts for each section will be announced. English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted. Students may not hold credit for both ENGL 1400 and the former ENGL 1310.

**Equiv To:** ENGL 1310

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**ENGL 2000 Intermediate Writing and Research 6 cr**

Designed to teach students how to read, write, and research at the university level, this course stresses effective expository writing, prose reading, and research skills. There is no prerequisite for this course. Students may not hold credit for both ENGL 2000 and ENGL 2001. NOTE: Credit in ENGL 2000 is acceptable toward a degree in Arts or Science, but does not satisfy the humanities requirement in the Faculty of Arts. It may not be offered for credit in the 30 hours for a Major (General) or the 18 hours for a Minor but may be offered for credit in the 48 hours for the Major (Advanced).

**Equiv To:** ENGL 2001

**Attributes:** Written English Requirement

**ENGL 2070 Literature of the Sixteenth Century 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for both ENGL 2070 and ENGL 2071.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Equiv To:** ENGL 2071

**Attributes:** Humanities, Written English Requirement

**ENGL 2080 Medieval Literature 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2090 Literature of the Seventeenth Century 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for both ENGL 2090 and ENGL 2091.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Equiv To:** ENGL 2091

**Attributes:** Humanities, Written English Requirement

**ENGL 2120 Literature of the Restoration and Eighteenth Century 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2130 Literature of the Romantic Period 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2140 Literature of the Victorian Period 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2160 British Literature since 1900 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for both ENGL 2160 and ENGL 2161.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Equiv To:** ENGL 2161

**Attributes:** Humanities, Written English Requirement

**ENGL 2170 American Literature to 1900 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2180 American Literature since 1900 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2190 Special Topics 3 cr**

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2270 Canadian Literature 6 cr**

A survey of poetry, prose and drama by major and minor writers in historical context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Written English Requirement

**ENGL 2280 Film and Literature 6 cr**

The interrelationships between literature and film through an analysis of significant films, novels, poems and plays. Special attention to adaptations of Shakespeare, modern drama, the 19th century novel, the modern novel, and popular fiction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340] or [FILM 1290 and FILM 1310 (or the former FILM 1300)]. Also offered as FILM 2280.

Students may not hold credit for both ENGL 2810 and FILM 2280.

**Equiv To:** FILM 2280

**Attributes:** Humanities, Written English Requirement

**ENGL 2490 Literature in Translation 3 cr**

Content of this course will vary from year to year and from section to section. See the course descriptions available from the English Department. Each section of this course will be double-numbered with the department of the instructor teaching the course. Restrictions: See note 4 in the program table under section 8.10.2 English. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2550 Critical Practise 3 cr**

An introduction to the critical idioms and methods for the analysis of literary texts. This course emphasizes the application of critical idioms and methods in the analysis of literary texts. Students may not hold credit for both ENGL 2550 and the former ENGL 2800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2570 The Novel 6 cr**

A survey of the development of the novel as a genre.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2600 Writing and Gender 3 cr**

The literary representation of gender, the influence of the author's gender on writing, and other issues of gender in literature.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2620 Introduction to Print Culture and Book History 3 cr**

This course will introduce students to a broad range of methodologies and topics important for the study of book history, print and post-print culture. Students will study texts from and/or about the four main areas of book history: manuscript, hand-press printing, machine press printing, and digital publishing while also being introduced to the methodologies of authorship and reception studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (the former ENGL 1310) and ENGL 1340].

**Attributes:** Written English Requirement

**ENGL 2650 Introduction to Critical Theory 3 cr**

An introduction to the history and application of critical theory for the study of literature and other media. The course will cover at least three distinct schools of critical theory and at least two distinct historical eras.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2760 Introductory Creative Writing 3 cr**

Offers students the chance to explore the basic forms of creative writing - poetry, fiction, and drama - whether or not they have made previous formal attempts to write in these forms. A sample of the student's writing is not required for admission to this course. The format is seminar and workshop and will include, as needed, lectures on the fundamentals of creative writing. Students may not register concurrently for ENGL 2760 and ENGL 3500. Not open to students who have previously obtained credit for any of ENGL 3500 or the former ENGL 3790.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2830 Literature of Africa and/or the Caribbean 3 cr**

This course will explore the literatures of Africa and the Caribbean by writers from Nigeria, South Africa, Kenya, Zimbabwe, Grenada, Jamaica, and/or Trinidad. We will also examine the theories often associated with postcolonialism - theories of marginality, power, alterity, ethnicity, race, locality, space, the subaltern, mimicry, hybridity, nationalism, diaspora, class, migration, multiculturalism, minority discourse, resistance, and historical revisionism - in a comparative context. Accordingly, we will be reading both fictional and theoretical works. The central objective of this course is to offer an overview of some contemporary world literature written in English. Students will also be encouraged to examine the texts from a variety of complimentary literary perspectives including new historicism, feminism, and Marxism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2900 Genre 3 cr**

Selections in literature of a particular genre. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2940 Short Fiction 3 cr**

Representative writers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 2960 Drama 3 cr**

An introduction to dramatic forms and conventions. Students may not hold credit for both ENGL 2960 and ENGL 2961.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Equiv To:** ENGL 2961

**Attributes:** Humanities, Written English Requirement

**ENGL 2980 Poetry 3 cr**

Introduction to poetic language and forms.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities, Written English Requirement

**ENGL 3000 Chaucer 6 cr**

Critical study of the works of this author, including historical context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3010 Shakespeare 6 cr**

Critical study of the works of this author, including historical context. Students may not hold credit for both ENGL 3010 and ENGL 3011.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Equiv To:** ENGL 3011

**Attributes:** Humanities, Written English Requirement

**ENGL 3030 Studies in Sixteenth-Century Literature 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3050 Studies in Old English 6 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3080 Studies in Medieval Literature 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3090 Studies in Seventeenth-Century Literature 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3120 Studies in Restoration and Eighteenth-Century Literature 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3130 Studies in the Romantics 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3140 Studies in the Victorians 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both ENGL 3140 and ENGL 3141.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Equiv To:** ENGL 3141

**Attributes:** Humanities, Written English Requirement

**ENGL 3170 Studies in American Literature 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3180 Studies in Renaissance Literature 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3190 Studies in Special Topics 6 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3270 Studies in Canadian Literature 3 cr**

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both ENGL 3270 and ENGL 3271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Equiv To:** ENGL 3271

**Attributes:** Humanities, Written English Requirement

**ENGL 3500 Creative Writing 6 cr**

This advanced seminar will include practical and theoretical components and will focus on the generation and revision of work within the main literary genres: prose, poetry, drama, and memoir, with an emphasis on preparing pieces for publication. Students may not hold credit for both ENGL 3500 and the former ENGL 3790.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ENGL 2760] or written consent of instructor, based on a letter of application and a writing sample to be submitted electronically to the Department general office no later than one month prior to the start of the course.

**Mutually Exclusive:** ENGL 3790

**Attributes:** Humanities, Written English Requirement

**ENGL 3530 Special Topics in Creative Writing 3 cr**

This advanced studies course will include practical and theoretical components and will focus on a particular area of writing craft or poetics without an emphasis on end-of-term publication or production. Possible topics include prose fiction, poetry, memoir, dramaturgy, and screenwriting. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [ENGL 2760] or written consent of instructor, based on a letter of application and a writing sample to be submitted electronically to the Department general office no later than one month prior to the start of the course.

**Attributes:** Humanities, Written English Requirement

**ENGL 3550 Studies in British Literature since 1900 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3620 Special Topics in Print Culture and Book History 3 cr**

Content of this course will vary from year to year and from section to section. However, all courses under this designation will be primarily (but not exclusively) focused on the conditions of dissemination and/or reception of the works being discussed and on their material form. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at or above the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3630 Studies in Critical Theory 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3670 Studies in the Novel 6 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both ENGL 3670 and ENGL 3671.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Equiv To:** ENGL 3671

**Attributes:** Humanities, Written English Requirement

**ENGL 3800 Special Studies 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Mutually Exclusive:** ENGL 2910

**Attributes:** Humanities, Written English Requirement

**ENGL 3890 Studies in Writing and Gender 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3960 Special Topics in Drama 3 cr**

Advanced study of selected topics. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both ENGL 3960 and ENGL 3961.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Equiv To:** ENGL 3961

**Attributes:** Humanities, Written English Requirement

**ENGL 3970 Special Topics in Poetry 3 cr**

Advanced study of selected topics. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3980 Studies in Modernism 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 3990 Studies in Post-Modernism 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six hours of English at the 2000 level.

**Attributes:** Humanities, Written English Requirement

**ENGL 4630 Honours Seminar 3 cr**

This course may vary from year to year depending on the needs and interests of instructors and students. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities, Written English Requirement

**ENGL 4770 Honours Seminar 1 6 cr**

This course may vary from year to year depending on the needs and interests of instructors and students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities, Written English Requirement

## Entomology (ENTM)

**ENTM 0610 Beekeeping 2 cr**

Introduction to beekeeping that includes economics and marketing of honey and beeswax, equipment and its construction, pollen and nectar plants, pollination, management systems, diseases and pests, honey handling, package bees, wintering of bees, etc.

**ENTM 0620 Insect Pest Management 4 cr**

Characteristics, damage, and identification; insecticide use and safety; life histories and control of common Manitoba livestock, field and farmyard insects. General principles of pest management in agriculture will also be discussed.

**ENTM 1000 World of Bugs 3 cr**

A survey of insect biology and life styles with emphasis on insect diversity and human-insect interactions.

**Attributes:** Recommended Intro Courses

**ENTM 2050 Introductory Entomology 3 cr**

A basic course for students requiring a foundation in entomology. The anatomy, life history, identification, adaptations, and relations of insects to humans are examined along with methods of collecting and preserving insect specimens.

**ENTM 3160 Veterinary and Wildlife Entomology 3 cr**

An introduction to the insects and their relatives that affect domestic animals, pets and wildlife. Special consideration is given to life histories, insect/host interaction, evolutionary relationships, impact on host vertebrates and pest management. Not all courses are offered every year. Please contact the department regarding course availability.

**ENTM 3162 Manitoba's Insect Fauna 3 cr**

A collection of insects is required. Emphasis is placed on collecting techniques, specimen preparation, diversity of species collected, organization and curatorial skills, and accuracy of identification. Students should contact instructors in April preceding registration in this course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENTM 2050.

**ENTM 3170 Crop Protection Entomology 3 cr**

A course for students requiring a foundation in entomology and knowledge of major insect pest groups in Western Canada. The pests and principles for their control (chemical, cultural, mechanical, physical and biological methods) are explored with emphasis on the entire ecosystem. Students may not hold credit in ENTM 3170.

**ENTM 3180 Field Techniques in Entomology 3 cr**

A field course to provide a foundation in field sampling and collection techniques for insects in natural and agroecosystems. The course is run at the University of Manitoba Star lake research station near Whiteshell MB. Transportation to and from the University and accommodations are included. Six day intensive field-based course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: none.

**ENTM 3190 Introduction to Applied Entomology 3 cr**

A course providing a foundation in applied entomology covering topics including: basic insect biology, insect pest management, insect biodiversity and the biological services provided by insects. Online lecture presentations, weekly readings and online laboratories. May not be held with ENTM 3170.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: none.

**Equiv To:** ENTM 3170

**ENTM 4000 Topics in Entomology 3 cr**

A Course of assigned readings and literature review essays for students in the minor in Entomology program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENTM 2050 and consent of department head.

**ENTM 4250 Pesticide Toxicology 3 cr**

Action, behaviour, and fate of pesticides in target and non-target species and in the environment. Past, present, and future chemical control agents will be discussed on the basis of chemical and biochemical knowledge. Not all courses are offered every year. Please contact the department regarding course availability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A course in biochemistry.

**ENTM 4280 Aquatic Entomology 3 cr**

Adaptations and significance of insects to aquatic habitats, with emphasis on identification. Aquatic insects as indicator species of pollution and their response to chemical pesticide application. A collection of aquatic insects is required. Not all courses are offered every year. Please contact the department regarding course availability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENTM 2050; AGEC 2370 or BIOL 2300; or consent of instructor.

**ENTM 4320 Pollination Biology 3 cr**

The biology, ecology of social, semisocial and solitary insect pollinators and their ecological interactions with entomophilous plants. Not all courses are offered every year. Please contact the department regarding course availability.

**ENTM 4500 Insect Taxonomy and Morphology 3 cr**

Study of insect structure combined with evolution of insect orders. Modern concepts of subspecies, species and higher taxa. Collection required (contact instructor for details in April/May of preceding year.) Students may not hold credit for ENTM 4500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENTM 2050 or consent of instructor.

**ENTM 4520 Physiological Ecology of Insects 3 cr**

The effect of environmental factors such as temperature, moisture, light and other organisms on the physiology and ecology of insects. Not all courses are offered every year. Please contact the department regarding course availability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENTM 2050 or consent of instructor.

## Entrepreneurship/Small Bus. (ENTR)

**ENTR 2010 Managing the Smaller Business 3 cr**

Small firms dominated the Canadian economic scene and contribute to the nations' economic welfare in a major way but pose different managerial issues and problems for their owner/managers than larger organizations. This course will focus specifically on how to effectively manage and grow the smaller firm. Students may not hold credit for both ENTR 2010 and ENTR 3100. This course is not open to students in the Asper School of Business. This course is not for students who will pursue a major in Entrepreneurship/Small Business. U1 students may take this course.

**Mutually Exclusive:** ENTR 3100

**Attributes:** Recommended Intro Courses

**ENTR 2020 Starting a New Business 3 cr**

This is a course for students who may wish to start a business of their own at some time or assess their potential for such an option. It will cover a broad range of topics to increase your understanding of what it takes to succeed in an entrepreneurial career. May not be held with ENTR 2030. This course is not open to students in the Asper School of Business. This course is not for students who will pursue a major in Entrepreneurship/Small Business.

**Equiv To:** ENTR 2030

**Attributes:** Recommended Intro Courses

**ENTR 2030 Introduction to Entrepreneurship 3 cr**

Examines entrepreneurship via a social, environmental and economic sustainability perspective. Provides proven methods of entrepreneurial thinking to help students explore the relationship between society's need for economic development and costs to and benefits for the environment or other stakeholders, including rural and Indigenous communities. Students may not hold credit for both ENTR 2030 and May not be held with ENTR 2020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GMGT 1010 (D) or GMGT 1011 (D).

**Equiv To:** ENTR 2020

**ENTR 3100 Small Business Management 3 cr**

An appreciation of the primary issues that should be considered in starting and managing a small business within the Canadian context. Students may not hold credit for both ENTR 3100 and ENTR 2010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ACC 1100 (D), and MKT 2210 (D), and GMGT 2060 (formerly GMGT 2080) (D), and ENTR 2030.

**Mutually Exclusive:** ENTR 2010

**ENTR 3102 Technological Entrepreneurship 3 cr**

An overview of the inter-relationship between technology and entrepreneurship. An appreciation of the role of technical entrepreneurship in the economy, how a technology strategy is developed, implemented and defended as well as the societal implications of technological entrepreneurship. May not be held with the former GMGT 3050.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENTR 2020 (D) or ENTR 2030 (D) and a minimum of 42 credit hours of university level courses.

**Equiv To:** GMGT 3050

**ENTR 3104 Selected Topics in Small Business/Entrepreneurship 3 cr**

A study of selected areas of recent development related to small business/entrepreneurship. Topics may include innovation and creativity, venture financing, opportunity identification and recognition, franchising and entry strategies of new business, social entrepreneurship, international entrepreneurship and entrepreneurial histories (e.g. IDEA recipients).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENTR 2030.

**ENTR 3106 Family Business Management 3 cr**

An examination of the unique challenges inherent in the management of a family business. Topics include founder relinquishment, the need for succession planning and firm regeneration, the core actors and their issues, ownership structure and estate planning.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENTR 2020 (D) or ENTR 2030 (D) and a minimum of 42 credit hours of university level courses.

**ENTR 4100 New Venture Analysis 3 cr**

A project oriented course focusing on the identification and evaluation of viable new venture concepts and their associated risks, problems, and opportunities. May not be held with ENTR 4511. Students are strongly encouraged to take FIN 3240 prior to ENTR 4100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENTR 2020 (D) or ENTR 2030 (D) and a minimum of 42 credit hours of university level courses."

**Mutually Exclusive:** ENTR 4511

## Envir. Design Landsc & Urban (EVLU)

**EVLU 3000 History of Designed Environments 3 cr**

A critical examination and appraisal of design for dwelling in the context of settlement with emphasis on representation of diverse positions on key issues in design practice. Studies will include consideration of cross cultural precedents and lessons from around the world.

**EVLU 3002 Site Planning 3 cr**

An investigation of the relationship between natural and cultural processes in the formation of the built environment, including a review of the methods and strategies employed for site programming, inventory, analysis, and development at different scales of intervention.

**EVLU 3004 Ecology and Design 2 3 cr**

This course will focus on an examination of ecological and technological perspectives on the planning, design and making of the physical environment. This will include a meshing of prediction and advocacy concerning new models of sustainable urbanization, focusing on green technology and infrastructure. Key theories and their application to landscapes at varied scales will be considered along with salient literature, current issues, design precedents and potentials for creative expression and interpretation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 2200.

**EVLU 3006 Studio 3: Dwelling/ Precinct/ Everyday Life 9 cr**

A studio/lecture course that examines the notion of dwelling through spatial design with a concentration at the scale of the precinct in the private to semi-private realm focusing on the needs of the individual, on spatial qualities, materials, and site design detail. Theoretical, analytical, conceptual, design, planning and communication skills in landscape + urbanism will be developed and applied in distinct projects. Emphasis is on habitat by design, issues of contested space, ecological design and sustainability. The course may include a field trip (location and cost to be determined on a yearly basis) and will include an obligatory pre-term drawing workshop.

**EVLU 3008 Studio 4: Networks and Infrastructure 9 cr**

A critical exploration of analytical, conceptual, and developmental aspects of design of the public realm in an experimental studio setting. Social, political, economic, communication, and ecological networks will be studied at the scale of neighborhood and community in the urban realm.

**EVLU 3010 Landscape and Urbanism Theory 3 cr**

An examination through lectures, readings, seminars and essay assignments, of twentieth and twenty first century philosophical thinking, which has been influential in the theory and practice of landscape architecture, planning and urbanism. Emphasis is on ideas, paradigms, and manifestos. This will include a study of the social, political, religious, cultural, technological, and aesthetic forces behind landscape and urbanism, and the forms that these forces have generated.

**EVLU 3012 Site Morphology and Grading 3 cr**

An examination of the means and methods used to create landscapes that are shaped by earthwork grading. This will include the study of the forces, principles, and techniques in the modelling and manipulation of the ground plane and the resolution of cultural, ecological and hydrological design considerations implicit in landform design. The course may include a pre-term drafting workshop.

**EVLU 3014 Placemaking Fundamentals 3 cr**

An introduction to placemaking as an integrated community-based application of landscape and urbanism concepts, based on topical themes, such as the Great Neighbourhood or Edens Lost and Found.

**EVLU 4000 Philosophy, Ethics and Aesthetics 3 cr**

An examination of philosophical issues and debates regarding ethics and aesthetics, and their influence and potential upon urban design and urban form in the past and present, and to speculate upon the future.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVLU 3010.

**EVLU 4002 Construction Materials 3 cr**

A comprehensive introduction to construction materials, methods and processes. Examination of regulatory issues of human safety and techniques for communicating construction proposals with application to how this information is incorporated into contracts. Field trips to nurseries, quarries, lumber yards, and urban sites where students can observe materials transformed to comply with the requirements of designers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVLU 3012.

**EVLU 4004 Inquiry by Environmental Design: Researching Space-Place Transformation 3 cr**

An exploration of the design/research relationship, from a critical and creative thinking perspective will be the core of this course, viewing design and research as linked forms of inquiry into space-place transformation. A focus will be on design/research methods and approaches appropriate to informing and investigating designed environments and community design contexts.

**EVLU 4006 Special Topics in Community Design 3 cr**

This course will involve a critical examination of specific topics such as: health and community design; inner city environments; and Canadian community planning and design, and its contexts.

**EVLU 4008 Plants, Ecosystems and Design 3 cr**

The examination of cultural and technical aspects of designing with plants will be explored in an urban context through field investigations, lectures, seminars and assignments. Issues of plant identification, planting design types, their application to contemporary landscape architecture, technical requirements, planting details and ecological integration in the urban environment will be included.

**EVLU 4010 Community Design Process and Method: Advanced Placemaking 3 cr**

An introduction to the integration of perception, intention and placemaking associated with manifestations of community, especially communities of interest, and systems of 'communities of communities'. A consideration of the relationship of space-place transformation and placemaking, via participatory design processes will be examined as part of a critical design and planning process.



**EVLU 4012 Studio 5: Possible Urbanism(s) 9 cr**

A radical exploration of analytical, conceptual, and socio-political aspects of urban public place in an experimental studio setting. An emphasis will be placed on design as mediation between competition demands. The studio incorporates the theory and application of three dimensional simulation technology in design.

**EVLU 4014 Studio 6: Emergent Futures 9 cr**

This studio integrates planning and design from the scale of urban infrastructure through to design detail in the context of landscape and urbanism. An emphasis is placed on the challenges of relevant equitable environmental and social design in the post-industrial world. The studio incorporates the theory and application of CAD and GIS technology in design.

**EVLU 4016 History of Landscape and Urbanism 3 cr**

An historical survey of human made landscapes and urban settlement form, patterns, and types, including major themes and movements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVLU 3000.

**EVLU 4018 Principles of Urban Design 3 cr**

This course will examine urban design principles, practices, and applications including political and social systems, and their impacts on the contemporary urban condition.

## Environment (ENVR)

**ENVR 1000 Environmental Science 1 - Concepts 3 cr**

This course will introduce students to the conceptual framework of the environment by examining its physical, biological, and social components. General topics to be considered will include ecological principles and the responses of natural and managed systems to disturbance; population growth; biodiversity and conservation; and environmental sustainability. Not to be held with BIOL 1340.

**Mutually Exclusive:** BIOL 1340

**Attributes:** Recommended Intro Courses

**ENVR 2000 Environmental Science 2 - Issues 3 cr**

This course will briefly review the major features of the structure and function of natural systems along with the degree to which these have been compromised. The main component of the course, however, will concentrate on the identification of the issues that underlie environmental degradation, while exploring alternative conditions that have the potential to reverse current trends and ultimately contribute to ecological sustainability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 1000 or BIOL 1340.

**Attributes:** Recommended Intro Courses

**ENVR 2010 Field Topics in Environment 1.5 cr**

Field and practical experience in selected topics of current interest in the Environmental Science and Studies, with the content to vary depending on the needs of students and faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**ENVR 2020 Extended Field Topics in Environment 3 cr**

Field and practical experience in selected topics of current interest in the Environmental Science and Studies, with the content to vary depending on the needs of students and faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**ENVR 2180 Introductory Toxicology 3 cr**

A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants. Not to be held with ENVR 2190 or BIOL 2380 or BIOL 2382 or AGRI 2180 or AGRI 2190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [BIOL 1030 or BIOL 1031], and [(CHEM 1310 or CHEM 1311, or CHEM 1320)].

**Equiv To:** AGRI 2180, BIOL 2380, BIOL 2381, BOTN 2180

**Mutually Exclusive:** AGRI 2190, BIOL 2382, BOTN 2190, ENVR 2190, ZOO 2190

**ENVR 2190 Toxicological Principles 1.5 cr**

A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, and the mechanisms of toxic action. Not to be held with ENVR 2180 or BIOL 2380, or BIOL 2382, or AGRI 2180, or AGRI 2190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [BIOL 1030 or BIOL 1031], and [CHEM 1310 or CHEM 1311, or CHEM 1320].

**Equiv To:** AGRI 2190, BIOL 2382, BOTN 2190, ZOO 2190

**Mutually Exclusive:** AGRI 2180, BIOL 2380, BIOL 2381, BOTN 2180, ENVR 2180, ZOO 2180

**ENVR 2350 Technical Communication in the Environmental Sectors 3 cr**

(Lab Required) An introduction to technical communication skills required for environmental practitioners in research, government, and industry. The course covers technical writing and literature search techniques, business writing including reports, memos and e-mails, professional presentation skills, and fundamental internet skills. Practical experience is gained through assignments and laboratory exercises.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 1000 or BIOL 1340, or permission of department head.

**ENVR 2550 Environmental Chemistry 3 cr**

(Lab Required) An introduction to the chemistry of the environment. Emphasis will be on the composition of the natural environment and the processes of natural and human-introduced chemical species that take place within it. The course will provide students with the chemical basis for understanding the environment and environmental problems. Not to be held with CHEM 2550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 1310 or CHEM 1311.

**Equiv To:** CHEM 2550

**ENVR 2810 Environmental Critical Thinking and Scientific Research 3 cr**

Course is designed to aid students in the development of a skeptical, scientific approach to thinking about environmental and geographical problems and issues, as well as applying that skepticism and critical thinking to develop well balanced research hypotheses and data collection methods. May not be held with the former ENVR 2270 or the former GEOG 2530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENVR 1000 or GEOG 1280 or GEOG 1290 or GEOG 1700 or GPE 1700 or consent of department.

**Mutually Exclusive:** ENVR 2270, GEOG 2530

**Attributes:** Written English Requirement

**ENVR 2900 Professional Development in the Environmental Sectors 1 1.5 cr**

Through self directed learning students are introduced to the environmental sectors and issues including workplace health and safety, the respectful workplace, managing workloads and expectation, and professionalism. The course is a mandatory requirement to Cooperative Education Option admission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: 30 credit hours of university credit.

**ENVR 3000 Multidisciplinary Topics in Environmental Science 1 3 cr**  
Selected topics of current interest in the Environmental Sciences and Studies. Course content to vary with each offering depending on the needs and interests of students and faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: Permission of department head, and 60 credit hours of university credit.

**ENVR 3010 Field Topics in Environmental Science 1 1.5 cr**

Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of department head.

**ENVR 3020 Extended Field Topics in Environmental Science 1 3 cr**

Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of department head.

**ENVR 3110 Environmental Conservation and Restoration 3 cr**

(Lab Required) Environmental conservation and restoration are introduced and approaches based on science and traditional knowledge are contrasted. An emphasis is placed on systems thinking and both local and international case studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: BIOL 2390, or BIOL 2300, or AGECE 2370, or permission of department head.

**ENVR 3140 Aquatic Ecosystem Services 3 cr**

This course introduces the field of Ecosystem Services, an analytical framework for evaluating the economic, cultural, and biogeochemical contributions that ecosystems make to human health and well-being. Examples will be drawn from aquatic ecosystems and cover topics such as pollution and contamination cleanup, commercial and subsistence food provisioning, climate regulation, and cultural uses in folklore, art, religion, science, and recreation. A special emphasis will be made on microbes as key drivers of aquatic ecosystems, including topics in microbial diversity, metabolism, and evolution.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: [BIOL 1010 or BIOL 1011] or [(BIOL 1020 or BIOL 1021) and (BIOL 1030 or BIOL 1031)]; and [(one of CHEM 1100, CHEM 1101, the former CHEM 1300, or the former CHEM 1301) and (CHEM 1120 or CHEM 1121)] or ENVR 2000.

**ENVR 3160 Environmental Responsibilities and the Law 3 cr**

Environmental responsibilities and their legal framework in terms of policies, legislation, standards and guidelines and the tools to manage responsibility are examined through lectures, case study review and discussion. Environmental liability and due diligence are reviewed in relation to responsibilities of organizations and individuals. Strategies to manage environmental liabilities, including environmental and risk assessment, are also discussed. Not to be held with (ENVR 3150 or ENVR 2650).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: ENVR 2000 or permission of department head.

**Equiv To:** ENVR 2650, ENVR 3150

**ENVR 3180 Methods in Ecotoxicology 3 cr**

(Lab Required) This is a laboratory-based course exploring and critiquing the development, conduction and interpretation of toxicity tests in ecotoxicology. Students will learn how to perform standard bioassays for a variety of species (plants, invertebrates, and vertebrates) as well as systems (aquatic and terrestrial) at different levels of biological organization, from the individual to the ecosystem.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: ENVR 2180 or BIOL 2380 or AGRI 2180, or permission of instructor or department head.

**Equiv To:** ENVR 3300

**ENVR 3250 Environmental Assessment 3 cr**

This course engages with the theory, principles and practices of environmental assessment as a planning and decision-making process to identify and mitigate adverse effects of development projects. Environmental assessment is defined in the context of federal and provincial legislation, and applicable standards and guidelines. Assignments involve practical experiences, case study review and basic report preparation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: [ABIZ 3550 or ENVR 3160 or the former ENVR 3150] and [BIOL 2300 or BIOL 2301 or AGECE 2370] or [BIOL 2390] or permission of department head or instructor.

**ENVR 3340 Circumpolar Cultures and Lifestyles 3 cr**

This course provides an introduction to the culture, lifestyles, belief systems, material culture, art, environmental issues, and politics of Aboriginal Peoples in northern Canada, Greenland, Alaska, Siberia and Scandinavia.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of department head.

**Equiv To:** NATV 3340

**ENVR 3350 Environmental Management Systems 3 cr**

This course provides an introduction to environmental management systems and specific material on the ISO 14001 international EMS standard. Auditing principles and techniques are described with specific guidance on auditing an ISO 14001 EMS.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of department head.

**ENVR 3400 Introduction to Environment and Health 3 cr**

An overview of the linkages between human health and environmental issues. The course discusses the nature of environmental hazards, human exposure and health outcomes. Major environmental and human health issues such as air pollution, hazardous substances, endocrine disruptors and products in the home are covered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: 60 credit hours of university credit.

**ENVR 3500 Project in Environmental Science 3 cr**

A research project in any aspect of environmental science, chosen in consultation with the department head and an appropriate supervising faculty member. Written reports and oral presentation on the results of the project will be required. The course is normally available only to final year students in the Environmental Science or Studies Program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**ENVR 3550 Environmental Analysis 3 cr**

(Lab Required) An introduction to classical and modern techniques for sampling, sample pre-treatment, and analysis of chemical substances in aquatic atmospheric and terrestrial environments and the interpretation of data obtained from such analyses. Not to be held with CHEM 3590.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 2550, or CHEM 2550, or CHEM 2470, or permission of department head.

**Mutually Exclusive:** CHEM 2523, CHEM 3500, CHEM 3520, CHEM 3590

**ENVR 3750 Green Building and Planning 3 cr**

An overview of the concepts and tools of Green building design and Green Planning. The course covers the history and trends in Green Building and Planning, related policies, tools and techniques. There is a strong emphasis on learning from local case-studies through seminars and field trips.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 2000 and 57 credit hours, or permission of department head.

**ENVR 3850 Sustainable Manitoba (A) 3 cr**

This course approaches local sustainability issues from an interdisciplinary perspective. By looking at the ecological, social and economic aspects from a variety of discipline perspectives, a fuller understanding of sustainability is achieved. The broad range of perspectives is achieved through participation of guest speakers from other faculties and outside of the university as well as excursion outside the classroom. Not to be held with GEOG 3850.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 60 credit hours of course work, or permission of department head.

**Equiv To:** GEOG 3850

**ENVR 3890 Geography and Wellness 3 cr**

This course explores how human environment relations influence our mental, emotional, and physical wellbeing. Students will delve into current research in health and wellness geography and related disciplines, particularly focusing on: therapeutic landscapes, ecological loss and grief, sacred spaces, and environmental influences on mental wellbeing. Also offered as GEOG 3890. May not be held with GEOG 3890.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENVR 1000 or GEOG 1200 or GEOG 1280 or GEOG 1700 or GPE 1700 or permission of the department head.

**Equiv To:** GEOG 3890

**ENVR 3900 Professional Development in the Environmental Sectors 2 1.5 cr**

Attendance and participation in seminars, conferences and workshops to foster greater interaction between students and practitioners in the environmental sectors. Students improve professional skill sets through assignments and mock interviews. The normal sequence for participation is after completion of ENVR 3980.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENVR 2900, and 60 credit hours of university credit.

**ENVR 3910 Coop Work Term Report 1 1.5 cr**

Work term report, completed in conjunction with the coop placement, designed to integrate professional experiences with the concepts and theories explored through academic study. Students must be admitted into the Coop program to be registered, and receive credit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 2900. Prerequisite or Concurrent Requirement: ENVR 3980.

**ENVR 3920 Coop Work Term Report 2 1.5 cr**

Work term report, completed in conjunction with the coop placement, designed to integrate professional experiences with the concepts and theories explored through academic study. Students must be admitted into the Coop program to be registered, and receive credit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 3980 (P). Prerequisites or Concurrent Requirements: ENVR 3900, and ENVR 3990.

**ENVR 3980 Coop Work Term 1 0 cr**

Work assignments in business, industry, research or government for students registered in the Honours or Major Cooperative program. This course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 2900.

**ENVR 3990 Coop Work Term 2 0 cr**

Work assignments in business, industry, research or government for students registered in the Honours or Major Cooperative program. This course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or Concurrent Requirement: ENVR 3900.

**ENVR 4000 Multidisciplinary Topics in Environmental Science 2 3 cr**

Selected topics of current interest in the Environmental Sciences and Studies. Course content to vary with each offering depending on the needs and interests of students and faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Permission of department head, and 60 credit hours of university credit.

**Mutually Exclusive:** ENVR 4850

**ENVR 4010 Field Topics in Environmental Science 2 1.5 cr**

Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**ENVR 4020 Extended Field Topics in Environmental Science 2 3 cr**

Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**ENVR 4050 Ecosystem Management 3 cr**

This course will provide students with an understanding of the practical applications of ecological science, environmental policy, and resource management approaches in the large-scale planning of landscapes. The course will review ecological principles and trace the historical development of the ecosystem concept. Comparisons are made to other possible environmental management approaches. The synthesis of major elements and concepts will be reinforced through case studies on the Manitoba landscape, with an emphasis on practical learning by students through field seminars and group discussions. Not to be held with GEOG 4050.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**Equiv To:** GEOG 4050

**ENVR 4060 Biogeography 3 cr**

This course will provide students with a general understanding of the historical, ecological, analytical, and conservation aspects of biogeography. The course will also have a dual focus on the principles and concepts of reasons for the distribution of plants and animals worldwide, as well as incorporating discussion on as many local (Manitoba, Canada, North America) examples as possible. Not to be held with GEOG 4060.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**Equiv To:** GEOG 4060

**ENVR 4110 Critical Thinking and the Environment 3 cr**

(Lab Required) Topical issues and responses regarding the environment including conservation, management, and policy making are critically evaluated at local, national, and global scales. Term projects emphasizing applied work with environmental organizations and researchers are presented.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENVR 2000, and 72 credit hours of course work, or permission of department head.

**ENVR 4180 Ecotoxicological Risk Characterization 3 cr**

An advanced course that will give students working knowledge of current techniques for defining and mitigating the environmental risks associated with chemical and other contaminants. The course will cover the topics of problem definition, effects characterization, exposure characterization, risk assessment, causality, weight of evidence and risk communication and management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of ENVR 2180, BIOL 2380, BIOL 2381 or AGRI 2180 or permission of instructor or department head.

**ENVR 4400 Advanced Issues in Environment and Health 3 cr**

An evaluation of global and local environmental health issues and the assessment and management tools used to manage these risks. Case studies of environmental issues and their human health effects are covered. Students have the opportunity to work on a substantial interdisciplinary environmental health project.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 3400.

**Equiv To:** ENVR 4220

**ENVR 4500 Thesis Project in Environmental Science and Studies 6 cr**

A research thesis project in any aspect of environmental science or environmental studies, chosen in consultation with the course coordinator and an appropriate supervisor, typically a faculty member. Written reports and oral presentation on the results of the thesis project will be required. The course is normally available only to final year students in the Environmental Science Honours or Environmental Studies Honours Program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Permission of course coordinator, and a GPA of 3.00 in the last 30 credit hours.

**ENVR 4550 Aquatic Chemistry 3 cr**

An examination of biogeochemical processes affecting the distribution, speciation and bioavailability of chemical substances in the aquatic environment. The theoretical basis for the chemical behaviour of natural water systems is discussed, as well as the description of the processes involved in wastewater treatment. Not to be held with CHEM 4550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 3550, or CHEM 3590, or permission of department head.

**Equiv To:** CHEM 4550

**ENVR 4650 Advanced Issues in Environmental Law and Policy 3 cr**

This course provides an in-depth review of Canadian law and policy relating to environmental protection and management. In particular, the course describes the laws governing a variety of topics related to the environment, including constitutional responsibilities, federal and provincial environmental legislation, water law, parks and protected areas, wildlife and fisheries management, species at risk, and international law including climate change.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum grade of C in ENVR 3160 (or the former ENVR 2650), or permission of department head.

**ENVR 4850 Wildlife Management 3 cr**

(Lab required) This course provides students with an understanding of relevant theory and practice in wildlife management. Topical management issues will be studied, selected through consultation with government and NGOs in Manitoba. There will be field trips and lab activities. May not be held with ENVR 4000 when titled "Wildlife Management."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of Instructor.

**Mutually Exclusive:** ENVR 4000

**ENVR 4872 Advanced Methods in Geomatics 3 cr**

(lab required) This course focuses on the theory and application of geomatics in spatial problem solving in geography and the environment. The use of geomatics' technologies including GIS, Earth observation and spatial numerical methods will be covered. Students will learn the theoretical underpinning of spatial statistical concepts and will experiment with data exploration, inference and hypothesis testing. Lab assignments will provide practical experience with GIS and other geomatics software as well as CRAN-R. Not to be held with GEOG 4590 or GEOG 4720 or GEOG 4872.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3730 or permission of instructor.

**Equiv To:** GEOG 4590, GEOG 4720, GEOG 4872

**ENVR 4910 Coop Work Term Report 3 1.5 cr**

Work term report, completed in conjunction with the coop placement, which is designed to integrate professional experiences with the concepts and theories explored through academic study. Students must be admitted into the Coop program to be registered, and receive credit.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: ENVR 3990 (P).

**ENVR 4980 Work Term 3 0 cr**

Work assignments in business, industry, research or government for students registered in the Honours or Major Cooperative program. This course is graded pass/fail.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: ENVR 3990 (P).

## Environment, Earth & Resources (EER)

**EER 1000 Earth: A User's Guide 3 cr**

This course will present a multi-disciplinary introduction to the Planet Earth as both the source of essential resources and as the site of resulting negative impacts. Focus in the course will be provided by addressing important and current topics, case studies, and concepts that the well-educated citizen of the Earth should understand and will include natural and human-induced processes within a broad range of spatial and temporal scales.

**Attributes:** Recommended Intro Courses

## Environmental Architecture (EVAR)

**EVAR 3000 Pre-Modern Architectural History and Theory I 3 cr**

Provides a historical and theoretical understanding of early Greek, Roman, Gothic and non-western architectural topics and their influence. Content is explored using primary texts where possible, and through critical analysis of selected topics. May not be held for credit with the former EVDS 2690, EVDS 2610, ARCH 6320 or ARCH 6420.  
**Equiv To:** ARCH 6430, EVDS 2620

**EVAR 3002 Pre-Modern Architectural History and Theory II 3 cr**

Provides a historical and theoretical understanding of Gothic and Renaissance architectural topics and their influence, up to the work of Claude Perrault. Content is explored using primary texts where possible, and through critical analysis of selected topics. May not be held for credit with EVDS 2620 or ARCH 6340.  
**Equiv To:** ARCH 6340, EVDS 2620

**EVAR 3004 ARCH TECH 1 3 cr**

Construction materials and structural theory in the analysis and design of simple wood-frame, masonry and light steel construction; fundamental passive energy systems and design strategies for material and energy reduction. May not be held for credit with EVDS 1690 or ARCH 6480.  
**Equiv To:** ARCH 6480

**EVAR 3006 Architectural Technology 2-Building Construction, Structures & Envelopes 3 cr**

Architectural, environmental and technical aspects of construction focusing on low-rise and medium sized wood, steel and masonry construction including issues of material production/manufacturing, soils, foundation, envelope systems, basic mechanical systems and their integration and acoustic concerns. May not be held for credit with the former EVDS 2670, EVDS 2700, ARCH 6520 or ARCH 6530  
**Equiv To:** ARCH 6530, EVDS 2670, EVDS 2700

**EVAR 3008 Architecture Design Studio 1 9 cr**

An architectural study of the human condition in relation to the natural and built environment through design oriented research exploration, analysis, evaluation and interpretation of a selected subject of inquiry. Various ways of seeing and making are applied as tools for critical thinking to align content with modes of representation. May not be held for credit with former EVDS 2630 or ARCH 6380.  
**Mutually Exclusive:** ARCH 6380, EVDS 2640

**EVAR 3010 Architecture Design Studio 2 9 cr**

Building upon first term explorations, architectural propositions are developed that seek to clarify relations between human inhabitation and the physical environment in a regional context. Design principles influenced by programmatic, theoretical, historical, technological material and environmental criteria are examined. May not be held for credit with former EVDS 2640 or ARCH 6390.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: EVAR 3008.  
**Mutually Exclusive:** ARCH 6390, EVDS 2640

**EVAR 3012 Architecture Technology Preparation: Structural Concepts 3 cr**

A preparatory block course introducing the fundamentals of structural concepts in architecture that prepares students for the foundation technology courses in architecture. May not be held for credit with EVDS 2300 (or former EVDS 1690), EVDS 1700 or ARCH 6480.  
**Equiv To:** ARCH 6480, EVDS 1690, EVDS 1700, EVDS 2300

**EVAR 3014 Drawing: Freehand/Digital 3 cr**

An introduction to drawing skills that allows students to become articulate in proposing and studying architecture through drawing. The course covers a range of media. May not be held for credit with the former ARCH 6532 or ARCH 6370  
**Equiv To:** ARCH 6370, ARCH 6532

**EVAR 4000 Modern Architectural History and Theory I 3 cr**

Provides a historical and theoretical understanding of the origins of modernity in architecture. Content is explored using primary texts where possible, and through critical analysis of selected topics. May not be held for credit with former EVAR 3700, EVAR 3470, ARCH 6460 or ARCH 6450.  
**Equiv To:** ARCH 6460, EVAR 3470, EVAR 3700

**EVAR 4002 Architectural Technology 3-Building Systems 3 cr**

Integrated building systems focusing on multi-story steel and concrete construction including: passive and active heating, cooling, and ventilation methods, strategies and designs, electrical, water, communication, security, fire protection, and vertical transportation systems; and building code constraints. May not be held for credit with the former EVAR 3560, EVAR 3570, ARCH 6500 or ARCH 6510.  
**Equiv To:** ARCH 6500, ARCH 6510, EVAR 3560, EVAR 3570

**EVAR 4004 Architecture Design Studio 3 9 cr**

This studio focuses on the broader cultural implications of social interaction and the collective inhabitation of the built and natural environments. Architecture design explorations are influenced by a thorough examination of programmatic, theoretical, historical, technological, material and environmental criteria. May not be held for credit with the former EVAR 3680 or ARCH 6400  
**Mutually Exclusive:** ARCH 6400, EVAR 3680

**EVAR 4006 Modern Architectural History and Theory II 3 cr**

Provides an historical and theoretical understanding of 20th century topics in architecture (western and non-western). Content is explored using primary texts where possible, and through critical analysis of selected topics. May not be held with the former EVAR 3330, EVAR 3480, ARCH 6440 or ARCH 6470.

**Equiv To:** ARCH 6440, ARCH 6470, EVAR 3330, EVAR 3480

**EVAR 4008 Arch Tech 4: Comprehensive Design Technology Report 3 cr**

A technical knowledge project-based course integrating with Arch Studio 4. Comprehensive technology issues include: site; material; energy; structures; construction; sustainability; environmental factors; building code; life safety. Student's work will include analysis, technical drawings and calculations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisite: EVAR 4010 Arch Studio 4

**EVAR 4010 Architecture Design Studio 4 9 cr**

The previous terms investigations are further developed and synthesized into a comprehensively designed environment. Architectural propositions seek to clarify specific relations between details and the overall design, through the integration of complex social, cultural, programmatic, theoretical, historical, technological, material and environmental principles, systems and criteria. May not be held with the former EVAR 3690 or ARCH 6410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVAR 4004. Corequisite: EVAR 4008 .

**Mutually Exclusive:** ARCH 6410, EVAR 3690

## Environmental Design (EVDS)

**EVDS 1600 Introduction to Environmental Design 3 cr**

An introduction to the philosophies, theories, practices, processes and methods that collectively compose the discipline of Environmental Design. The focus will be on the social, environmental, and technological issues that shape the built environment and on an examination of the challenges and roles facing environmental designers in the contemporary world.

**Attributes:** Recommended Intro Courses

**EVDS 1602 Visual Literacy 3 cr**

This course examines the contemporary visual and spatial environment, its critical historical influences and emerging cultural issues. The structure of image and form, the foundations of spatial and visual knowledge and the importance of materiality as they pertain to Environmental Design will be advanced as well as disciplinary appropriate methods of communication.

**Attributes:** Recommended Intro Courses

**EVDS 1660 History of Culture, Ideas and Environment 1 3 cr**

Historical survey of key works from the foundations of civilization to the Enlightenment, including interdisciplinary perspectives in art, architecture, interior design, landscape architecture and urban planning considered in the physical, socio-economic, political, artistic and cultural contexts. May not be held with FAAH 1030.

**Mutually Exclusive:** FAAH 1030

**EVDS 1670 History of Culture, Ideas and Environment 2 3 cr**

A historical survey of western movements in art, architecture, interior design, landscape architecture and urban planning considered within the physical, socio-economic, political, artistic and cultural context. An introduction to the historical influence of the art, design and culture of non-western traditions will be included. Emphasis is on works created after the Enlightenment. May not be held with FAAH 1040.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 1660.

**Mutually Exclusive:** FAAH 1040

**EVDS 1680 Environmental Technology 3 cr**

An examination of the scientific principles embodied in the natural laws which govern the science and technology of building, landscape and environmental design in the context of sustainable development. Factors of climate, geology and natural resource systems and their effects upon the built environment at a range of scales are introduced.

**EVDS 2100 Urban Media Lab 3 cr**

An introduction to visual methods of representation and related media including drawing, photography and video. The intention is to critically engage the urban and suburban contexts as a laboratory for investigating cultural values, aesthetic issues, design principles, and representational techniques, 'prerequisite' to undertaking design studio work. Course evaluated on a pass/fail basis.

**EVDS 2200 Ecology and Design 3 cr**

An examination of principles of Ecology and Design works in which these tenets are considered, engaged, and/or demonstrated. Topics fundamental to the science of Ecology will structure the course content. Emphasis will be placed on understanding the forces and systems working within and between natural, social and human environments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 2702.

**EVDS 2300 Materials, Structures and Assemblies 3 cr**

This course provides an introduction to applied statics, construction materials and construction system assemblies for landscape, building, and interior constructions. Construction material properties and applications, including impacts on resource depletion and on sustainable building practices will be introduced along with basic strategies and methods to analyze and calculate forces in simple structures.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 1680 (C+).

**EVDS 2400 Visual Media 1 3 cr**

An introduction to technical and free-hand drawing processes and techniques, and in various media - to develop, to express, and to communicate design intentions. The focus will be directed to abstract and concrete methods of representation. Emphasis will be placed on the integral relationship between thinking, drawing, and making in relation to critically observing the world at large, and in relation to design studio work.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 1602 (C+). Corequisite: EVDS 2500.

**EVDS 2500 Design Studio 1 6 cr**

Introduction to the elements and principles of visual and spatial design, design process and techniques, requisite methods of representation and communication, and design intentions. Studio work will explore different ways of space and form-making, beginning at the site of the body, in both abstract and environmental contexts.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 1600 (C+). Corequisite: EVDS 2400.

**EVDS 2600 Tectonic Precedent 3 cr**

An examination of seminal built works of environmental design, at a range of scales, from the 19th and 20th centuries, with an emphasis on examples that are representative of diverse positions of key issues in contemporary design practice. Methodologically, this course endeavours to critically evaluate the relationships between perception, intention, and making through the exploration of the material and tectonic nature of the work(s).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 1670 (C+).

**EVDS 2690 Design Since 1800 3 cr**

An examination of key architectural treatises of the 19th and 20th centuries that are representative of the predominant ideals of their time and the influence they have had in the construction of the built environment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: EVDS 1670.

**EVDS 2702 Natural and Human Systems 3 cr**

An application of the scientific principles embodied in the natural laws which govern environmental design. Aspects of the bio-physical factors, energy, human physiology and perception, comfort, and resource management are reviewed in the context of sustainable planning and design practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 1680 (C+).

**EVDS 2800 Visual Media 2 3 cr**

This course bridges technical and freehand drawing introduced in Visual Media 1, with computer/digital media. This course advances contemporary digital media in relation to emerging modes of 2, 3, and 4 dimensional modes of representation, in the context of design studio work, and in relation to graphic standards associated with professional design practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 2400. Corequisite: EVDS 2900.

**EVDS 2900 Design Studio 2 6 cr**

An exploration of the fundamental relationships between space, form and order in the context of the built environment, from body to place. Pedagogical emphasis will be directed towards design process, cultural intentions, and environmental accountability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 2500. Corequisite: EVDS 2800.

**EVDS 3250 Advanced Computing in Environmental Design 3 cr**

Advanced Computing in Environmental Design builds upon skills obtained in the introductory course. The advanced course provides an opportunity for students to explore detailed applications of computational technologies in design & planning.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 2800 or EVDS 2650.

**EVDS 3710 Special Topics 3 cr**

Independent study related to environmental design. Content may vary according to the interest of the community, students, profession, and the faculty. Written consent of the instructor(s) and program coordinator required.

**EVDS 3740 Introduction to AutoCad in Design 3 cr**

The course will familiarize the student with the AutoCad program. The course content begins at an introductory level and will progress to a level which will prepare the student for work within a professional office. The course will explore the use of AutoCad for the creation of presentation drawings as well as working drawings.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 2800 or ARCH 6370 or written permission of Instructor.

**EVDS 3800 Cooperative Education/Integrated Work Term 1 1 cr**

Cooperative education/work assignment in practice, business, industry or government for Faculty of Architecture students. Requires submission of a written report and portfolio covering the work completed during each four-month professional assignment. Students participating in the program must have completed at least 85 credit hours towards a university degree prior to placement. Those registering for this course must have applied for and been accepted into the Faculty of Architecture cooperative stream. Course evaluated on a pass/fail basis.

**EVDS 3900 Cooperative Education/Integrated Work Term 2 1 cr**

Cooperative education/work assignment in practice, business, industry or government for Faculty of Architecture students. Requires submission of a written report and portfolio covering the work completed during each four-month professional assignment. Students participating in the program must have completed at least 85 credit hours towards a university degree prior to placement. Those registering for this course must have applied for and been accepted into the Faculty of Architecture cooperative stream. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 3800.

**EVDS 4800 Cooperative Education/Integrated Work Term 3 1 cr**

Cooperative education/work assignment in practice, business, industry or government for Faculty of Architecture students. Requires submission of a written report and portfolio covering the work completed during each four-month professional assignment. Students participating in the program must have completed at least 85 credit hours towards a university degree prior to placement. Those registering for this course must have applied for and been accepted into the Faculty of Architecture cooperative stream. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 3900.

**EVDS 4900 Cooperative Education/Integrated Work Term 4 1 cr**

Cooperative education/work assignment in practice, business, industry or government for Faculty of Architecture students. Requires submission of a written report and portfolio covering the work completed during each four-month professional assignment. Students participating in the program must have completed at least 85 credit hours towards a university degree prior to placement. Those registering for this course must have applied for and been accepted into the Faculty of Architecture cooperative stream. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 4800.

## Environmental Interior Environ (EVIE)

**EVIE 3000 Field Studies 3 cr**

This course introduces students to the field of Interior Design through firsthand experience and study of innovative and significant examples of historic and contemporary work from interior design and related fields, in a major design center. The course consists of lectures and a field trip. Location may vary from year to year.

**EVIE 3002 Interior Design History and Theory 1 3 cr**

Examination of concepts, theories and writings related to the development of Interior Design as a discipline, to Modernism. Not to be held for credit with the former EVIE 3650.

**Equiv To:** EVIE 3650

**EVIE 3004 Materials, Assemblies and Detailing 3 cr**

Workshop and lecture course on materials, joinery and invention. Review of the principles of framing, bracing, and tension applied to casegoods and furniture; exploration of a variety of soft and hard materials and constructions with an emphasis on sustainability. Not to be held for credit with the former EVIE 3630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVDS 2200.

**Equiv To:** EVIE 3630

**EVIE 3006 Interior Design Media 3 cr**

This course develops a student's ability to use drawing as a reflective, problem-solving, designing and visual communication tool; techniques for representing volume, depth and scale, and interfaces with digital photography and media are a focus.

**EVIE 3008 Interior Design Studio 3.1 6 cr**

Interior Design studio exploring the body as the primary reference in design, and the semantic and cultural meanings of objects and architectural elements as mediators of space. Integration of drawing, design and making through projects.

**EVIE 3010 Interior Design Studio 3.2 6 cr**

An in-depth investigation, by design, of the nature of interiors including the physical and perceptual, spatial elements and order, human involvement and experience. Exploration and development of spatial solutions using a variety of visual media. Not to be held for credit with the former EVIE 3680.

**Mutually Exclusive:** EVIE 3680

**EVIE 3012 Interior Light and Colour 3 cr**

This course examines interior lighting and colour theories and concepts emphasizing human and ecological issues, exploration of spatial design strategies and practices. Not to be held for credit with the former EVIE 3610.

**Mutually Exclusive:** EVIE 3610

**EVIE 3014 Human Factors and Environmental Experience 3 cr**

Theoretical and practical issues related to human characteristics, needs, behaviours, and interactions with and within the built interior environment.

**EVIE 3016 Topics in Interior Design 3 cr**

This course will explore topics at the cutting edge of interior design, examining political, economic, sociological and technological influences on current and future directions in interior design; examination of current research, writing, projects and works from related and diverse fields.

**EVIE 4000 Interior Design History and Theory 2 3 cr**

Examinations of concepts, theories and writings related to the development of interior Design as a discipline and profession, from Modernism to the present day. Not to be held for credit with the former EVIE 3660.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVIE 3002.

**Equiv To:** EVIE 3660

**EVIE 4002 Indoor Systems 1 3 cr**

In-depth, whole building examination of various integrated active and passive environmental controls systems. Focus on working with existing commercial building construction and environmental systems when integrating new interior design and ecological concepts and strategies. Introduction to building performance assessment, construction drawings and schedules. Not to be held for credit with the former EVIE 3620.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVIE 3004 and EVIE 3012. Co-requisite: EVIE 4010.

**Equiv To:** EVIE 3620

**EVIE 4004 Indoor Systems 2 3 cr**

Broad exploration of a variety of contemporary and innovative building technologies and their integration with interior design. Focus on ecological, new building construction concepts and measure, delivered in the context of integrated design team processes and building systems innovation. Integration and coordination of interior architectural elements with active and passive building systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVIE 4002.

**EVIE 4006 Design Methods and Processes 3 cr**

Development of knowledge and abilities to collect, analyze, synthesize, interpret, and apply information for the purpose of identifying and solving interior design problems. Not to be held for credit with the former EVIE 3640.

**Equiv To:** EVIE 3640

**EVIE 4008 Digital Media (AutoCAD) 3 cr**

This course focuses on the creation of two-dimensional architectural working drawings in a set of construction documents through the use of advanced features in CAD. Students will learn the concepts of formatting units, text, dimensions, multi-leaders, and layouts, using both non-annotative and annotative scaling techniques. How to use CAD software in a three-dimensional environment to create realistic shapes is also included. May not be held with EVIE 3670.

**Equiv To:** EVIE 3670

**EVIE 4010 Interior Design Studio 4.1 6 cr**

Projects that explore the interaction between urban context, programmatic requirements and design concepts; integration of building technology and three-dimensional spatial development; development of communication skills and methods. Not to be held with the former EVIE 3690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVIE 3010. Co-requisite: EVIE 4002.

**Equiv To:** EVIE 3690

**EVIE 4012 Interior Design Studio 4.2 6 cr**

Design studio with the potential for collaboration, exploring regional and global influences, communication technology, history and temporality in the design of interior environments.

**EVIE 4014 Advanced Interior Design Media 3 cr**

Focus on the concepts of building information modeling (BIM), parametric design, analysis, and construction documentation using current software. Demonstrates effect of this type of software on presentation and construction documentation through the use of intelligent building components and interdependent views of the building model, including acquisition of statistical and other quantitative information.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisite: EVIE 4008 or consent of instructor.



## Family Social Sciences (FMLY)

### **FMLY 1000 Families in Contemporary Canadian Society 3 cr**

(Formerly FMLY 1020) This course provides an introduction to issues in contemporary families from an interdisciplinary perspective. Changing and diverse family forms and experiences are reviewed. An overview of issues pertinent to family well-being, including but not limited to immigration, poverty, homelessness, racism, addiction, disability, divorce, and physical and mental illness is provided. Not to be held with FMLY 1020.

**Equiv To:** FMLY 1020

**Attributes:** Recommended Intro Courses

### **FMLY 1010 Human Development in the Family 3 cr**

Introductory survey of key aspects of human development processes within the family context from a life span perspective. Not to be held with NURS 1260.

**Mutually Exclusive:** NURS 1260

**Attributes:** Recommended Intro Courses

### **FMLY 1012 Introduction to Social Development 3 cr**

This course is an introduction to social development with a particular emphasis on families and communities. Social development is concerned with the advancement of the common good, the effective management of social problems, the meeting of human needs, and the equitable distribution of society's resources. As such, this course explores the social factors and conditions that promote or hinder social development and how this affects the well-being of individual, families, and communities in contemporary societies. Not to be held with FMLY 1900

**Equiv To:** FMLY 1900

### **FMLY 1420 Family Management Principles 3 cr**

An introductory course that uses an ecosystem perspective resources, decision-making, planning, implementing, evaluating, and communication within family contexts. Applications to balancing work and family, individual and family stress, family finance, environmental issues, and the use of time and human resources will be made.

**Attributes:** Recommended Intro Courses

### **FMLY 2012 Development, Conflict, and Displacement 3 cr**

The course is an introduction to development, conflict, and displacement as they affect individuals, families and communities. Specifically, this course examines the current phenomenon of induced displacement due to social conflicts, natural disasters, or uneven development in developing countries. Students will examine concepts and issues arising from induced displacement and explore community based responses to this problem. Not to be held with FMLY 2900.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 1012 or consent of the instructor.

**Equiv To:** FMLY 2900

### **FMLY 2400 Family Financial Health 3 cr**

A survey of topics that have an impact on the financial health of Canadian families, including personal money management, mortgage financing, credit and debt, educational and retirement planning, taxation, insurance, savings and investments. The course prepares students to help families maximize resources and increase their financial literacy. May not be held with the former FMLY 2070.

**Equiv To:** FMLY 2070

### **FMLY 2500 Diversity and Families 3 cr**

(Formerly FMLY 2350) Using the theoretical frameworks of intersectionality and social ecology, this class addresses how diversity in Canada is influenced by age, gender, ability, ethnicity, race, as well as family relationships, institutions and social policies. A focus on human rights and anti-racism education is emphasized. Not to be held with FMLY 2350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 1000 (FMLY 1020) or FMLY 1010 or equivalent.

**Equiv To:** FMLY 2350

### **FMLY 2600 Foundations of Childhood Developmental Health 3 cr**

This course examines the theoretical and empirical foundations of childhood development and their implications for promoting developmental health. Specifically, the course considers the biological and environmental factors that influence developmental health given physical, cognitive, emotional and social development from the prenatal period to middle childhood. May not be held with PSYC 2290 or PSYC 2291.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 1010.

**Mutually Exclusive:** PSYC 2290, PSYC 2291

### **FMLY 2650 The Social Aspects of Aging 3 cr**

An examination of the social aspects of aging. Emphasis on understanding the aging process as a life transition involving adaptation through interaction with social and physical environments. May not be held with the former HMEC 2650 or SWRK 2650 or SWRK 2651 or REC 2650.

**Equiv To:** HMEC 2650, REC 2650, SWRK 2650

### **FMLY 2800 Family Violence 3 cr**

A survey of the extent and nature of various forms of family violence across the life course. Topics include physical and sexual child abuse, sibling violence, partner violence, and elder abuse. Emphasis is on prevalence, incidence, causes, consequences and solutions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 1010 or FMLY 1000 (FMLY 1020) or PSYC 1200 or SOC 1200.

### **FMLY 3012 Theories of Social Development 3 cr**

This course is a survey of social development theories that have influenced the study and practice of development since the 1950s. It addresses the question of why theories of social development are necessary and why different theories emerged at particular times in history. This course examines explanations of development and underdevelopment as they impact on individuals, families and communities. Not to be held with FMLY 3900.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 1012.

**Equiv To:** FMLY 3900

### **FMLY 3220 Death and the Family 3 cr**

An examination of dying and death of family members throughout the family life cycle. Specific topics included are the meaning of death, the process of dying, caring relationships, grief and bereavement.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 1000 (FMLY 1020) or PSYC 1200 or SOC 1200.

**FMLY 3240 Families in Later Years 3 cr**

An investigation of family issues in the later years of life, such as housing, intergenerational relations, adjustment to retirement, sibling relations, grandparenting, death.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [FMLY 1010 and FMLY 1000 (FMLY 1020)] or PSYC 1200 or SOC 1200.

**FMLY 3330 Parenting and Developmental Health 3 cr**

Examines parenting and its influence on developmental health, with consideration of change across time, the context in which parenting occurs, and the effect of the parent-child relationship on developmental health.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FMLY 2600 or FMLY 3600.

**FMLY 3400 Families as Consumers 3 cr**

An examination of the factors that influence the consumer behaviour of individuals and families across the life course, with particular attention to the situation of vulnerable consumers. Theory, education, policy and practice are related to contemporary consumer issues and the impact of consumption behaviour on the environment. Not to be held with the former FMLY 3450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [FMLY 2400 or FMLY 2070] and [ECON 1210 or ECON 1220 or ECON 1010 or ECON 1020].

**Equiv To:** FMLY 3450

**FMLY 3470 Selected Studies in the Family I 3 cr**

The opportunity to carry out an individual study in the area of the family of particular interest to the student. When enrolment warrants, the department may offer selected topics in a regular course format.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**FMLY 3600 Adolescents in Families and Society 3 cr**

This course is designed to help students understand the nature of adolescent relationships with their families in communities. The application of theory and research on adolescent relationships to professional practice with families and communities is emphasized.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 2600 and completion of 54 credit hours.

**FMLY 3750 Fundamentals of Health Promotion 3 cr**

This course provides an interdisciplinary life course perspective on theories and methods of health promotion. Current research, practices and policies in health promotion targeting individuals, families and communities will be critically reviewed with regard to issues of gender, culture, age, functional ability, socio-economic status, sexual orientation, and other determinants of health.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HEAL 2600 or KPER 1200 (or the former PERS 1200) or KPER 1400 (or the former PERS 1400).

**FMLY 3780 Introduction to the Development of Programs for Children and Families 3 cr**

An introduction to the theory and practice of program development with special emphasis on programs for children and families. The course will cover techniques for conducting need assessments, as well as the process of planning and implementing programs to address community need.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HNSC 2000 (or the former HMEC 2000 or the former HMEC 2050).

**FMLY 3790 Introduction to the Evaluation of Programs for Children and Families 3 cr**

An introduction to the theory and practice of program evaluation with special emphasis on child and family programs. Considers the purpose of evaluation, types of evaluation, evaluation design and analysis, and the evaluation process.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HNSC 2000 (or the former HMEC 2000 or the former HMEC 2050).

**FMLY 3800 Conflict Resolution in the Family 3 cr**

Students will examine the nature and development of conflict in family relationships throughout the life span. Implications of conflict for the quality of family relationships and individual development will be addressed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 2800 and completion of 54 credit hours.

**FMLY 3802 Intimate Partner Violence 3 cr**

A critical examination of theory and research on violence in intimate relationships. Topics will include violence in dating, common-law, marital, ex-partner and same-sex relationships.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 2800.

**FMLY 3806 Children, Violence and Rights 3 cr**

Violence against children in their families takes many forms, from sexual exploitation to honour killings. We will explore, through a child rights lens, the forces contributing to violence against children, its impact on human lives, and approaches to prevention being implemented around the world. Not to be held with FMLY 3804.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 2800.

**Equiv To:** FMLY 3804

**FMLY 4012 Social Development Policies 3 cr**

This course examines the formulation of social development policies and the impact of these policies on the well-being of individuals, families, and communities. The course uses a seminar format to foster students' capacity to understand and examine policy issues. Students will develop skills in understanding, analyzing, and formulation social development policies. Actual social development case studies will be evaluated and alternative family and community oriented policies discussed. Not to be held with FMLY 4900.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 1012.

**Equiv To:** FMLY 4900

**FMLY 4220 Aging and Risk in a Global Context 3 cr**

This course will take an interdisciplinary perspective on definitions of risk associated with a variety of determinants that shape the daily lived experience of older adults, their families and communities, and the institutions that care for them. Students will evaluate programs, policies and research, and engage in a final project of their choice. Pre- or

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisites: FMLY 2650 (or the former HMEC 2650) or SWRK 2650 or SWRK 2651 or REC 2650 or NURS 2610 or KIN 2610.

**FMLY 4300 Field Experience 6 cr**

Provide students with field experience in a supervised setting. The course consists of 120 hours of supervised work in an assigned setting and seminar time with peers and field experience coordinator. Grade is pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 84 credit hours and consent of instructor.

**FMLY 4330 Management of Family Stress 3 cr**

Theories which influence family behaviour during stress are discussed, and coping/managerial skills to mitigate the effects of the stressors are examined. Stress management advice from agencies and in educational settings is analyzed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 1000 (FMLY 1020).

**FMLY 4400 Family Economics: Poverty and Wealth 3 cr**

Analysis of principles, major problems and trends in the economic welfare of individuals and families in both the Canadian and global economies. Emphasis on families and their relationships to the economy such as income inequality, family economic policy, human capital, poverty and resource distribution within families.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [FMLY 2400 or FMLY 2070] and [one of ECON 1210 or ECON 1220 or ECON 1010 or ECON 1020]. Not to be held with the former FMLY 4450.

**Equiv To:** FMLY 4450

**FMLY 4470 Selected Studies in the Family II 3 cr**

The opportunity to carry out advanced study in the area of the family of particular interest to the student. When enrolment warrants, the department may offer selected topics in a regular course format.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**FMLY 4480 Work and Family Issues 3 cr**

An exploration of the interface between paid work and unpaid work and families in the Canadian and international contexts. Topics include demographic trends; parenting, child and elder care; management of work-family conflict; development of workplace solutions; and social policy implications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 2400 (or FMLY 2070) and 84 credit hours.

**FMLY 4500 Senior Thesis 6 cr**

The preparation and presentation of a comprehensive review of the literature and an empirical investigation of an approved topic. Application required. Enrolment limited.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Registered in the final year of the Family Social Sciences program and consent of Department Head.

**FMLY 4600 Risk and Resilience in Behavioural and Social Development 3 cr**

The development of behavioural and social difficulties are examined from a risk and resilience perspective. The interaction of factors at all levels of the human ecological system are considered in terms of their impact on increasing risk and/or building resilience in children and youth.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 2600

**FMLY 4602 Family Relationships, Health and Well-being 3 cr**

This course provides an in-depth survey of the interaction between family relationship dynamics, and health and well-being across the life course period. The influence of family members on health-related behaviours is reviewed and preventive family-based interventions are evaluated.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 3600.

**FMLY 4604 Children in Adversity 3 cr**

Millions of children live with violence, trauma and other adverse circumstances. We will explore the interactions among individual, family, cultural, legal and policy factors as they affect children's developmental pathways in the face of adversity. May not be held with FMLY 4600.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 2600 or FMLY 3600.

**Equiv To:** FMLY 4600

**FMLY 4606 A Social Justice Perspective on Indigenous Maternal and Child Health 3 cr**

This course examines the local and global challenges regarding the health care and health care needs of Indigenous peoples, with particular attention to childbearing women, new mothers, and young children. Interdisciplinary theories and methods applied to the study of Indigenous peoples are critically evaluated from Indigenous and social justice perspectives.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 2500 (FMLY 2350) or NURS 3330 or NATV 1220 or NATV 1240.

**FMLY 4800 Senior Seminar in Family Violence and Conflict Resolution 3 cr**

Advanced study in the areas of family violence and/or conflict resolution. Special emphasis is placed upon current research and/or practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FMLY 3800 and completion of 72 credit hours.

**FMLY 4802 Family Violence Prevention 3 cr**

Family violence prevention theories, research, practices and policies will be critically reviewed with regard to issues such as gender, culture, sexual orientation and others. Not to be held with the former FMLY 4800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FMLY 2800.

**Equiv To:** FMLY 4800

## Film Studies (FILM)

**FILM 1290 The Art of the Film 1 3 cr**

The study of film as an art form, entertainment and document.

**Attributes:** Humanities, Recommended Intro Courses

**FILM 1310 Film History 3 cr**

In this course students will examine films from more than one period in film history, exploring the relationships among and between films in terms of genre, style, theme, structure, and other aesthetic elements. Students will study films selected from various periods of world cinema, taking into consideration how and in what ways films bear the traces of their time and place, or are affiliated with relevant movements in art, history, or society, or have been shaped by technical and artistic developments in the art of film. Students may not hold credit for both FILM 1310 and the former FILM 1300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290] or written consent of instructor.

**Equiv To:** FILM 1300

**Attributes:** Humanities, Recommended Intro Courses

**FILM 2040 Documentary Film 3 cr**

Theories and forms of the non-fiction as an art form, an information carrier and a propaganda tool. Students may not hold credit for both FILM 2040 and the former FILM 2420.

**Equiv To:** FILM 2420

**Attributes:** Humanities

**FILM 2280 Film and Literature 6 cr**

The interrelationships between literature and film through an analysis of significant films, novels, poems and plays. Special attention to adaptations of Shakespeare, modern drama, the 19th century novel, the modern novel, and popular fiction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or [ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or [ENGL 1400 (or the former ENGL 1310) and ENGL 1340]. Also offered as ENGL 2280. Students may not hold credit for both FILM 2280 and ENGL 2280.

**Attributes:** Humanities

**FILM 2300 The Popular Film 3 cr**

Current trends in film as a form of culture. Emphasis on recently released films as mirrors of existing social myths and values.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 2330 Film and Contemporary Thought 3 cr**

Recent films viewed in the light of current intellectual developments. Screenings are complemented by readings in contemporary political theory, philosophy, art, psychology, critical theory, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 2370 Experimental Cinema 3 cr**

Formal innovations in avant-garde and underground films and videos, their significance and influence on the feature film industry.

**Attributes:** Humanities

**FILM 2380 The International Cinema 1 3 cr**

An examination of major works of international cinema, focusing upon the contributions of individual countries, or relevant global issues. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 2400 The American Film to 1950 3 cr**

The aesthetic development of the American Film from the early days until the beginning of television.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 2410 The American Film from 1950 3 cr**

An examination of the Hollywood film from the decline of the studio system.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 2430 The Canadian Film 3 cr**

The development of the film industry in Canada in its varied forms, with emphasis upon key films, regional differences and Manitoba contributions.

**Attributes:** Humanities

**FILM 2460 Film Genres 3 cr**

An examination of a major cinematic genre (e.g, the gangster film, the western, the musical) with emphasis upon the permanence and evolution of generic conventions and the ability of filmmakers to register personal visions within these conventions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 3250 Special Topics in Film 3 cr**

An intensive examination of selected topics in film. Students are asked to consult the English, Theatre, Film & Media website for detailed course descriptions. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Mutually Exclusive:** FILM 3440

**Attributes:** Humanities

**FILM 3270 Special Topics in Film 3 6 cr**

An intensive examination of selected topics in film including creative filmmaking projects. Contents of the course will vary according to the needs and interests of students and faculty. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] and written consent of instructor.

**Mutually Exclusive:** FILM 3440

**Attributes:** Humanities

**FILM 3400 The Director's Cinema 3 cr**

An intensive critical look at the career of one or two major filmmakers. Students are asked to consult the English, Theatre, Film & Media website for detailed course descriptions. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 3420 Film Theory 3 cr**

A survey of Film Theory from its beginnings to the present: Eisenstein to André Bazin to Christian Metz and others (film theories, not reviewers).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 3430 Screenwriting 3 cr**

An introduction to the techniques and procedures of screenwriting. Students will be expected to complete a screenplay. Students may not hold credit for both FILM 3430 and Screenwriting as previously offered under the title of Special Topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 3440 Filmmaking 3 cr**

Digital filmmaking equipment is used to understand the rudiments of cinematography, editing, lighting, and directing. Students will make at least one short film. Students may not hold credit for both FILM 3440 and any of FILM 3250, FILM 3260, or FILM 3270 when titled "Filmmaking".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Mutually Exclusive:** FILM 3250, FILM 3260, FILM 3270

**Attributes:** Humanities

**FILM 3450 The Animated Film 3 cr**

The art of animation from early cell and puppet films to computer animation and current experimentation. Special attention is given to the "Golden Age of Animation" and to Canada's continuing contribution.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 3460 Acting for the Camera 3 cr**

This course is a practical exploration of the acting techniques appropriate for work in film and television. Each student will be required to perform a significant number of scene bits and a few full scenes on video camera. Students will develop skills connected with directing actors in film; intensive preparatory scene analysis, storyboarding, and camera operation during performance. Students may not hold credit for both FILM 3460 and Acting for the Camera as previously offered under the title of Special Topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FILM 1290 and FILM 1310 (or the former FILM 1300)] or written consent of instructor.

**Attributes:** Humanities

**FILM 3650 Advanced Filmmaking 3 cr**

This course is for students who have taken FILM 3440 Basic Filmmaking and offers an opportunity to pursue longer, more technically ambitious work. Students are required to shoot one (1) 10 minute 16mm film; transfer that film to video; edit and soundtrack it.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FILM 3440 (C+) and written consent of instructor.

**Attributes:** Humanities

## Finance (FIN)

**FIN 2200 Corporate Finance 3 cr**

(Lab required). An introduction to corporate finance regarding the allocation and acquisition of funds. Topics include: discounted cash flows, capital budgeting, financial instruments, cost of capital, risk-return trade-offs, market efficiency, capital structure and the use of derivatives. May not be held with FIN 2201.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Prerequisite: [ACC 1100 (D) or ACC 1101 (D)] and [one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, the former MATH 1520, or MATH 1524] and [STAT 1000 or STAT 1001 or STAT 1150] and [(ECON 1010 (or ECON 1011) and ECON 1020 (or ECON 1021)) or the former ECON 1200 (or the former ECON 1201)].

**Equiv To:** FIN 2201

**FIN 2420 Financial Risk Management 3 cr**

The fundamental concepts, principles, and practices related to financial derivatives and risk management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (FIN 2200 or FIN 2201 (C+)) and (one of MATH 1220, MATH 1300, MATH 1301, MATH 1310) and (STAT 2000 or STAT 2001 or STAT 2150).

**FIN 3010 Fixed Income Securities 3 cr**

This course introduces students to fixed income securities and markets and prepares students for writing the fixed income parts of the Chartered Financial Analyst exams. Topics covered include debt securities, risks of investing in bonds, the pricing of fixed income securities, the measurement of interest rate risk, the term structure and volatility of interest rates, mortgage backed and asset-backed securities, the valuation of mortgage-backed and asset-backed securities, credit analysis and interest rate derivatives etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 2420 (C+) or FIN 2200 (C+) or FIN 2201 (C+).

**FIN 3020 Portfolio Management 3 cr**

This course explores the theory and practice of portfolio management and prepares students for writing the portfolio management parts of the Chartered Financial Analyst exams. Topics covered include asset allocation, currency management, fixed income portfolio management, equity portfolio management, risk management and application of derivatives, execution of portfolio decisions, monitoring and rebalancing, and performance evaluation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 2420 (C+) or FIN 2200 (C+) or FIN 2201 (C+).

**FIN 3030 Professional Financial Ethics 3 cr**

The course prepares students to be ethical in professional conduct in general, with specific focus on finance, and preparing students for the ethical component in Chartered Financial Analysts examinations.

**FIN 3240 Entrepreneurial Finance 3 cr**

Study of entrepreneurial finance, addressing both investment and financing decisions of new ventures, covering both in theory and in practice. May not be held for credit in any program with FIN 3470 and may not be used in place of FIN 3470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 2200 (D).

**Mutually Exclusive:** FIN 3470

**FIN 3270 Personal Financial Planning 3 cr**

An introduction to financial planning techniques used in professional practice. Topics include financial assessment, income tax planning, risk management, insurance, debt and credit management, investments, retirement planning, estate planning, and ethics issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 2010 (D) or FIN 2200 (D) or FIN 2201 (D).

**FIN 3400 Investment Banking 3 cr**

The practice and theory of investment banking including valuation, initial public offerings, mergers and acquisitions, and restructuring.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 3480 (D) or FIN 3481 (D).

**FIN 3410 Investments 3 cr**

An introduction to investment analysis and modern portfolio theory. Topics include equilibrium in the capital markets, fixed income securities, equities and derivative instruments. May not be held with FIN 3411.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [FIN 2200 (C+) or FIN 2201 (C+) or FIN 2420 (C+)] and [one of MATH 1220, MATH 1300, MATH 1301, MATH 1310, or MATH 1524] and [STAT 2000 or STAT 2001 or STAT 2150].

**Equiv To:** FIN 3411

**FIN 3420 Security Analysis 3 cr**

This course provides a practical application of techniques to analyse a company for investment purposes and evaluate purchases of stock and fixed-income securities. Topics include financial statement analysis, ratio analysis, alternative methods for forecasting corporate profits and dividends, risk assessment, and valuation techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FIN 2200 (C+).

**FIN 3440 Real Estate Investments 3 cr**

An introduction to real estate finance. Topics include valuation, financing, transaction, tax and legal issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 2200 (C+).

**FIN 3450 International Finance 3 cr**

An introduction to the theory of comparative advantage, foreign exchange markets, international parity relations, international debt and equity markets, international debt operating exposures, and international capital budgeting.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 2200 (C+).

**Equiv To:** FIN 3451

**FIN 3460 Financial Markets and Institutions 3 cr**

A study of financial systems with emphasis on Canada. Major topics include monetary policy, financial markets, financial institutions, financial regulation and risk management. May not be held with ECON 3640 or ECON 3641.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [FIN 2200 (C+) or FIN 2201 (C+)] and [MATH 1220 or MATH 1300 or MATH 1301 or MATH 1310] and [STAT 2000 or STAT 2001 or STAT 2150].

**Mutually Exclusive:** ECON 3640, ECON 3641

**FIN 3480 Corporate Finance Theory and Practice 3 cr**

Intermediate Corporate Finance including the following topics: Capital budgeting theory and techniques, determination of relevant cost of capital, capital structure, dividend policy, leasing and other special topics. May not be held with FIN 3481.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [FIN 2200 (C+) or FIN 2201 (C+)] and [MATH 1220 or MATH 1300 or MATH 1301 or MATH 1310] and [STAT 2000 or STAT 2001 or STAT 2150].

**Equiv To:** FIN 3481

**FIN 4230 Selected Topics in Finance 3 cr**

A study of current issues in finance. Topics considered will depend on the interests and needs of the participants.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 2200 (C+).

**Mutually Exclusive:** FIN 4240

**FIN 4240 Financial Modeling 3 cr**

Spreadsheet implementation of practitioner-oriented financial models. May not be held with FIN 4230 when titled "Financial Modeling".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 3410.

**Mutually Exclusive:** FIN 4230

**FIN 4250 Behavioral Finance 3 cr**

Understand how human biases impact the financial decisions of market participants and the practical implications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 2200 (C+).

**FIN 4260 Advanced Finance Theory 3 cr**

Theories that provide the foundation for modern corporate finance. Empirical tests of finance theories. Implications for managers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FIN 3410 (D) and FIN 3480 (D).

**FIN 4270 Options and Futures 3 cr**

Mechanics of futures, options and swaps markets. Topics include arbitrage, hedging, forward rate agreements, models of derivative valuation and value-at-risk.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 3410 (D).

**FIN 4400 Financial Management Practices 3 cr**

Application of theoretical models in finance to real-world problems using cases. Topics include working capital management, long-term investment and financing decisions, valuation, risk management, reorganizations and international financial management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 3480 (D).

## Fine Art, Art History Courses (FAAH)

**FAAH 1030 Introduction to Art 1A 3 cr**

A basic study/survey of world art history and theory to the early Renaissance. This course is a prerequisite to further study in art history and theory of art. May not be held with the former FAAH 1050 or EVDS 1660.

**Equiv To:** FAAH 1050

**Mutually Exclusive:** EVDS 1660

**Attributes:** Recommended Intro Courses

**FAAH 1040 Introduction to Art 2A 3 cr**

A basic study/survey of world art history and theory from the Renaissance to the present. May not be held with the former FAAH 1060 or EVDS 1670.

**Equiv To:** FAAH 1060

**Mutually Exclusive:** EVDS 1670

**Attributes:** Recommended Intro Courses

**FAAH 1100 Survey of Asian Art 3 cr**

An introductory survey of the arts of India, China and Japan from prehistory to the present. May not be held with FAAH 2100.

**Equiv To:** FAAH 2100

**FAAH 2060 Medieval to Early Renaissance Art and Architecture 3 cr**

An introduction to the study of Medieval art and architecture in Europe, from the very beginnings of a specifically Christian artistic tradition to the beginning of the Renaissance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 1030 or EVDS 1660.

**FAAH 2070 Renaissance to Baroque Art and Architecture 3 cr**

An introduction to the study of Renaissance art and architecture up to the Baroque era in the context of the social, political and economic circumstances of this time.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 1040 or EVDS 1670.

**FAAH 2080 Modern to Contemporary Art 3 cr**

A study of the major movements, themes, and media of Western Art from the late 18th century to the present.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 1040 or EVDS 1670.

**FAAH 2090 Art of the North American Aboriginal Peoples 3 cr**

A study of the art and artifacts of the indigenous peoples of North America (other than the Inuit). No prerequisite.

**FAAH 2110 Women and Art 3 cr**

This art history course will examine the aesthetics, ideology and social conditions that have shaped women's relationships to the visual arts and to art history, as artists, as patrons, and as subject matter. No prerequisite.

**FAAH 2910 Field Studies in Art History I 3 cr**

This off-campus travel course will provide students with the opportunity to study firsthand the art and architecture of a particular city or region in a broad cultural context. Course location may vary from year to year. Offered during Summer Session only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written permission of instructor.

**FAAH 2920 Field Studies in Art History 2 3 cr**

This off-campus travel course will provide students with the opportunity to study firsthand the art and architecture of a particular city or region in a broad cultural context. Course location may vary from year to year. Offered during Summer Session only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written permission of instructor.

**FAAH 2930 Writing about Art 3 cr**

This course is designed to give students in Art History and Studio programs the opportunity to develop their writing skills with a focus on academic and critical writing on both historical and contemporary art. The practical needs of professional artists will also be covered. May not be held with the former FA 2620.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 1030 or FAAH 1040 or FAAH 1100 or EVDS 1660 or EVDS 1670.

**Equiv To:** FA 2620

**Attributes:** Written English Requirement

**FAAH 3130 Topics in Medieval Art and Architecture 3 cr**

Significant topics in Medieval art and architectural history. Topic will vary from year to year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2060 or written permission of the instructor.

**FAAH 3140 Topics in Renaissance and Baroque Art and Architecture 3 cr**

Significant topics in Renaissance and Baroque art and architectural history. Topic will vary from year to year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2070 or written permission of the instructor.

**FAAH 3150 Topics in 18th and 19th Century Art 3 cr**

Significant topics in 18th and 19th century art history. Topic will vary from year to year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2070 or FAAH 2080 or written permission of the instructor.

**FAAH 3160 Topics in 20th Century Art 3 cr**

Significant topics in 20th century art history. Topic will change from year to year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2080 or written permission of the instructor.

**FAAH 3180 History of Photography 3 cr**

The development of photography from its origins to the present.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 1040 or EVDS 1670.

**FAAH 3190 History of Ceramics 3 cr**

This course will examine the history of ceramics, extending from prehistory in Asia to recent work in Europe, the United States and Canada. No prerequisite, or written permission of instructor, but STDO 2230 (Ceramics 1) will be helpful.

**FAAH 3200 Art in New Media 3 cr**

This course will consider art produced in non-traditional media during the Modern era, i.e. since the 18th century, with emphasis on developments during the 20th century and particularly the last 40 years.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 1040 or EVDS 1670.

**FAAH 3202 Contemporary Art History 3 cr**

This course will consider the art history of the past few decades with an emphasis on recent and contemporary developments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2080 or written permission of the instructor.

**FAAH 3212 Introduction to The Theory of Art 3 cr**

This lecture course is a introduction to major theoretical and critical approaches to art. The course will explore theories regarding formal aspects of art as well as social, cultural and ideological concerns, historically significant critical movements, and issues of production, exhibition and reception. May not be held with FAAH 3210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (FAAH 1030 or EVDS 1660) and (FAAH 1040 or EVDS 1670) or FAAH 1050 and FAAH 1060.

**Equiv To:** FAAH 3210

**FAAH 3220 Topics in Aboriginal Art 3 cr**

This course will cover significant topics in the art of the North American Aboriginal peoples, including the Inuit. Topic will vary from year to year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2090 or FAAH 3430, as appropriate, or written permission of the instructor.

**FAAH 3230 Chinese Art and Architecture 3 cr**

A survey of the art and architecture of China beginning with the Shang-Yin Period (2000 BCE) and continuing to the present.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2100 or FAAH 1100 or written permission of the instructor.

**FAAH 3240 Japanese Art and Architecture 3 cr**

A survey of the art and architecture of Japan beginning with the Jomon Period (300 BCE to 300 CE) and continuing through the Heisei Period (1989 - present).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2100 or FAAH 1100 or written permission of the instructor.

**FAAH 3250 Topics in Art History 3 cr**

This course will vary from year to year depending on the needs of students and the interests and availability of instructors. May not be taken for credit with a course equivalent to the topic currently offered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Any 2nd year course or written permission of instructor.

**FAAH 3260 Canadian Art and Architecture to World War 2 3 cr**

A study of Canadian art up to World War 2.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 1040 or EVDS 1670.

**FAAH 3270 Canadian Art Since World War 2 3 cr**

A study of Canadian art from World War 2 to the present.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 1040 or EVDS 1670.

**FAAH 3280 Early Byzantine Art and Architecture 3 cr**

A study of the origin and evolution of early Byzantine Art and Architecture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2060.

**FAAH 3290 Later Byzantine Art and Architecture 3 cr**

A study of later Byzantine Art and Architecture to the end of the Middle Ages. Special emphasis will be placed on the influence of Byzantine art on the modern traditions of Eastern Europe.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2060 or FAAH 3280.

**FAAH 3430 Inuit Art 3 cr**

The history and analysis of Inuit Art.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (FAAH 1030 or EVDS 1660) and (FAAH 1040 or EVDS 1670); or FAAH 2090.

**FAAH 3590 Islamic Art and Architecture 3 cr**

A contextual and thematic study of Islamic art and architecture beginning in the 7th century and continuing through the present.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (FAAH 1030 or EVDS 1660) and (FAAH 1040 or EVDS 1670); or FAAH 2100 or FAAH 1100.

**FAAH 3780 Twentieth Century American Art Until 1950 3 cr**

Realism, modernism, and regionalism are among the topics given special emphasis in this study of late 19th and 20th century American art.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one 2000-level in the appropriate area as defined by the instructor, or written permission of the instructor.

**FAAH 3930 Introduction to Curatorial Studies 3 cr**

A survey introduction to the theory and practice of art display and gallery collecting.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 2080 or by permission of the instructor.

**FAAH 3940 History of Visual Communication 3 cr**

A concentration of the advent of Modernism in visual communication and subsequent graphic design movements in the twentieth century. May not be held with STDO 3960.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STDO 2660 or [(FAAH 1030 or EVDS 1660) and (FAAH 1040 or EVDS 1670)].

**Equiv To:** STDO 3960

**FAAH 4060 Seminar in Art Theory and Criticism 3 cr**

A seminar treating selected topics in the theory and criticism of art.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FAAH 3210 or written permission of the instructor.

**FAAH 4070 Seminar in Art History 1 3 cr**

Seminar treating special topics in Art History.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one 300-level in the appropriate area as defined by the instructor, or written permission of the instructor.

**FAAH 4090 Seminar on Contemporary Issues in Art 3 cr**

A seminar treating contemporary issues in art. The topic varies from year to year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one 3000-level course in the appropriate area as defined by the instructor, or written permission of the instructor.

**FAAH 4250 Seminar on Curatorial Studies 3 cr**

Students receive hands-on experience within a critical context of curating an exhibition. Instructional methods include seminar format and practicum in School of Art Gallery.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FAAH 3930 and one 3000-level Art History course or by permission of the instructor.

**FAAH 4710 Directed Study 1 3 cr**

Directed study in art history.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written permission of instructor and director.

**FAAH 4720 Directed Study 2 3 cr**

Directed study in art history.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written permission of instructor and director.



## Fine Art, General Courses (FA)

### FA 1020 Mathematics in Art 3 cr

Specific theory, structuring systems, and mathematical methods and principles used in works of art from various historical periods and contexts will be explored in relation to Euclidean and non-Euclidean geometries. Topics include linear perspective; shapes, patterns, balance and symmetry; ratio, proportion, and harmony; and order, dynamics, and chaos. The course will be one half art and one half mathematics, team-taught by faculty from the School of Art and the Department of Mathematics. This course is also given in the Department of Mathematics as MATH 1020. This is a terminal course and may not be used as a prerequisite for other Mathematics courses. This course cannot be used as part of an Honours, Major, General or Minor program in the mathematical sciences. Not available to any student already holding a grade of "C" or better in any Mathematics courses with the exception of MATH 1010, the former MATH 1190, MATH 1191. Not to be taken concurrently with any other Mathematics course with the exception of MATH 1010, the former MATH 1190, or MATH 1191. Not to be held for credit with MATH 1020. No prerequisite.

**Equip To:** MATH 1020

**Mutually Exclusive:** MATH 1200, MATH 1201, MATH 1210, MATH 1211, MATH 1220, MATH 1230, MATH 1232, MATH 1240, MATH 1241, MATH 1300, MATH 1301, MATH 1310, MATH 1500, MATH 1501, MATH 1510, MATH 1520, MATH 1690, MATH 1700, MATH 1701, MATH 1710

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

### FA 1990 First Year Field Trip 0 cr

A field trip conducted by members of faculty. When the field trips are destined for the United States, students requiring a visa should make arrangements to obtain the visa at least 90 days before field trip departure date. A field trip exemption is not grantable except under extreme/extraordinary/visa issues circumstances. The field trip is required for a BFA General Degree and the Diploma program. Students unable to obtain a visa should contact their student advisor.

## Fine Art, Studio Courses (STDO)

### STDO 1210 Drawing: Studio 1 3 cr

Students are introduced to key concepts and competencies used in contemporary drawing practice. Prerequisite for further study in fine arts studio courses. May not be held with STDO 1200.

**Mutually Exclusive:** STDO 1200

**Attributes:** Recommended Intro Courses

### STDO 1240 Figure Study 1 3 cr

Traditional and experimental approaches to rendering the figure, culminating in the production of a portfolio of drawings. Prerequisite to further study in the Fine Arts Studio courses. May not be held with STDO 1200 or STDO 1230.

**Mutually Exclusive:** STDO 1200, STDO 1230

**Attributes:** Recommended Intro Courses

### STDO 1250 Drawing: Studio 2 3 cr

Building on competencies developed in STDO 1210 Drawing: Studio 1, students integrate individual research with methods and materials of contemporary drawing. Prerequisite for further study in fine arts studio courses. May not be held with STDO 1200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 1210.

**Mutually Exclusive:** STDO 1200

**Attributes:** Recommended Intro Courses

### STDO 1410 Visual Language 3 cr

An introduction to communication in contemporary visual art through traditional and experimental 2D and 3D modes. Prerequisite for further study in fine arts studio courses. May not be held with the former STDO 1220.

**Mutually Exclusive:** STDO 1220

**Attributes:** Recommended Intro Courses

### STDO 1450 Open Studio 1 3 cr

Expanding concepts and ideas developed in Visual Language, students investigate the nature of contemporary art and design. Prerequisite for further study in fine arts studio courses. May not hold with the former STDO 1220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 1410.

**Mutually Exclusive:** STDO 1220

**Attributes:** Recommended Intro Courses

### STDO 1470 Materials Studio 3 cr

Students choose among individual studio area modules to learn material technologies used in art, facilitating students' ability to work in School of Art workshops. Prerequisite for further study in fine arts studio courses. May not be held with STDO 1220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 1410.

**Mutually Exclusive:** STDO 1220

**Attributes:** Recommended Intro Courses

### STDO 1480 Digital Essentials 3 cr

An introduction to the core software skills and digital methods that may be applied to art, design and research practices. Topics will provide students a basic understanding of digital platforms within a creative environment.

### STDO 1510 Art Now 3 cr

Introduction to current activities in art practices through gallery talks/visits, journal writing, formal critique methods and research methodology. It supports FA 1990 (Field Trip) which all first year BFA students must take. Pre-requisite to further study in Fine Arts Studio courses. May not be held with STDO 1200, STDO 1220 or STDO 1430.

**Mutually Exclusive:** STDO 1200, STDO 1220, STDO 1430

**Attributes:** Recommended Intro Courses

### STDO 2210 Introduction to Sculpture 6 cr

This course introduces materials, processes and ideas informing the making of contemporary sculptural practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 21 credit hours of 1000-level STDO courses.

**STDO 2212 Intermediate Sculpture 3 cr**

The course explores sculptural practices at an intermediate level, developing skills in a variety of materials and media. The course will provide the opportunity for independent thought, conceptual growth and project planning and implementation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (STDO 2210 and STDO 2214) or STDO 2690 when titled Mould Making.

**STDO 2214 Mould Making 3 cr**

This course focuses on plaster as the primary mould making material. Students will have the opportunity to use other media in the projects they make from their moulds so long as it is something that can be released from the surface of the plaster. May not be held with STDO 2690 when titled Mould Making.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: successful completion of 21 credit hours of 1000-level STDO courses.

**Mutually Exclusive:** STDO 2690

**STDO 2220 Introduction to Painting 6 cr**

Basic instruction in oil painting and pictorial composition.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses.

**STDO 2222 Intermediate Painting 3 cr**

A continuation of STDO 2220 Introduction to Painting this course provides focused technical instruction and opportunities to develop an individual painting practice. May not be held with STDO 3680 when titled Intermediate Painting.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2220.

**Mutually Exclusive:** STDO 3680

**STDO 2230 Ceramics 1 6 cr**

Introduction to ceramic art, including contemporary processes, techniques, and history.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses.

**Mutually Exclusive:** STDO 2310, STDO 2320

**STDO 2250 Drawing 1 6 cr**

Creative use of drawing with emphasis on the human figure. May not be held with STDO 2240.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

**Equiv To:** STDO 2240

**STDO 2310 Introduction to Wheel - Throwing 3 cr**

This course will cover the basics of wheel throwing and gas kiln firing. Technical and conceptual content will be provided through a series of assigned projects. May not be held with STDO 2230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours of 1000 level studio courses.

**Mutually Exclusive:** STDO 2230

**STDO 2320 Introduction to Handbuilding 3 cr**

This course will cover the basics of hand building with clay and electric kiln firing. Technical and conceptual content will be provided through a series of assigned projects. May not be held with STDO 2230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours of 1000 level studio courses.

**Mutually Exclusive:** STDO 2230

**STDO 2380 Intermediate Wheel-Throwing 3 cr**

The course builds on elements learned in STDO 2310 Beginning Wheel Throwing. Students will be taught the correct procedures for the further manipulation of wheel thrown cylinders. Emphasis will be on creating objects with spouts, lids, as well as multiples.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2310 or STDO 2690 when titled Beginning Wheel Throwing.

**Mutually Exclusive:** STDO 2690

**STDO 2400 Introduction to Photography 6 cr**

Introduction to the camera and photographic techniques with problems in creative visual expression.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses.

**STDO 2420 Intermediate Film Photography 3 cr**

Students will explore aspects of analogue photography at the intermediate level, including photographing on medium-format film, printing on fibre paper, darkroom experimentation, and historical processes such as cyanotype printing. May not be held with STDO 2690 when titled Intermediate Film Photography or STDO 3680 when titled Intermediate Photo.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2400.

**Mutually Exclusive:** STDO 2690, STDO 3680

**STDO 2430 Intermediate Digital Photography 3 cr**

This course will provide students with the ability to further advance their technical and conceptual abilities in digital photography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2400.

**STDO 2460 Digital Photography 1 6 cr**

This is a Studio course introducing the basic technical foundation and critical understanding of contemporary photo-based image production. May not be held with STDO 2450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

**Equiv To:** STDO 2450

**STDO 2500 Printmaking Intaglio A 3 cr**

An introduction to the basic techniques in Intaglio.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

**Equiv To:** STDO 2550

**STDO 2502 Printmaking Intaglio B 3 cr**

A continuation in the basic techniques in Intaglio.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STDO 2500 or STDO 2550.

**STDO 2510 Printmaking Silkscreen A 3 cr**

An introduction to the basic techniques in Silkscreen.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

**Equiv To:** STDO 2550

**STDO 2512 Printmaking Silkscreen B 3 cr**

A continuation in the basic techniques in Silkscreen.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STDO 2510 or STDO 2550.

**STDO 2520 Printmaking Lithography A 3 cr**

An introduction to the basic techniques in Lithography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

**Equiv To:** STDO 2550

**STDO 2522 Printmaking Lithography B 3 cr**

A continuation in the basic techniques in Lithography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STDO 2520 or STDO 2550.

**STDO 2530 Relief and Monoprints 3 cr**

This course introduces the student to working in a printshop environment, using various mediums and methods of creating works on paper. Projects are structured to explore traditional and experimental approaches to monoprinting and relief printmaking. Technical proficiency and skill will require practice and attention to detail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

**STDO 2610 Video 1 6 cr**

The creative use of video as an art medium.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses.

**STDO 2630 Introduction to Design 3 cr**

An introduction to the creative use of design elements and principles applied to problems in Graphic Design.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000-level STDO course.

**STDO 2640 Intermediate Design 3 cr**

A continuation of the investigation of the creative use of advanced design elements and principles applied to problems in Graphic Design. The course provides a grounding in the concepts, techniques and skills required to solve specific problems, develop a personal design process and acquire a deeper understanding of visual media.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2630.

**STDO 2650 Digital Design Technology 3 cr**

This course is an introduction to the computer as a creative tool and to explore industry standard software for use in the creative graphic design applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses.

**STDO 2662 Typography Studio 3 cr**

Students will explore both form and functional typography in studio practice. Consideration of how shifts in the appearance of language can change the way it signifies. A review of how typography has developed historically and the context that it exists in today, where the interrelated systems of reading, technology, culture and language meet, asking us to understand typography as a relational practice. This course is a prerequisite for students wishing to pursue higher level course work in graphic design.

**STDO 2670 Design Theory and Criticism 1 3 cr**

An introduction to the nature of the design process and the principles of visual perception and visual language with a focus on the cultural and commercial roles of visual communication design practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses and FAAH 1030 and FAAH 1040.

**STDO 2680 Special Topics 3 cr**

Selected projects in Fine Art Studio of current interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000 level STDO courses.

**STDO 2690 Special Topics in Studio Practice 1 3 cr**

Individual three credit hour courses offered in multiple discipline areas. Courses will provide opportunities for skill building, conceptual development and depth of topics of interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisites: twenty-one credit hours of 1000-level Studio courses or written permission of the instructor.

**Mutually Exclusive:** STDO 2214, STDO 2380, STDO 2420

**STDO 2712 Interdisciplinary Studio 1 3 cr**

Complementary to 2000-level Studio practice courses. Students will engage in discussion, readings and practical studio work. May not hold with the former STDO 2710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisites: Twenty-one credit hours at 1000- level Studio courses.

**Equiv To:** STDO 2710

**STDO 2740 Open Media 6 cr**

This interdisciplinary studio course encourages the research, creation, and presentation of works of a diverse nature.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 21 credit hours at 1000 level STDO courses.

**STDO 2810 Introduction to Performance Art 3 cr**

An introduction to the language and form of performance art, including live performance, performance based installation, and interactive and relational performances. May not be held with STDO 3680 when titled "Introduction to Performance Art".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours of 1000- level STDO courses.

**Mutually Exclusive:** STDO 3680

**STDO 3110 Projects in Sculpture 3 cr**

Advanced instruction and studio practice in sculpture with a focus on individual research and sustained, self-directed projects. May not be held with STDO 3680 when titled Projects in Sculpture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2212.

**Mutually Exclusive:** STDO 3680

**STDO 3120 Projects in Painting 3 cr**

Advanced instruction and studio practice in painting with a focus on individual research and sustained, self-directed projects. May not be held with STDO 3680 when titled Self Directed Projects in Painting, Projects in Painting, or Independent Projects in Painting.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2220.

**Mutually Exclusive:** STDO 3680

**STDO 3130 Projects in Ceramics 3 cr**

Advanced instruction and studio practice in ceramics with a focus on individual research and sustained, self-directed projects. May not be held with STDO 3680 when titled Independent Projects in Ceramics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (STDO 3380 or STDO 3680 when titled Advanced Wheel Throwing with Clay) or (STDO 3390 or STDO 3680 when titled Advanced Hand Building with Clay).

**Mutually Exclusive:** STDO 3680

**STDO 3140 Projects in Photography 3 cr**

Advanced instruction and studio practice in photography with a focus on individual research and sustained, self-directed projects. May not be held with STDO 3680 when titled Self Directed Projects in Photography or Independent Projects in Photography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2400.

**Mutually Exclusive:** STDO 3680

**STDO 3330 Advanced Drawing 2 6 cr**

An upper level drawing course with an emphasis on finished drawings and experimental techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2250.

**STDO 3360 Ceramic Sculpture 6 cr**

This course investigates methods used to create large-scale clay forms and small-scale mixed-media works. Concept, material, and presentation will be the focus as paper clay, paper plaster moulds, reinforcement techniques, experimental surfaces, 3D digital fabrication methods, and presentation are investigated. May not be held with STDO 3680 when titled Ceramic Sculpture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3390 or STDO 3680 when titled Advanced Hand Building with Clay.

**Mutually Exclusive:** STDO 3680

**STDO 3370 Advanced Ceramics 6 cr**

Continuation of Ceramics 1 (STDO 2230).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2230.

**Mutually Exclusive:** STDO 3380, STDO 3390

**STDO 3380 Advanced Wheel Throwing with Clay 3 cr**

A continuation of STDO 2310 Beginning Wheel Throwing with Clay. This course will focus on advanced techniques in wheel throwing and the firing of gas and atmospheric kilns. May not be held with STDO 3370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2310 or permission of the School of Art.

**Mutually Exclusive:** STDO 3370

**STDO 3390 Advanced Hand Building with Clay 3 cr**

A continuation of STDO 2320 Beginning Hand Building with Clay with a focus on experimental and innovative practices. May not be held with STDO 3370. Prerequisite: STDO 2320 or permission of the School of Art.

**Mutually Exclusive:** STDO 3370

**STDO 3420 Advanced Painting 6 cr**

Continuation of Painting 1 (STDO 2220) with increasing emphasis on painting techniques, theory, and use of expressive idioms.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2220.

**STDO 3422 Advanced Painting 3 cr**

A continuation of STDO 2222 Intermediate Painting with increasing emphasis on individual development, theory and use of expressive idioms.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2220.

**STDO 3460 Advanced Sculpture 6 cr**

Continuation of Sculpture 1 (STDO 2210), with emphasis on one of modeling, carving, or construction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2210.

**STDO 3462 Advanced Sculpture 3 cr**

The course explores sculptural practices at an advanced level, developing skills in a variety of materials and media at a self-determinate level. The course will provide the opportunity for independent thought, conceptual growth and project planning and implementation. May not be held with STDO 3680 when titled Topics in Advanced Sculpture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2212.

**Mutually Exclusive:** STDO 3680

**STDO 3480 Advanced Photography 1 6 cr**

Continuation of Photography 1 (STDO 2400) or Digital Photography (STDO 2450), with emphasis on print quality and personal imagery.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2400 or STDO 2450.

**STDO 3482 Advanced Film Photography 3 cr**

Students will gain advanced techniques for artists using film photography, such as studio photography, artificial lighting, and large-format camera exposures and development. These major skills will be complemented by honing students' ability to resolve a photographic artwork through its most ideal presentation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2400.

**STDO 3490 Photography 2 9 cr**

Advanced instruction toward individual expression. (Major course)

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2400 (C+) or STDO 2450 (C+).

**STDO 3670 Special Topics 6 cr**

Projects of an unusual nature. Click on View "Timetable" to see current offerings.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written permission of instructor and director.

**STDO 3672 Special Topics in Design 3 cr**

Courses will provide opportunities for skill building, conceptual development and depth on topics of interest within the area of Design. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2640.

**STDO 3674 Special Topics in Printmaking 3 cr**

Course will provide opportunities for skill building, conceptual development and depth on topics of interest within the area of Printmaking. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 6 credit hours of STDO 2500 or STDO 2502 or STDO 2510 or STDO 2512 or STDO 2520 or STDO 2522 or STDO 2530 or STDO 2690 when titled Silkscreen Textiles or STDO 3680 when titled Relief and Monoprints.

**STDO 3680 Special Topics in Studio Practice 2 3 cr**

Individual three credit hour courses offered in multiple discipline areas. Courses will provide opportunities for skill building, conceptual development and depth on topics of interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisites: will vary depending on the course.

**Mutually Exclusive:** STDO 2222, STDO 2420, STDO 2810, STDO 3110, STDO 3120, STDO 3130, STDO 3140, STDO 3360, STDO 3462

**STDO 3682 Special Topics in Painting 3 cr**

This course will provide opportunities for skill building, conceptual development and depth on topics of interest within the area of Painting. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2220.

**STDO 3684 Special Topics in Photography Special Topics in Photography 3 cr**

This course will provide opportunities for skill building, conceptual development and depth on topics of interest within the area of Photography. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2400.

**STDO 3686 Special Topics in Sculpture 3 cr**

Courses will provide opportunities for skill building, conceptual development and depth on topics of interest within the area of Sculpture. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2210.

**STDO 3688 Special Topics in Ceramics 3 cr**

Courses will provide opportunities for skill building, conceptual development and depth on topics of interest within the area of Ceramics. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 6 credit hours from STDO 2214, STDO 2310, STDO 2320, or STDO 2690 when titled Beginning Wheel Throwing or Beginning Handbuilding with Clay.

**STDO 3710 Special Topics in Indigenous Contemporary Art Practices 3 cr**

This course will provide opportunities for skill building, conceptual development and depth, and historical and theoretical considerations of topics concerning Indigenous Contemporary Art Practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000 level STDO courses.

**STDO 3720 Special Topics in BIPOC Contemporary Art Practices 3 cr**

This course will provide opportunities for skill building, conceptual development and depth, and historical and theoretical considerations of topics concerning BIPOC Contemporary Art Practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 21 credit hours at 1000 level STDO courses.

**STDO 3830 Advanced Printmaking A 3 cr**

An upper level print media course allowing students to develop work in one or more of the print process.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion in one of the following courses: STDO 2500, STDO 2502, STDO 2510, STDO 2515, STDO 2520, STDO 2522 or STDO 2530.

**STDO 3840 Advanced Printmaking B 3 cr**

An upper level print media course allowing students to develop work in one or more of the print processes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3830.

**STDO 3910 Projects in Design 3 cr**

This course builds on students' abilities to solve graphic design problems in visual communications as developed in STDO 2640 Intermediate Design, and to increase the repertoire of design problems typically encountered in professional practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2630 and STDO 2640 and STDO 2662.

**Mutually Exclusive:** STDO 3940

**STDO 3920 Advanced Design 3 cr**

This course builds on students' abilities to solve graphic design problems in visual communications as developed in STDO 2640 Intermediate Design, and to increase the repertoire of design problems typically encountered in professional practice. May not be held with the former STDO 3930.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3910.

**Mutually Exclusive:** STDO 3930

**STDO 3950 New Media Design 3 cr**

An exploration of the 'new media' revolution within a critical graphic design context. The course is also an introduction to the tools and principles of new media content creation and information architecture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 2650.

**STDO 3972 Interdisciplinary Studio 2 3 cr**

Complementary to 2000-level and 3000-level Studio practice courses. Students will engage in discussion, readings, and practical studio work. May not hold with the former STDO 3970.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisites: twenty-one credit hours of 1000-level Studio courses.

**Equip To:** STDO 3970

**STDO 4450 Advanced Drawing 3 6 cr**

Advanced individual instruction in creative drawing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3330 or STDO 3630.

**STDO 4520 Advanced Ceramics 2 6 cr**

Individual instruction (Ceramics) with concentration in the areas most relevant to the student's creative development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3370 or STDO 3620.

**STDO 4530 Advanced Painting 2 6 cr**

Individual instruction with concentration in the areas most relevant to the student's creative development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3420 or STDO 3600.

**STDO 4550 Advanced Sculpture 2 6 cr**

Individual instruction with concentration in the areas most relevant to the student's creative development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3460 or STDO 3650.

**STDO 4570 Advanced Printmaking 2A 3 cr**

Continuation of Advanced Printmaking 2. Students may not hold credit for both STDO 4540 and STDO 4570.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3830 and STDO 3840, or STDO 3890 and STDO 3900.

**STDO 4610 Advanced Printmaking 2B 3 cr**

Continuation of Advanced Printmaking 2A. Students may not hold credit for both STDO 4540 and STDO 4610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 4570.

**STDO 4700 Advanced Photography 2 6 cr**

Advanced individual instruction in creative photography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 3480 or STDO 3490.

**STDO 4710 Design Senior Studio 1 6 cr**

(Lab required) This course provides an opportunity for students to propose and develop a self-directed term-long design project. Peer learning and collaboration will be encouraged using yearly thematic focus to frame the class research. May not be held with STDO 4810 or STDO 4820. Prerequisite: STDO 3910.

**Mutually Exclusive:** STDO 4810, STDO 4820

**STDO 4720 Design Senior Studio 2 6 cr**

(lab required) This course provides an opportunity for students to propose and develop a self-directed term-long design project. Peer learning and collaboration will be encouraged using a yearly thematic focus to frame the class research. May not be held with STDO 4810 or STDO 4820.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 4710.

**Mutually Exclusive:** STDO 4810, STDO 4820

**STDO 4730 Design Honours Seminar 1 3 cr**

Design Honours Seminar will complement the work and research in Design Honours Studio 1 and 2 and provide critical conversations around contemporary design. The course emphasizes writing about design as well as covering issues related to the documentation and dissemination of design thinking, design process and designed outcomes. May not be held with STDO 4910.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of 15 credit hours of 3000 level studio courses. Corequisite: STDO 4710.

**Mutually Exclusive:** STDO 4910

**STDO 4810 Senior Studio 1 6 cr**

Students develop and complete a self-directed program of Studio work. Regular peer and faculty review of Studio program of work. Taught by individual faculty or two-faculty teams. May not hold with STDO 4880 or 054.488. Open only to students in fourth year Honours.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: 15 credit hours of 3000 level Studio courses. Co-requisite: STDO 4910.

**Mutually Exclusive:** STDO 4710, STDO 4720, STDO 4880

**STDO 4820 Senior Studio 2 6 cr**

Taken after Senior Studio 1 (STDO 4810) students develop and complete their self-directed program of Studio work. Regular peer and faculty review of Studio program of work. Taught by individual faculty or two-faculty teams. Open only to students in fourth year of Honours program. May not be held with STDO 4880.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 4810. Co-requisite: STDO 4920.

**Mutually Exclusive:** STDO 4710, STDO 4720, STDO 4880

**STDO 4870 Visual Research Methods in Design 3 cr**

An examination of the technologies and techniques of visual communication production with a focus on the concepts of business and production management. This studio course is a part of the graphic design area sequence.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (STDO 3910 or STDO 3920 or the former STDO 3930 or the former STDO 3940) and STDO 3950.

**STDO 4910 Honours Seminar 1 3 cr**

This Seminar is taken in the fourth year of the Bachelor of Fine Arts Honours Degree as the first of two Honours Seminar courses and taken co-currently with Senior Studio 1 and Senior Studio 2. Issues of professional practice are examined against contemporary art theory. Students document their work and create artist statements and interact with visiting artists. May not be held with STDO 4890.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: 15 credit hours of 3000-level Studio courses. Co-requisite: STDO 4810.

**Equiv To:** STDO 4890

**Mutually Exclusive:** STDO 4730

**STDO 4920 Honours Seminar 2 3 cr**

A continuation of STDO 4910, Honours Seminar 1. Issues of professional practice are examined against contemporary art theory. Students document their work and create artists statements and interact with visiting artists. May not be held with STDO 4890.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STDO 4820.

**Equiv To:** STDO 4890

## Food Science (FOOD)

**FOOD 1000 Food Safety Today and Tomorrow 3 cr**

A contemporary examination of the safety of the food supply - where, how and why problems may arise and what is and can be done to consistently achieve high quality, safe food. Controversial issues (residues, organic, biotechnology, irradiation) will be discussed in a balanced manner, and prospects for the future presented.

**Attributes:** Recommended Intro Courses

**FOOD 2500 Food Chemistry 3 cr**

(Lab required) The chemical components of food. Chemical problems and chemical changes which exist uniquely in foods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM/MBIO 2730 and CHEM 2740) or the former CHEM/MBIO 2770] or [(CHEM/MBIO 2700 (CHEM/MBIO 2701) and CHEM 2720 (CHEM 2721)) or the former CHEM/MBIO 2360 (the former CHEM 2361)].

**FOOD 3010 Food Process 1 3 cr**

The basic principles and practices of the major techniques used in food processing and preservation are covered. Emphasis is placed on thermal processing, drying, evaporation, chilling, freezing, separation, packaging and sanitation. Also preservation by salting, smoking, microwave, radiation and chemical techniques is presented. Critical issues in food regulations are introduced.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: any MATH course at the 1000 level.

**FOOD 3160 Frozen Dairy Products 3 cr**

Technology of frozen dairy products, including selection and processing of materials and handling of products. Standards and quality control programs for major dairy products will be covered. Offered in 2006-07 and alternate years thereafter.

**FOOD 3170 Cheese and Fermented Milk Products 3 cr**

Selection and evaluation of raw materials and lactic cultures are covered. Processing, packaging and distribution of cheddar and cottage cheese, cultured milk, cream and yogurt are studied. Offered in 2005-2006 and alternate years thereafter.

**FOOD 3200 Baking Science and Technology 3 cr**

The science and technology of transforming wheat into quality baked foods. Focus will be on the biophysical and biochemical basis for the functionality of intrinsic wheat constituents, e.g. starch, and gluten proteins, and extrinsic ingredients, e.g. yeast, chemical leaveners, fats, oxidants, enzymes and other improvers. Principles of product formulations and modern processing techniques used to add value to wheat as diverse foods will also be covered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM/MBIO 2730 and CHEM 2740) or the former CHEM/MBIO 2770] or [(CHEM/MBIO 2700 (CHEM/MBIO 2701) and CHEM 2720 (CHEM 2721)) or the former CHEM/MBIO 2360 (the former CHEM 2361)].

**FOOD 3210 Food Engineering Fundamentals 3 cr**

Applications of engineering fundamentals to unit operations in the food industry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOE 3530.

**FOOD 3220 Grains for Food and Beverage 3 cr**

The science and technology behind the functionality of major Canadian cereal grains and grain legumes for food and beverage. Grains covered include wheat, barley, oats, peas, beans, and lentils in the context of their processing into products such as bread, pasta and beer, and foods high in dietary fibre. Details are presented on the differing physical and chemical attributes of grains to make quality products with focus on the roles of protein, starch, and non-starch polysaccharides.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FOOD 2500 or equivalent.

**FOOD 3500 Processing of Animal Food Products 3 cr**

(Lab required) Processing of materials of animal origin will be studied with emphasis on product quality and safety. The impact of initial characteristics and further processing will be discussed as factors that can affect nutritive value, convenience, functionality, appearance, palatability, and food safety of the final product. Additionally, the course will provide practical experience in identifying the quality parameters, detecting defects, and applying technologies to obtain different foods of animal origin, through labs and field trips.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CHEM/MBIO 2730 and CHEM 2740 (or the former CHEM/MBIO 2770)] or [CHEM/MBIO 2700 (CHEM/MBIO 2701) and CHEM 2720 (CHEM 2721) (or the former CHEM/MBIO 2360 (the former CHEM/MBIO 2361))].

**FOOD 4010 Food Process 2 3 cr**

The processing of specific food groups is covered. The functions and changes in the primary chemical components (carbohydrates, proteins and lipids) of the commodities receive special consideration. New technologies including thermal/nonthermal processing, radiation, extrusion, minimal processing and other advanced processing methods will be studied.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FOOD 3010.

**FOOD 4100 Current Issues in Food and Human Nutrition 3 cr**

Integration of current issues in food and human nutritional sciences. Emphasis on ethics, equity, economics, and professional approaches to challenges in food and human nutritional sciences using case studies, team work, and scientific communication to specialists and the public. This is a capstone course restricted to students in year 4 of the B.Sc. Food Science degree programs. May not be held with HNSC 4100 or AGRI 4100 or the former FOOD 4120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: AGRI 2030 and Faculty approval.

**Equiv To:** FOOD 4120

**Mutually Exclusive:** AGRI 4100, HNSC 4100

**FOOD 4150 Food Microbiology 1 3 cr**

(Lab required) This course focuses on the significance of the presence and/or growth of microorganisms in foods and their importance in the production and safety of foods. Contents include the microbial ecology of food, beneficial microorganisms in food systems, pathogenic and spoilage microorganisms, characteristics of foodborne infection, food intoxication and the influence within the food system of the growth and survival of microorganisms and contaminants that may occur in a food-processing environment. Food preservation and food processing related to food microbiology are also discussed.

**FOOD 4160 Food Analysis 1 3 cr**

This course exposes students to the principles, methods, and techniques of qualitative and quantitative physical, chemical and biological analyses of foods. Major emphasis is placed on understanding the basic principles of classical and instrumental methods of analysis. Criteria for the choice of various analytical methods, methods for treating data and sampling techniques will be studied.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FOOD 2500.

**FOOD 4200 Quality Control in Foods 3 cr**

Fundamentals of quality control and their industrial application through physical, chemical, microbiological, statistical and sensory methods will be studied. Statistical process control (SPC) will be mainly covered; required background knowledge of statistics will be reviewed briefly.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FOOD 3010.

**FOOD 4230 Food Research 3 cr**

Research interests and aptitudes of students are developed through specific project assignments related to the food industry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of Department Head required.

**FOOD 4250 Food Analysis 2 3 cr**

Advanced techniques employed in the physico-chemical analysis of food products as preparation for research, development, and inspection roles in government and in industry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FOOD 4160.

**FOOD 4260 Water Management in Food Processing 3 cr**

(Lab required) The course is devoted to the management of water and wastewater in food processing. The roles of water in food processing, recycle and reuse opportunities, treatment options for water and wastewater are presented. The course also discusses water stewardship in relation to food processing, water and wastewater regulations and implication for HACCP and ISO. Laboratory sessions are designed for the student to become familiar with Standard Methods for the Examination of Water and Wastewater. May not be held with the former FOOD 4240.

**Equiv To:** FOOD 4240

**FOOD 4310 Introduction to HACCP 3 cr**

This course will cover the principles related to hazard analysis and critical control points (HACCP), a food safety and self-inspection system that is widely endorsed internationally by industry, consumer and regulatory groups. HACCP examines chemical, physical and biological hazards and identifies critical control points involved in producing, manufacturing and processing food products. Prerequisite or co requisite: FOOD 4150 or consent of instructor.

**FOOD 4500 Food Safety and Regulations 3 cr**

Current food safety issues; government, industry and consumers' role in organizing a safe food supply system; food laws and regulations in Canada and internationally. Preventative measures to increase food safety and sanitation will also be covered. Offered in 2005-2006 and alternate years thereafter.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: FOOD 4150 or FOOD 4300.

**FOOD 4510 Food Product Development 3 cr**

This course will help the student gain an understanding of the product development procedure as it relates to the food industry. Emphasis will be on application of basic knowledge of foods and food processing in designing a new product. May not be held with HNSC 4280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ABIZ 1000 and FOOD 3010 and MKT 2210 and [AGRI 2400 or STAT 2000 or STAT 2001].

**Equiv To:** HNSC 4280

**FOOD 4540 Functional Foods and Nutraceuticals 3 cr**

The course will examine the bioactive components of functional foods and nutraceuticals, their sources, chemistry, process technology, efficacy, safety and regulation. Also offered as HNSC 4540. May not be held with HNSC 4540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [CHEM/MBIO 2730 and CHEM 2740 (or the former CHEM/MBIO 2770)] or [CHEM/MBIO 2700 (CHEM/MBIO 2701) and CHEM 2720 (CHEM 2721) (or the former CHEM/MBIO 2360 (the former CHEM/MBIO 2361))].

**Equiv To:** HNSC 4540

## Forensic Science (FORS)

**FORS 2000 Introductory Forensic Science 3 cr**

Survey course which introduces forensic science via a series of guest lectures provided by experts from within the university and from the community (e.g., Winnipeg Police, RCMP, Chief Medical Examiner, etc.). Multidisciplinary topics will be covered including how a case is studied, use of scientific techniques in investigations, collection of evidence, the role of the expert witness, and presentation of evidence in court.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 1030 (C+), CHEM 1310 (C+).

**Attributes:** Science, Written English Requirement

**FORS 3000 Forensics Processing and Analysis 3 cr**

(Lab Required) Theory and practice of processing and analysis of various types of forensic evidence. Lectures will be given by experts from within the university and within the community. Topics covered in lecture and lab exercises include protocols to identify, document and protect visible and latent forensic scientific evidence, analytical methods with forensic applications, rules and procedures governing the collection of evidence and the use of scientific data in court.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FORS 2000.

**Attributes:** Science

## French (FREN)

**FREN 1152 Introductory French 1 3 cr**

(Lab required) This course is the first in the introductory French language sequence. Students are not required to register for both courses. A basic study of the fundamental structures of French including regular and irregular verbs in the present and the passé composé, with oral and written practice. For students with no prior knowledge of French or who have studied French up to and including Grade 11 or its equivalent. Students with Grade 12 French may not normally take the course. Students may not hold credit for both FREN 1152 and the former FREN 1150. Not open to students who have previously obtained credit in FREN 1154 or FREN 1190 or FREN 1200 or FREN 1252 or the former FREN 1250. Not for credit in French Major or Minor.

**Mutually Exclusive:** FREN 1150

**Attributes:** Humanities, Recommended Intro Courses



**FREN 1154 Introductory French 2 3 cr**

(Lab required) This course is the second in the introductory French language sequence. Students are not required to register for both courses. A continuing study of the fundamental structures of French including the imparfait, future and conditional, with oral and written practice. For students with limited prior knowledge of French or who have studied French up to and including Grade 11 or its equivalent or who have successfully completed Introductory French 1. Students may not hold credit for both FREN 1154 and the former FREN 1150. Not open to students who have previously obtained credit in FREN 1190 or FREN 1200 or FREN 1252 or the former FREN 1250. Not for credit in French Major or Minor.

**Mutually Exclusive:** FREN 1150

**Attributes:** Humanities, Recommended Intro Courses

**FREN 1190 Français 6 cr**

Un cours comportant des éléments de langue, de linguistique et de littérature destiné aux étudiants issus des écoles françaises ou aux étudiants de la filière immersion. Students may not hold credit for both FREN 1190 and FREN 1200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Senior Matriculation French or written consent of department head.

**Mutually Exclusive:** FREN 1200

**Attributes:** Humanities, Recommended Intro Courses

**FREN 1200 French 1 6 cr**

Language study and practise and readings in French and French-Canadian culture. Students may not hold credit for both FREN 1200 and FREN 1190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [Senior Matriculation French] or [FREN 1154 or the former FREN 1150].

**Mutually Exclusive:** FREN 1190

**Attributes:** Humanities, Recommended Intro Courses

**FREN 1252 Français oral 1 3 cr**

For students whose mother tongue is not French, and who wish to improve their understanding, fluency and correctness in spoken French. Regular attendance is obligatory. Direct access to FREN 2610. Not open to students from Français or Immersion high school programs. Students may not hold credit for both FREN 1252 and the former FREN 1250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [Senior matriculation French] or [FREN 1200 or FREN 1154 (B) (or the former FREN 1150)] or written consent of department head.

**Mutually Exclusive:** FREN 1250

**Attributes:** Humanities, Recommended Intro Courses

**FREN 2022 La grammaire au bureau (A) 3 cr**

Ce cours vise à acquérir, analyser et pratiquer le vocabulaire du français des affaires et de l'administration. Un accent sera mis sur l'acquisition de structures grammaticales propres à la rédaction de textes du domaine des affaires. Students may not hold credit for both FREN 2022 and FREN 2630 with the topic "Français commercial."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FREN 1190 or FREN 1200] or written consent of department head.

**Attributes:** Humanities

**FREN 2610 Français oral 2 (A) 3 cr**

Ce cours vise à l'amélioration de la compréhension du français parlé ainsi qu'au développement de la facilité et de la correction de l'expression orale. Une attention particulière sera vouée au développement du vocabulaire ainsi qu'à la maîtrise des structures grammaticales. Le cours n'a pas été conçu pour les étudiants qui sont déjà bilingues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FREN 1252 or the former FREN 1250] or written consent of department head.

**Attributes:** Humanities

**FREN 2620 Grammaire et lexique (A) 3 cr**

Révision intensive de la grammaire et enrichissement du vocabulaire.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FREN 1190 or FREN 1200] or written consent of department head.

**Attributes:** Humanities

**FREN 2630 Special Studies (A) 3 cr**

The content of this course will vary from year to year depending on the needs and interests of instructors and students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2640 Special Studies (B) 3 cr**

The content of this course will vary from year to year depending on the needs and interests of instructors and students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Mutually Exclusive:** FREN 2800

**Attributes:** Humanities

**FREN 2660 Analyses textuelles (A) 3 cr**

A partir de textes courts en prose et en vers, l'étudiant(e) apprendra à reconnaître les moyens linguistiques et stylistiques dont dispose l'auteur pour créer l'expressivité de son texte.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2680 Littérature féminine française (B) 3 cr**

Une étude de textes écrits par des femmes et analysés selon la perspective des théories féministes contemporaines.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2700 Poésie et théâtre canadiens-français (B) 3 cr**

Introduction à la poésie et au théâtre canadiens-français à partir d'un choix d'oeuvres.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 (C+) or written consent of department head.

**Attributes:** Humanities

**FREN 2720 Roman français du vingtième siècle (B) 3 cr**

Ce cours est destiné à initier l'étudiant(e) au roman français du vingtième siècle. Les romanciers étudiés seront choisis parmi les plus connus, tels que Proust, Gide, Colette, Mauriac, Cocteau, Camus, Robbe-Grillet, Duras, Cardinal et Yourcenar.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2728 Littérature et cinéma dans l'espace francophone 3 cr**

Suivant une approche comparative, ce cours s'intéresse à quelques interactions possibles entre la littérature et le cinéma de l'espace francophone. Il y sera question d'étudier, soit des romans et leurs adaptations cinématographiques, soit la reprise littéraire des films, soit la représentation littéraire du cinéma, soit le développement d'un même thème par ces différents media, dont on découvrira les modes de représentation spécifiques. Ce cours servira de tremplin à l'exploration des relations intermédias et intertextuelles entre le cinéma et la littérature; il permettra de discuter, entre autres, des enjeux théoriques, sociologiques et idéologiques de la réécriture du filmique au littéraire ou du littéraire au filmique.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2740 Théâtre et poésie du dix-neuvième siècle (B) 3 cr**

Initiation aux poètes et aux dramaturges représentatifs des mouvements romantique, symboliste et réaliste à partir d'un choix d'oeuvres.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2770 Littératures francophones d'Afrique et des Antilles (B) 3 cr**

Études des principales tendances littéraires de l'Afrique et des Antilles francophones depuis l'époque coloniale jusqu'à nos jours: négritude, engagement anticolonial, post-indépendance et désillusion, créolité, immigration. Lecture d'oeuvres marquantes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2780 Idéologie et oppression dans le roman français contemporain (B) 3 cr**

Étude du thème de divers genres d'oppression dans le roman français contemporain. Analyse philosophique du concept de l'idéologie. Students may not hold credit for both FREN 2780 and FREN 2640 when titled "Idéologie et oppression."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or written consent of department head.

**Attributes:** Humanities

**FREN 2800 Introduction aux littératures autochtones de langue française (B) 3 cr**

Ce cours propose d'aborder les principaux enjeux relatifs aux littératures autochtones de langue française au Canada. On se demandera de qui il est question lorsque l'on parle d'un(e) écrivain(e) autochtone; quels sont les critères de l'indigénité, quelle importance pour le choix de la langue, l'engagement ou encore pour les thématiques dites amérindiennes? À partir de la production des années 1970 jusqu'à nos jours, il sera question d'interroger les œuvres à partir de leur contexte. May not be held with FREN 2640 when titled "Special Topics: Introduction aux littératures autochtones de langue française."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of FREN 1190, FREN 1200 (C+), FREN 2620, or written consent of department head.

**Mutually Exclusive:** FREN 2640

**Attributes:** Humanities

**FREN 2810 Civilisation française moderne (A, B, C) 3 cr**

Ce cours a pour objet l'étude de la civilisation française au plus tôt depuis le XVII siècle, au plus tard depuis la Révolution. Il portera sur les transformations connues par la France dans ses structures politiques, sociales et ses modes de vie. Il s'attachera simultanément au mouvement des idées et à la création artistique dans les domaines de l'architecture, de la sculpture, de la peinture et de la musique.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2820 Le cinéma africain (B) 3 cr**

Ce cours est destiné à initier l'étudiant(e) au cinéma africain. Les films étudiés, choisis parmi les plus connus, serviront à illustrer la diversité des options thématiques, esthétiques et idéologiques des cinéastes africains. Students may not hold credit for both FREN 2820 and FREN 2640 when titled "Cinéma africain."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2870 Stylistique comparée 1 (A) 3 cr**

Initiation à la stylistique comparée du français et de l'anglais. Ce cours comporte des exercices de traduction et d'analyse de traductions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 2910 Expression écrite 1 (A) 3 cr**

Une étude des techniques de composition libre. Le cours comportera notamment une révision de la phrase complexe et une analyse d'éléments de rhétorique particulièrement utiles pour la rédaction en français.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FREN 1190 or FREN 1200 (C+) or FREN 2620 or written consent of department head.

**Attributes:** Humanities

**FREN 3020 Révision intensive de la grammaire française (A) 3 cr**

Étude systématique et avancée de la grammaire française avec révision de vocabulaire. Ce cours est la suite logique de FREN 2620 (Grammaire et lexique) mais on peut s'y inscrire sans l'avoir suivi. Dans ce cours-ci, nous parlerons des nuances de la langue qui ne sont pas traitées en deuxième année mais nous reverrons aussi quelques-unes des questions fondamentales examinées auparavant.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3022 Les communications au bureau (A) 3 cr**

Ce cours vise à acquérir, analyser et pratiquer le vocabulaire du français des affaires et de l'administration. Un accent sera mis sur la maîtrise des outils linguistiques et des techniques spécifiques propres à la rédaction de textes de type commercial et administratif. Students may not hold credit for both FREN 3022 and FREN 2630 with the topic "Français commercial."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3100 Littérature française du dix-huitième siècle (B) 3 cr**

Après une introduction portant sur le dix-huitième siècle en France, on étudiera quelques-uns des grands auteurs et dramaturges de ce siècle, tels Montesquieu, Voltaire, Prévost, Marivaux, Beaumarchais et Rousseau.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3140 Roman canadien-français (B) 3 cr**

Ce cours est destiné à initier l'étudiant(e) au roman canadien-français à partir d'un choix d'oeuvres. Un accent particulier sera mis sur l'interprétation historique.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: any 2000-level French course] or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3160 Roman et nouvelle français du dix-neuvième siècle (B) 3 cr**

Étude des principaux romanciers romantiques, réalistes et naturalistes à partir d'un choix d'oeuvres.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3170 Littératures du Canada francophone contemporain (B) 3 cr**

Ce cours offrira un aperçu des grands enjeux des littératures de la francophonie canadienne à partir des années 1970. Il se concentrera sur une ou plusieurs grandes œuvres contemporaines, réunies soit autour d'un genre, soit autour d'un thème commun. Des liens pourront être établis avec d'autres domaines des arts : cinéma, chanson, peinture, bandedessinée par exemple.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of "C" or better in any 2000-level French course or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3350 Français oral 3 (A) 3 cr**

Ce cours vise au perfectionnement de la facilité d'expression, de la correction et de la compréhension du français oral. Le professeur se servira de certains aspects de la culture canadienne-française, et dans une moindre mesure de la culture française, pour stimuler la conversation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FREN 2610] or written consent of department head.

**Attributes:** Humanities

**FREN 3500 Littérature du 17e siècle (B) 3 cr**

Ce cours constitue une analyse d'ouvrages marquants tirés du domaine de la littérature française classique.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3580 Travail indépendant (A, B) 3 cr**

Ce demi-cours s'étendra sur toute la durée des deux trimestres. Chaque étudiant sera placé sous la direction d'un professeur qui l'assistera dans l'établissement d'un programme de lectures relatif à un domaine d'intérêt particulier pour l'étudiant en question. A la fin du cours l'étudiant présentera un mémoire à son directeur. Not available for credit towards a Major or Minor in French. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**FREN 3830 Special Studies (A) 3 cr**

The content of this course will vary from year to year depending on the needs and interests of instructors and students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course]. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3840 Special Studies (B) 3 cr**

The content of this course will vary from year to year depending on the needs and interests of instructors and students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course]. FREN 2610 may not be used as a prerequisite.

**Mutually Exclusive:** FRAN 3343

**Attributes:** Humanities

**FREN 3850 Civilisation canadienne-française (A, B, C) 3 cr**

Aspects du développement de la culture du Canada français. Éléments de la vie politique, sociale et artistique des Québécois et des francophones hors Québec surtout au 20e siècle.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head.

**Attributes:** Humanities

**FREN 3860 Études sur Beauvoir (B) 3 cr**

Le but de ce cours est d'étudier l'oeuvre et la pensée de Simone de Beauvoir dont l'importance dans les études féministes continue d'être très marquée. Un choix de textes sera effectué parmi ses essais philosophiques, ses romans et son autobiographie.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 3870 Stylistique comparée 2 (A) 3 cr**

Étude approfondie des principes et techniques de la traduction accompagnée d'exercices et d'analyses de traductions d'un niveau élevé.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [FREN 2870] or written consent of department head.

**Attributes:** Humanities

**FREN 3910 Expression écrite 2 (A) 3 cr**

Ce cours est une étude des techniques de composition libre à un niveau avancé. Il comportera notamment des exercices avec la phrase complexe et l'étude et la pratique d'un certain nombre de genres de français écrit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head.

**Attributes:** Humanities

**FREN 3920 Enjeux majeurs en littératures francophones postcoloniales (B) 3 cr**

L'objectif de ce cours est d'approfondir un aspect important en littératures francophones postcoloniales d'Afrique et des Caraïbes ou d'étudier les oeuvres d'un auteur francophone majeur originaire d'Afrique ou des Caraïbes. Students may not hold credit for both FREN 3920 and FREN 3840 when titled "Littérature africaine."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [any 2000-level French course] or written consent of department head. FREN 2610 may not be used as a prerequisite.

**Attributes:** Humanities

**FREN 4426 Initiation à la recherche 3 cr**

Ce cours qui s'étendra sur toute la durée des deux trimestres, consiste en la préparation d'un travail de recherche et d'analyse, en plus d'une bibliographie. Chaque étudiant-e sera encadré-e par un-e professeur-e du département. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**FREN 4610 Études spécialisées 3 cr**

Le contenu de ce cours variera d'année en année selon les besoins et les intérêts des étudiants et du professeur. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**FREN 4620 Pratiques et théories critiques (B) 3 cr**

Ce cours est destiné à initier l'étudiant(e) à l'analyse critique de textes littéraires. Le choix des pratiques et des théories critiques dépendra de l'instructeur.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**FREN 4640 Séminaire: Littérature française du vingtième siècle (B) 3 cr**

Le but de ce cours est d'offrir à l'étudiant(e) une introduction à certaines oeuvres littéraires complexes, mais essentielles, de ce siècle, dans les différents ordres de la poésie, du théâtre et du roman. Elles pourraient être prises à des auteurs comme Claudel, Valéry, Saint-John Perse, Antonin Artaud, Proust, Gide, Sartre, Yourcenar.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**FREN 4650 Études sur l'Ancien Régime (B) 3 cr**

L'étude des oeuvres d'un auteur, d'une période ou d'un thème d'avant la Révolution française, du XVIe au XVIIIe siècles. Le choix des oeuvres, de la période ou du thème dépendra des besoins et des intérêts des étudiants et de l'instructeur. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**FREN 4710 Séminaire de langue (A) 3 cr**

L'objet de ce cours est d'affermir la maîtrise du français chez l'étudiant(e) par des études de grammaire approfondie, une approche méthodique des problèmes majeurs de rhétorique et de la stylistique, ainsi que par une pratique régulière de l'expression orale destinée à en assurer l'aisance et la correction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**FREN 4730 Traduction (A) 3 cr**

Une formation dans la traduction d'extraits tirés d'oeuvres de prosateurs anglais et français. Seront également traduits des textes de nature technique traitant de l'actualité politique, sociale, économique, juridique, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

## General Management (MGMT)

**MGMT 1010 Business and Society 3 cr**

The course will provide overarching frameworks to examine the nature, role, and importance of business in society. Key internal operations of business organizations will be discussed (e.g. finance, marketing, operations), but the majority of the course examines the relationships that business firms must balance among key stakeholders in their external environment (i.e. government, owners, customers, communities, suppliers, future generations, etc.). Students will examine various institutional contexts (e.g. economic, political-legal, and socio-cultural) and critically think about relationships between business and society, mindfully considering alternative approaches to management. Special emphasis will be placed on contemporary social issues in business (e.g. sustainable development, corporate social responsibility).

**Attributes:** Recommended Intro Courses, Written English Requirement

**GMGT 2010 Business Communications 3 cr**

The course provides an introduction to theoretical, cultural, and ethical bases of effective communication. Another goal is to develop students' interpersonal, oral, and written communication skills at individual, group, and organizational levels. The students will also develop analytical, problem-solving, rhetorical, and critical thinking abilities required in organizational and business settings. Students are strongly recommended to take GMGT 2010 in their first 45 credit hours. Not to be held for credit with the former GMGT 2000.

**Equiv To:** GMGT 2000

**Attributes:** Written English Requirement

**GMGT 2036 Introduction to Business 2 3 cr**

Inter-University Services course.

**Equiv To:** GMGT 2080

**GMGT 2060 Management and Organizational Theory 3 cr**

Examination of the underlying principles concerning the formation of organizations and their internal management. Emphasis on the study and analysis of various theoretical approaches to organization theory and management. Students may not hold for credit with either GMGT 2080 or GMGT 2030.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GMGT 1010 (D).

**Equiv To:** GMGT 2061, GMGT 2080, GMGT 2081

**Mutually Exclusive:** GMGT 2030

**Attributes:** Recommended Intro Courses

**GMGT 2070 Introduction to Organizational Behaviour 3 cr**

Examination of the impact of human behaviour on the formal and informal organization. Topics include leadership, work groups, organizational conflict, and communications.

**Attributes:** Recommended Intro Courses

**GMGT 2120 Business/Government Relations 3 cr**

Analysis of the interaction between business firms and government in the creation, modification, and implementation of government policies that affect business. Study of the ways business can influence government decision-making.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 1010 (D) and ECON 1020 (D)] or ECON 1200 (D).

**Equiv To:** GMGT 2121

**GMGT 2144 Unallocated Credit 3 cr**

Campus Manitoba course.

**GMGT 3010 Management Decision-Making 3 cr**

Introduces students to the decision-making process and factors that enter into making decisions, including the objectives and approaches to decision-making, the basic type of managerial decisions, and exemplifications of decision in operations. Decision making will be viewed as a multi-dimensional process involving values, psychology, sociology, social psychology, and politics. The course presents a variety of perspectives useful for making and evaluating decisions in all kinds of organizations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GMGT 2070 (D).

**GMGT 3160 Managerial Economics 3 cr**

An introduction to the economic foundation of managerial decision making, which includes pricing strategies, boundaries of the firm, investment in human capital and incentive contract design. Also offered by the Faculty of Arts as ECON 3160. May not be held with ECON 3160.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 1010 (or ECON 1011) and ECON 1020 (or ECON 1021), or the former ECON 1200, or the former ECON 1201] and [MATH 1230 or MATH 1500 (or MATH 1501) or MATH 1510 or MATH 1520].

**Equiv To:** ECON 3160

**GMGT 3300 Business Law 3 cr**

General history of law, the organization of courts, the Canadian Constitution, federal and provincial legislative functions. Legal concepts and problems relating to business organization, contracts, principal and agent, negotiable instruments, common torts, and bankruptcy proceedings. Recommending course to be taken in 4th year.

**Equiv To:** GMGT 3301

**GMGT 4010 Administrative Policy 3 cr**

Studies of policies available to business enterprise; with case studies to focus attention on problems involved in formulating and administering policies with interdisciplinary considerations. Take only in final term of program or with consent of department head.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: prior to being admitted to GMGT 4010, students must be in Year 4, in the final term prior to graduation in the Asper School and have successfully completed (with a minimum grade of (D) in each course) all 30 credit hours of courses specified in Year 2 of the 4-Year Program. Prerequisite or Concurrent Requirement: all remaining core courses specified in Year 3 and 4 of the 4-Year Program (with a minimum grade of (D) in each course).

**Equiv To:** GMGT 4011

**GMGT 4110 Commercial Law 2 3 cr**

Aspects of the law relating to business units, including a study of the law relating to proprietorships, partnerships and corporations, and secured transactions. Not taught every year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GMGT 3300 (D).

**GMGT 4210 Seminar in Management and Capitalism 3 cr**

This course provides students with an understanding of the institutions, developments, and debates associated with modern capitalism and their implications for management. Students will explore alternative management perspectives and bi-directional interactions within the context of larger issues. It is designed to ensure that students are introduced to a variety of different perspectives, and that no single perspective is unduly privileged over others.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GMGT 1010 (D) or GMGT 2120 (D).

## Geography (GEOG)

**GEOG 1280 Introduction to Human Geography 3 cr**

This course studies aspects of the human world: population, settlement and resources. Not to be held with GEOG 1200 or GEOG 1201, or GEOG 1281.

**Equiv To:** GEOG 1281

**Mutually Exclusive:** GEOG 1200, GEOG 1201

**Attributes:** Recommended Intro Courses

**GEOG 1290 Introduction to Physical Geography 3 cr**

This course studies aspects of our physical environment: climate, landforms, soils and vegetation. Not to be held with GEOG 1291 or GEOG 1200 or GEOG 1201.

**Equiv To:** GEOG 1291

**Mutually Exclusive:** GEOG 1200, GEOG 1201

**Attributes:** Recommended Intro Courses

**GEOG 1700 Social Justice in the 21st Century: Global Political Economy and Environmental Change 3 cr**

Introduces students to political economy and cultural geography through the close analysis of contemporary world events, including but not limited to instances of violent conflict, environmental change, international negotiations, political processes and events, social movements, and policy developments. A multimedia approach will advance students' understanding of geopolitical events from political economy and spatial perspectives. Specific content of the course will change year-by-year in response to developments in national and world politics. Also offered by the Faculty of Arts as GPE 1700. Students may not hold credit for both GPE 1700 and GEOG 1700.

**Equiv To:** GPE 1700

**Attributes:** Recommended Intro Courses

**GEOG 2200 Introduction to Thematic Cartography (TS) 3 cr**

(Lab Required) An introduction to the principles of map compilation and reproduction, including analysis and cartographic display of spatially referenced data. Emphasis will be placed on cartographic data manipulation, generalization, and symbolization, map design, visualization and communication. Not to be held with GEOG 2221.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

**GEOG 2272 Natural Hazards (PS) 3 cr**

Environmental hazards to human settlement and economy are examined with particular attention to meteorological, soil erosion, mass wasting, earthquake and volcanic phenomena. Not to be held with GEOG 2440.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of GEOG 1290, GEOL 1340, or GEOL 1410, GEOG 1291, GEOG 1200, GEOG 1201, GEOL 1360 or permission of department head.

**Mutually Exclusive:** GEOG 2440

**GEOG 2300 Atmospheric Thermodynamics, Clouds and Precipitation (PS) 3 cr**

Critical thermodynamic processes are discussed that are associated with the Earth's atmosphere including dry and moist processes, phases of water, stability, cloud development and precipitation processes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of GEOG 1290, GEOG 1291, GEOG 1200 or GEOG 1201), and (one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520 or MATH 1530) or permission of department head or instructor,

**GEOG 2310 Introduction to Process Hydrology (PS) 3 cr**

This course introduces students to the near-surface components of the hydrological cycle, including the processes of precipitation, evaporation, water-biosphere interactions, infiltration, overland and stream flow.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of GEOG 1290, GEOG 1291, GEOG 1200 or GEOG 1201) and (one of PHYS 1020, PHYS 1021, PHYS 1050, PHYS 1051, MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520 or MATH 1530) or permission of department head or instructor.

**GEOG 2330 Place, Populations and Mobility: Geographic Perspectives (HS) 3 cr**

An examination of the factors controlling the number and distribution of human population. Variations in fertility, mortality and mobility will be analyzed and the causes and consequences reviewed. Not to be held with GEOG 2480.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

**Mutually Exclusive:** GEOG 2480, GEOG 2481

**GEOG 2372 Geography of Tourism (HS) 3 cr**

This course examines the social, economic and environmental dimensions of tourism and recreation. Historical and contemporary experiences from around the world will be studied. Not to be held with GEOG 2410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (GEOG 1200) or GEOG 1280, or permission of department head.

**Mutually Exclusive:** GEOG 2410

**GEOG 2520 Geography of Natural Resources (HS) 3 cr**

An introduction to the basic concepts of the subject and the distribution of resources. Stress will be placed on Canadian resources and resource requirements but examples from other resource systems will also be used.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

**GEOG 2540 Weather and Climate (PS) 3 cr**

This half-course examines the nature, controls, and observations of weather and the variation of climate in time and space.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

**Equiv To:** GEOG 2541

**GEOG 2550 Geomorphology (PS) 3 cr**

This half-course surveys a broad array of landforms in the world and the geomorphic processes responsible for their creation. Attention is strongly focused on those landform processes originating at the earth's surface.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (GEOG 1200) or GEOG 1201, or GEOG 1290 or GEOG 1291, or permission of department head.

**Equiv To:** GEOG 2551

**GEOG 2570 Geography of Canada (A) 3 cr**

A regional study of Canada in which the major regions of Canada are studied with respect to geographical patterns of their physical environment, settlement, culture, economic activity, and land use. Not to be held with GEOG 2560, GEOG 2561 or GEOG 3431.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

**Equiv To:** GEOG 3431

**Mutually Exclusive:** GEOG 2560

**GEOG 2580 Geography of the United States (A) 3 cr**

A regional study of the United States in which the major regions of the United States are studied with respect to geographical patterns of their physical environment, settlement, culture, economic activity, and land use. Not to be held with GEOG 2560, GEOG 2561.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

**Mutually Exclusive:** GEOG 2560

**GEOG 2630 Geography of Culture and Environment (HS) 3 cr**

An introduction to the cultural geographic study of environment, focusing on the evolution of landscape, the creation of regions, and human relationships with nature.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (GEOG 1200) or GEOG 1201, or GEOG 1280 or GEOG 1281, or permission of department head.

**GEOG 2640 Geography of Culture and Inequality (HS) 3 cr**

An introduction to the study of cultural geography, with a specific focus on relationships of inequality and attempts to overcome them. Topics examined include globalization, landscapes and the environment, public space, gender and sexuality, colonialism and imperialism, and mobility.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 1280 or GEOG 1281, GEOG 1700 or GPE 1700, or permission of the instructor.

**GEOG 2700 Introduction to Arctic System Science 3 cr**

This course introduces students to the various components of the Arctic system, including the terrestrial and marine environments, polar atmosphere, biological and chemical oceanography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 1290 or (GEOG 1291), or GEOG 1200 or (GEOG 1201) or ENVR 1000 or GEOL 1340.

**GEOG 2870 Introduction to Economic Geography (HS) 3 cr**

This course introduces the field of economic geography, paying particular attention to the historical, environmental and spatial dimensions that shape the global economy and current economic order, including: wealth and poverty, production patterns and community chains, consumption and retail processes; natural resources; the state's role in economic governance; global labour; and the ways in which economic structures and processes shape gender and ethnicity. Course materials will be global in scope but will provide both a macro- and micro-economic perspective. May not be held with the former GEOG 2210 or GEOG 2211.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Geography at the 1000 level.

**Mutually Exclusive:** GEOG 2210, GEOG 2211

**GEOG 2900 Geography of Canadian Prairie Landscapes (A) 3 cr**

This course introduces students to the various geographical themes, concepts and processes within the context of the natural and anthropogenic development of the Canadian prairie region. It traces the evolution of the prairie landscape. It will focus on academic writing in the discipline. Not to be held with GEOG 2450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

**Mutually Exclusive:** GEOG 2450

**Attributes:** Written English Requirement

**GEOG 2930 Introduction to Oceanography 3 cr**

This course provides an introduction to the physical, chemical, biological and geological processes in the world oceans and their interactions with the overall Earth system. This course is interdisciplinary, applying geological, chemical and biological processes to the study of the world's oceans.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 1290 (or GEOG 1291) or GEOG 1200 (or GEOG 1201) or ENVR 1000 or GEOL 1340.

**GEOG 3200 Introduction to Remote Sensing (TS) 3 cr**

(Lab Required) The course is an introduction to the principles of optical, active and passive microwave remote sensing. A review of satellite and sensors and their geographic applications will be presented, along with digital image analysis techniques. Laboratory assignments will provide hands-on experience in dealing with remote sensing data.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of GEOG 1200, GEOG 1201, GEOG 1290 or GEOG 1291) and (one of PHYS 1020, PHYS 1021, PHYS 1050, PHYS 1051, MATH 1230, MATH 1300, MATH 1301, MATH 1310, MATH 1500, MATH 1501, MATH 1510 or MATH 1520) or permission of department head.

**GEOG 3272 Social Vulnerability to Natural Hazards (HS) 3 cr**

This course examines differing social vulnerability to natural hazards, before, during and after disasters, including class, gender, age, health, language, and ethnicity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: a minimum of three credit hours from Geography courses numbered at the 1000 level, or GPE 1700 or GEOL 1340 or GEOL 1410 or permission of department head.

**GEOG 3310 Atmospheric Dynamics, Storms and Radar (PS) 3 cr**

The course covers the critical dynamic processes that are associated with the Earth's atmosphere including forces that control wind, the kinematics of the wind field, general circulation, hodographs, thermal wind, laws of motion, mid-latitude circulations, convective storms and the utility of weather radar.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 2300, or permission of department head.

**GEOG 3320 Introduction to Microclimates and Micrometeorology (PS) 3 cr**

This course introduces the concept of energy balance climatology and examines relationships among climate, microclimate, and environments of the Earth's surface and human-made environments. Studies include bioclimates and hydroclimates.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (GEOG 2310), and (GEOG 2300), or permission of department head.

**GEOG 3340 Migration and Mobility in a Globalized World 3 cr**

This course surveys the geographic dimensions of migration and mobility of populations, with emphasis of contemporary events.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOG 2330 or (GEOG 2480), or permission of department head.

**GEOG 3390 Introduction to Climate Change and Its Causes (PS) 3 cr**

The primary objective of this course is to provide students with a general understanding of the physical and astronomical factors that drive global climate change. Focus will be given to current and future climate change in the context of observations and modeling. Not to be held with GEOG 3610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography or Environment courses, or permission of department head.

**Mutually Exclusive:** GEOG 3610

**GEOG 3460 Urban Geography (HS) 6 cr**

The course studies the processes and trends of urbanization; the classification of cities; central-place theory; cities as systems; land-use patterns; social forces and factorial ecology; and urban transport problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (GEOG 1200) or GEOG 1201, or GEOG 1280 or GEOG 1281, or permission of department head.

**GEOG 3640 Social Geography of the Environment (HS) 3 cr**

This course provides an intermediate-level assessment of current geographical approaches to society and environment. Students are exposed to critical realist, social constructionist, Marxist, feminist and post-Colonial traditions as they are applied to environmental and social justice, globalization and public health. It includes discussion and a community-based learning project.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (GEOG 1200 or GEOG 1201) or GEOG 1280 or GEOG 1281, or permission of department head.

**GEOG 3730 Geographic Information Systems (TS) 3 cr**

(Lab Required) Weekly two-hour lab. The course introduces students to the evolving science, technology and applications of Geographic Information Systems (GIS). Related geospatial technologies such as Global Navigation Satellite Systems and Remote Sensing, as well as the field of Geomatics will be introduced. Not to be held with GEOG 2250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography, Geology or Environment courses numbered at the 1000 and/or 2000 level, or permission of instructor or department head.

**Equiv To:** GEOG 2250

**GEOG 3740 Field Studies in Geography (A,TS) 6 cr**

A field course designed to introduce students to either a detailed area study or to field techniques employed for specific geographic enquiry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**GEOG 3750 Field Studies in Geography (A,TS) 3 cr**

A field course designed to introduce students to either a detailed area study or to field techniques employed for specific geographic enquiry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

**GEOG 3760 Special Topics in Geography 6 cr**

This course will vary from year to year depending on the needs of students and the interests of instructors.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**Equiv To:** GEOG 3761

**GEOG 3770 Special Topics in Geography 3 cr**

This course will vary from year to year depending on the needs of students and the interests of instructors.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**GEOG 3810 Quantitative Research Methods in Geography (TS) 3 cr**

This course focuses on the quantitative analytical methods available for the interpretation on physical and human geography applications. May not be held with the former GEOG 3680.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENVR 2810 or the former GEOG 2530 or STAT 1000 or STAT 1001 or STAT 1150, or permission of department head.

**Mutually Exclusive:** GEOG 3680

**Attributes:** Mathematics Requirement

**GEOG 3850 Sustainable Manitoba (A) 3 cr**

This course approaches local sustainability issues from an interdisciplinary perspective. By looking at the ecological, social and economic aspects from a variety of discipline perspectives, a fuller understanding of sustainability is achieved. The broad range of perspectives is achieved through participation of guest speakers from other faculties and outside of the university as well as excursion outside the classroom. Not to be held with ENVR 3850.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 60 credit hours of course work, or permission of department head.

**Equiv To:** ENVR 3850

**GEOG 3860 Animal Geographies (HS) 3 cr**

This course presents a variety of topics concerning the interactions between humans and animals, how humans influence and use animals, and the many roles animals play in human lives and environments. Animal Geographies lies at a meeting point between physical and human geography, where we must consider the blurring boundaries between what it means to be animal/human, and the implications of how animals are used and represented. A wide variety of perspectives, beliefs, and points of view will be explored.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**GEOG 3870 Food Geographies 3 cr**

This course provides a critical examination of the geographies of food at a variety of scales, from the body to the global. The course focuses on themes in three interconnected areas: 1) food production and the global food system from farm to plate including agribusiness and alternative food production and distribution models; 2) food consumption habits and beliefs and foodways as geographically contingent material culture; and 3) food (in) security and its relationship to health and wellbeing. This course is cross-listed as HNSC 3870. May not be held with HNSC 3870.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 1280 or GEOG 1281 or HNSC 1200 or GEOG 1200, or permission of department head.

**Equiv To:** HNSC 3870



**GEOG 3890 Geography and Wellness (HS) 3 cr**

This course explores how human environment relations influence our mental, emotional, and physical wellbeing. Students will delve into current research in health and wellness geography and related disciplines, particularly focusing on: therapeutic landscapes, ecological loss and grief, sacred spaces, and environmental influences on mental wellbeing. Also offered as ENVR 3890. May not be held with ENVR 3890.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENVR 1000 or GEOG 1200 or GEOG 1280 or GEOG 1700 or GPE 1700 or permission of the department head.

**Equiv To:** ENVR 3890

**GEOG 3920 Biological Oceanography 1: Lower Trophic Levels 3 cr**

In this course, students will gain a background on the study of biological oceanography. Biological oceanography is a very active and important field of study worldwide due to the spatial coverage and biological activity of the world's oceans. This course examines the interaction of marine organisms with other biological life, as well as with the physical environment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 2930 and BIOL 1030.

**GEOG 4050 Ecosystem Management 3 cr**

This course will provide students with an understanding of the practical applications of ecological science, environmental policy, and resource management approaches in the large-scale planning of landscapes. The course will review ecological principles and trace the historical development of the ecosystem concept. Comparisons are made to other possible environmental management approaches. The synthesis of major elements and concepts will be reinforced through case studies on the Manitoba landscape, with an emphasis on practical learning by students through field seminars and group discussions. Not to be held with ENVR 4050.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**Equiv To:** ENVR 4050

**GEOG 4060 Biogeography 3 cr**

This course will provide students with a general understanding of the historical, ecological, analytical, and conservation aspects of biogeography. The course will also have a dual focus on the principles and concepts of reasons for the distribution of plants and animals worldwide, as well as incorporating discussion on as many local (Manitoba, Canada, North America) examples as possible. Not to be held with ENVR 4060.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**Equiv To:** ENVR 4060

**GEOG 4200 Advanced Methods in Remote Sensing 3 cr**

(Lab Required) Provides instruction in the current theory and application of remote sensing technology to Earth system Science. Emphasis will be placed on the processing and interpretation of remote sensing imagery and the integration of remote sensing data with other spatial data.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3200, or permission of department head.

**GEOG 4260 Sacred Lands 3 cr**

Students will increase their understanding of the importance and significance of Sacred Lands and Sacred Spaces to International Indigenous Peoples. Experiential learning, seminars, and a field component may be included. Not to be held with NATV 4260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**Equiv To:** NATV 4260

**GEOG 4280 Gender and the Human Environment 3 cr**

This upper-level seminar course will develop in students a depth and breadth of understanding appropriate to the honours undergraduate/graduate level in the area of gender geography scholarship. From critical social science theoretical positions, this course asks students to examine what we can learn about how humans live on the earth if we see them as gendered. Just as we may also understand humans and their interactions in and with spaces, places and environments through the lenses of race, ethnicity, class, age and/or combinations of these categories with gender.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum of six credit hours in Geography, or permission of department head.

**GEOG 4290 Geographies of Health and Health Care 3 cr**

This course provides an introduction to and critical examination of the geographies of health and healthcare. Topics include perceptions and determinations of health and health care; health care delivery, focusing on spatial patterns and inequities; and the relationship between environment and health, particularly impacts of environmental contamination.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**GEOG 4300 Synoptic Meteorology and Weather Analysis 3 cr**

Applied aspects of meteorology are described in terms of weather analysis and forecasting techniques for synoptic-scales and meso-scales using various meteorological tools. An introduction to severe weather forecasting techniques will also be described.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3310, or permission of department head.

**GEOG 4310 Boundary-Layer Climatology and Micrometeorology 3 cr**

A seminar course on advanced topics in microclimatology and micrometeorology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3320, or permission of department head.

**GEOG 4330 Concepts in Atmospheric Modeling 3 cr**

This course will primarily focus on numerical modeling applications and techniques of the Earth's atmosphere with an emphasis on weather prediction. This includes understanding basic modeling terminology, numerical schemes, structure of models, types of models, what is required to run a model, and an introduction to data assimilation and ensemble techniques to weather prediction. Not to be held with GEOG 4320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3310 or GEOG 3320, or permission of department head.

**Equiv To:** GEOG 4320

**GEOG 4350 Parks and Protected Areas Planning and Management: Field Studies 6 cr**

The course is taught in two segments, an on-campus component and field study component taking place in Banff National Park. The on-campus component examines the historical development of the concept of parks and protected areas, the role of interpretation, management and research in the parks and emerging issues in the management of parks and protected areas. In addition, during the on-campus component planning for the field will take place. The field segment will focus on a wide variety of management issues with particular attention to Banff National Park. Emerging issues and trends will be examined and past management responses evaluated. There will be opportunities for students to investigate specific management issues of interest to them and to participate in current research being conducted in the park. This course is also offered in the Faculty of Kinesiology and Recreation Management as REC 4350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**Equiv To:** REC 4350

**GEOG 4390 Global Climate Change 3 cr**

Students will be introduced to the complexities of climate changes through a series of introductory lectures and reading assignments that focus on recent scientific publications and review articles (mathematical skills are not required). Both sides of the climate change debate will be addressed in weekly assignments, and students will defend their conclusions in classroom discussion. Each student will take on a project in some aspect of climate change – glaciers, sea ice, temperature trends, precipitation, agriculture, animal migration, aerosols, or a regional impact.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3390 (or GEOG 3610), or permission of department head.

**GEOG 4560 Techniques in Climatology 3 cr**

This course will examine field and analysis techniques that form the basis of climatological research, with particular emphasis on contemporary research in the areas of microclimatology and micrometeorology. Techniques for the examination of biophysical and biogeochemical processes driving the surface exchanges of heat, water and greenhouse gases form an important component of this course. The aim of the course is to prepare the student for independent research in applied climatology and meteorology, including the affiliated fields of ecology, hydrology, oceanography, as well as other fields of atmospheric science.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3320, or permission of department head or instructor.

**GEOG 4650 Models in Regional Analysis 3 cr**

Emphasis is placed on the use of regression techniques in regional analysis including the classical ordinary least squares methods and two-stage least squares. Migration and industrial location models are developed and calibrated using these techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**GEOG 4660 Honours Thesis 6 cr**

This course involves the production of a thesis under the supervision of a department faculty member.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**GEOG 4670 Selected Issues 3 cr**

Intensive study of selected geographic issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Prearranged written consent of an individual instructor and permission of department head.

**GEOG 4750 Understanding Contemporary Environmentalism: Power and Discourse 3 cr**

This course will provide students with an advanced understanding of the relationships between nature and society by examining the rise of environmentalism through the past 50 years. Special attention will be paid to recent developments within the field of environmentalism and to theoretical work in the field of political ecology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the Instructor,

**GEOG 4780 Storms-Mesoscale 3 cr**

This course focuses on a range of storms and mesoscale phenomena in the summer or winter. These include thunderstorms, tornadoes, squall lines, lightning, low level jets, gust fronts, blizzards, freezing rain, orographic storm, and polar lows. The emphasis is on the physical mechanisms leading to these events and it also examines how they may change in our changing climate. Not to be held for credit with GEOG 7780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3310 or permission of department head.

**Equiv To:** GEOG 7780

**GEOG 4872 Advanced Methods in Geomatics 3 cr**

This course focuses on the theory and application of geomatics in spatial problem solving in geography and the environment. The use of geomatics' technologies including GIS, Earth observation and spatial numerical methods will be covered. Students will learn the theoretical underpinning of spatial statistical concepts and will experiment with data exploration, inference and hypothesis testing. Lab assignments will provide practical experience with GIS and other geomatics software as well as CRAN-R. Not to be held with ENVR 4872, GEOG 4590 or GEOG 4720.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3730 or permission of Instructor.

**Equiv To:** ENVR 4872, GEOG 4590, GEOG 4720

**GEOG 4930 Oceanography: Chemical 3 cr**

This course deals with the sources, distribution, and transformation of chemical constituents of the oceans, and the processes that control them. The emphasis will be given to biologically or climatically significant elements such as carbon, nitrogen, phosphorus, iron and mercury in the Arctic Ocean.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENVR 2550 and GEOG 2930 or permission by department head.

**GEOG 4940 Arctic Sea Ice 3 cr**

This course aims to (i) provide students with a strong background on the importance and current knowledge of Arctic sea ice and (ii) train students on current field techniques used in research pertaining to sea ice-related investigations. To attain these goals, the course will combine field safety training, classroom lectures and assignments, and direct field experience through a field trip pertaining to physical and biogeochemical processes of the snow-covered sea-ice environment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of the instructor.

**GEOG 4960 Oceanography: Biological II Higher Trophic Levels 3 cr**

This course will examine the oceanographic-biological coupling occurring in the Arctic region, focusing on environmental conditions related to higher trophic levels and impacts of climate change. This course will extend the learning of the 3000-level course that examines biological oceanography, which focuses on the environmental factors that control primary production and lower trophic levels in the world's oceans.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3920 and a 2000-level BIOL course or permission of instructor.

## Geological Sciences (GEOL)

**GEOL 1340 The Dynamic Earth 3 cr**

(Lab required) An introduction to dynamics of the Earth's interior and surface that created the environment in which life evolved and that continue to change the world in which people now live. Not to be held with the former GEOL 1440 or the former GEOL 2250. Required for students intending to proceed in further courses in the Geological Sciences

**Mutually Exclusive:** GEOL 1440, GEOL 2250

**Attributes:** Recommended Intro Courses

**GEOL 1400 Time-Trekker's Travelog: Our Evolving Earth 3 cr**

Take a trip across billions of years, as we explore awesome times in the evolution of our planet and its life – from dust to us! Not to be held with GEOL 1350.

**Equiv To:** GEOL 1350

**Attributes:** Recommended Intro Courses

**GEOL 1410 Natural Disasters and Global Change 3 cr**

Discover how and when natural disasters occur, and how to identify and recognize them. Explore the Earth processes that lead to natural disasters and global change. Not to be held with the former GEOL 1360.

**Equiv To:** GEOL 1360

**Attributes:** Recommended Intro Courses

**GEOL 1420 Exploring the Planets 3 cr**

Discover the Solar System as we explore ancient ideas and modern concepts. Emphasis will be on recent space exploration and a comparison of the Earth and its neighbours. Not to be held with the former GEOL 1370.

**Equiv To:** GEOL 1370

**Attributes:** Recommended Intro Courses

**GEOL 2060 Introductory Geophysics 3 cr**

(Lab required) An introduction to geophysical exploration, Earth physics, seismology, electrical methods, and potential fields. Emphasis will be on quantitative modeling and will include geophysical measurements and handling of data.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 1340 (or the former GEOL 1440)], and [MATH 1300 or MATH 1301 or MATH 1310 or MATH 1500 or MATH 1501 or MATH 1510 or MATH 1520 or the former MATH 1530], and [PHYS 1020 or PHYS 1021 or PHYS 1050 or PHYS 1051].

**GEOL 2350 Canada Rocks: The Geology of Canada 3 cr**

This is a general interest course. Journey through the spectacular story of Canada's geology- its rocks and how they were assembled over time into the amazing country that we live in today.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [a minimum of 3 credit hours of university-level geology] or [GEOG 1290 or GEOG 1291] or [the former GEOG 1200 or the former GEOG 1201] or EER 1000.

**GEOL 2390 Environmental Geology 3 cr**

Examination of geological processes and material as they interact with human activities, environmental planning, and management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ Minimum 3 credit hours of university-level geology] or [GEOG 1290 or GEOG 1291], or [the former GEOG 1200 or GEOG 1201].

**GEOL 2440 Structural Geology 1 3 cr**

(Lab Required) Elementary mechanical principles of rock deformation, brittle and continuous deformation, geometry of faults, folds, joints, cleavage, lineations. Descriptive geometric and stereonet solution to structural geology problems, cross sections, structural contour maps.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 1340 (C+), and [MATH 1300, or MATH 1210, or MATH 1500, or MATH 1510, or MATH 1520].

**GEOL 2500 Introduction to Mineralogy 3 cr**

(Lab Required) An introduction to the chemistry, physics and classification of minerals. Brief, systematic description of about 200 of the most important minerals. Laboratory: hand specimen identification. Not to be held with the former GEOL 2540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 1340 (C+) and [one of Chemistry 40S (50%), CKSL 0100 (P) or the former CHEM 0900 (Pass)]. (CHEM 1100 or CHEM 1101) and ( one of CHEM 1120, CHEM 1121, or CHEM 1126) are highly recommended.

**Mutually Exclusive:** GEOL 2540

**GEOL 2520 Igneous and Metamorphic Petrology 3 cr**

(Lab Required) The classification, occurrence and origin of igneous and metamorphic rocks. The study and identification of rocks using hand specimens and thin sections.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 2500 and GEOL 2800] or [ the former GEOL 2540].

**GEOL 2530 Introductory Sedimentary Petrology and Stratigraphy 3 cr**

(Lab Required) An introduction to sedimentary deposits and principles of stratigraphic analysis. Occurrence, classification and origin of sedimentary deposits. Facies concept, stratigraphic classification and correlation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 2500 and GEOL 2800] or [the former GEOL 2540].

**GEOL 2570 Energy and Mineral Resources 3 cr**

An introduction to the geological factors and processes responsible for the origin, concentration and distribution of fuels, geothermal resources, metallic and nonmetallic minerals.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Any university-level Geology course.

**GEOL 2770 Principles of Inorganic Geochemistry 3 cr**

(Lab Required) The cosmic abundance of the elements, nucleosynthesis, geological differentiation of the elements; chemical petrology of igneous, metamorphic and sedimentary rocks. An introduction to aqueous and low-temperature geochemistry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GEOL 2500 or the former GEOL 2540] and [one of MATH 1300, MATH 1301, MATH 1210, MATH 1211, MATH 1230, MATH 1500, MATH 1501, MATH 1510, or MATH 1520]. Pre or Corequisite: [(CHEM 1100 or CHEM 1101) and (one of CHEM 1120, CHEM 1121 or CHEM 1126)] or the former CHEM 1300 or the former CHEM 1301.

**GEOL 2800 Optics and Spectroscopy of Minerals 3 cr**

(Lab Required) Use of the petrographic microscope; microscopic recognition of common rock-forming minerals; introduction to spectroscopic techniques in geosciences (including optical, vibrational and luminescence techniques).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Corequisite: GEOL 2500 or the former GEOL 2540.

**GEOL 3110 Petrogenesis of Igneous Rocks 3 cr**

(Lab Required) Crystallization processes in magma and resultant textures; physical, chemical, and kinetic processes of magmatic systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2520 and GEOL 2770.

**GEOL 3130 Communication Methods in the Geological Sciences 3 cr**

(Lab Required) Practice in oral and written description of geologic subjects; tools of library and database research; manuscript organization; abstract writing; preparation of tables, figures, and audio-visual material. This course is for students in the Honours and Major Geological Sciences programs only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2440 and GEOL 2520 and GEOL 2530.

**Attributes:** Written English Requirement

**GEOL 3140 Gemology 3 cr**

(Lab Required) An introduction to the scientific study of natural and synthetic gem materials, methods of their identification and principles of gemstone appraisals. Laboratory: identification of gemstones using optical methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 2500 and GEOL 2800] or [the former GEOL 2540].

**GEOL 3310 Paleontology 3 cr**

(Lab Required) The study of fossils: invertebrate paleontology, with an introduction to paleontologic principles, vertebrate paleontology, and paleobotany.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GEOL 1340 (C+) and GEOL 1400] or [BIOL 1030 or BIOL 1031].

**GEOL 3420 Engineering Geology 3 cr**

Engineering properties of rocks and soils, laboratory testing and site investigations in engineering geology. Engineering geology of tunnels, bridges, dams, reservoirs, shorelines, sanitary landfills, landslides, seismic risk areas, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2440 and GEOL 2520 and GEOL 2530.

**GEOL 3440 Structure and Metamorphism 3 cr**

(Lab required) Structural and metamorphic geology, links between deformation and metamorphism, and the application of pressure-temperature and time paths to study metamorphic equilibria. Not to be held with the former GEOL 3290.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2440 and GEOL 2520 and GEOL 3910.

**Equiv To:** GEOL 3290

**GEOL 3450 Hydrogeology 3 cr**

(Lab required) The hydrologic cycle and basic hydrologic processes; properties of aquifers and principles of groundwater flow; well hydraulics and groundwater resource evaluation; regional groundwater flow and subsurface geology; and basic chemical hydrogeology. May not be held with CIVL 4250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 1230 or MATH 1500 or MATH 1501 or MATH 1510 or MATH 1520] and [PHYS 1020 or PHYS 1021 or PHYS 1050 or PHYS 1051] and [(CHEM 1100 or CHEM 1101) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)] or [the former CHEM 1300 or the former CHEM 1301] and [GEOL 2060 or GEOG 2310 or (one of STAT 1000, or STAT 1001, or STAT 1150)] and [GEOL 2530].

**Mutually Exclusive:** CIVL 4250

**GEOL 3490 Glacial Geology and Geomorphology 3 cr**

(Lab required) Principles of landform development with emphasis on glacial deposition. Aerial photo and map interpretation in lab. Not to be held with the former GEOG 3580.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 2530.

**Mutually Exclusive:** GEOG 3580

**GEOL 3740 Exploration Seismology 3 cr**

(Lab required) Collection of seismic data (land and sea); simple elastic wave theory; geometry of refraction and reflection seismology; rock velocity determination; seismic noise and signal; data corrections; data enhancement techniques; representation of data; survey procedures.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 2060] and [MATH 1500 or MATH 1501 or MATH 1510 or MATH 1520 or the former MATH 1530 or MATH 1690].

**GEOL 3750 Geology and Geophysics of the Planets 3 cr**

(Lab required) Physical and chemical nature of the inner and outer planets and their satellites, asteroids and meteorites. The application of geophysical, geochemical and petrological techniques to planetology; remote sensing study of geological features of planetary surfaces and atmospheres.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2060, GEOL 2520, and GEOL 2530, or permission of department.

**GEOL 3810 Applied Geophysics 3 cr**

(Lab required) The application of geophysical methods in exploration and in environmental and engineering projects.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GEOL 2060] and [GEOL 2500 or the former GEOL 2540].

**GEOL 3900 Sedimentology 3 cr**

(Lab Required) The study of depositional environments of sedimentary rocks. Facies analysis and modeling of sedimentary deposits.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 2530.

**GEOL 3910 Introduction to Field Mapping 3 cr**

Course introducing field mapping techniques including field navigation and basic geologic interpretations. Students are responsible for costs of room and board during the field course. Offered in the Summer Term.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2440 and GEOL 2520 and GEOL 2530 and permission of department.

**GEOL 4250 Theory and Application of Geophysical Inversion Methods 3 cr**

(Lab required) Introduction to linear and non-linear geophysical inversion theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 2060] and [MATH 1210 or MATH 1300 or MATH 1301 or MATH 1310].

**GEOL 4260 Applied Geophysics Field Course 3 cr**

Field instruction in the planning and execution of geophysical surveys and the use of geophysical equipment; analysis, interpretation and reporting of acquired geophysical data. Taught with the first half of GEOL 4740 in the summer term. Students are responsible for costs of room and board during the field course. Not to be held with GEOL 4740.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 3810, GEOL 2440, GEOL 2520, GEOL 2530, and permission of department.

**Mutually Exclusive:** GEOL 4740

**GEOL 4270 Advanced Studies in Earth Sciences 3 cr**

Advanced study in a selected subject in Earth sciences. As the course content will vary from year to year, students may take this course more than once for credit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department head.

**GEOL 4280 Instrumental Techniques in Geology 3 cr**

(Lab required) Lecture and laboratory course introducing modern instrumental techniques for the characterization of materials. Includes coverage of diffraction, spectroscopy, mass spectrometry, electron and scanning probe techniques. Emphasis is placed on basic principles, instrument operation, data analysis and sample preparation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2520 and GEOL 2530 and GEOL 2770 and permission of department.

**GEOL 4300 Mineral Deposits 3 cr**

(Lab required) The tectonic setting and deformational and structural nature of ore deposits. The physics and chemistry of ore deposition and ore bearing fluids. The mineralogical, textural and environmental constraints on resource exploitation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 3110 and GEOL 3900.

**GEOL 4310 Paleontologic Principles 3 cr**

(Lab required) Interpretation of Earth history using fossils: topics in taxonomy, functional morphology, paleoecology, evolution, biostratigraphy, and biogeography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 3310 or permission of department.

**GEOL 4320 Physics of the Earth: Seismology and Heat Flow 3 cr**

Seismology and the structure, physical properties and equations of state of the Earth's interior; thermal constitution and the history of the Earth.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2060 and [MATH 2130 or MATH 2720 or MATH 2721]. Pre- or co-requisite: MATH 3132 or PHYS 2490 or PHYS 3496.

**GEOL 4330 Physics of the Earth: Geomagnetism and Gravity 3 cr**

Potential field theory; magnetic properties of Earth materials; figure and rotation of the Earth; theory and application of Earth's gravity and magnetic fields.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2060 and [MATH 2130 or MATH 2720 or MATH 2721]. Co-requisite: MATH 3132 or PHYS 2490 or PHYS 3496..

**GEOL 4360 Mineral Exploration Techniques 3 cr**

(Lab required) Methodologies used in exploration and evaluation of Canadian mineral deposits and case studies illustrating the application of these methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 3910 and GEOL 2770. Recommended pre- or corequisite: GEOL 4300.

**GEOL 4370 Global Change 3 cr**

Examination of the major processes controlling global change through time. The causes, magnitude, and periodicity of changes in the geological record resulting from the variability and interaction of continents, oceans, atmospheres, climate, Earth-sun relationships, and ice sheets, with an emphasis on paleoclimate.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 3900. Pre- or corequisite: GEOL 3490.

**GEOL 4380 Mineral Resource Development 3 cr**

Examination of economic, political, social, and environmental considerations that affect exploration and mining activity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 3130 (C+). Pre- or corequisite: GEOL 4300 or GEOL 3810.

**GEOL 4520 Petroleum Geology 3 cr**

(Lab required) A study of the physical properties, origins and maturation, migration, and accumulation of petroleum products.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 2060 and GEOL 3900] or [GEOL 2530 and either (GEOL 3810 or GEOL 3740)].

**GEOL 4670 Global Tectonics 3 cr**

(Lab required) The structure and properties of, and physical processes taking place within, the Earth's interior. Continental cratons and their margins, orogenic belts, structural and petrologic features of the ocean basins, modern diastrophism, global tectonic theories.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 3110, GEOL 3440 (or the former GEOL 3290), GEOL 3900] or [GEOL 2440, GEOL 2520, GEOL 2530 and two of the following courses: GEOL 4250, GEOL 4320, GEOL 4330, GEOL 4810].

**GEOL 4740 Geophysics Field Course 6 cr**

Field instruction in planning and execution of geophysical surveys and use of geophysical equipment; analysis, interpretation and reporting of acquired geophysical data. Students are responsible for costs of room and board during the field course. Taught in the summer term. Not to be held with GEOL 4260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 2440, GEOL 2520, GEOL 2530, GEOL 3810, and permission of department.

**Mutually Exclusive:** GEOL 4260

**GEOL 4810 Geophysical Data Analysis 3 cr**

(Lab Required) The theory and application of spectral methods in geophysics. The use of Fourier Transforms, convolution, power spectra, coherence, transfer functions, covariance, correlation and filtering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2132 or PHYS 2490 or PHYS 2496 or permission of department.

**GEOL 4870 Honours Thesis 6 cr**

A thesis based on a geoscience research project conducted by a fourth-year student in Geology or Geophysics. Selection of a project and supervisor to be arranged prior to registration, submitted in writing to and approved by the department head. This course is for Honours students only and is to be taken in the student's final year before graduation. Not to be held with GEOL 4920.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 3130 and permission of department head.

**Mutually Exclusive:** GEOL 4920

**GEOL 4890 Basin Analysis 3 cr**

(Lab required) The study of major sedimentary basins. Qualitative and quantitative aspects of basin origin, classification, evolution, fluid content and diagenesis, and sedimentary facies architecture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [GEOL 3900 and GEOL 2060] or [GEOL 2530 and (GEOL 3740 or GEOL 3810)].

**GEOL 4910 Advanced Field Mapping 3 cr**

Course developing field mapping techniques including independent mapping and interpretation and synthesis in complex geological terrains. Students are responsible for costs of room and board during the field course. Offered in the summer term.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOL 3440 or (the former GEOL 3290), GEOL 3110, GEOL 3900, GEOL 3910, and permission of department.

**GEOL 4920 Technical Report 3 cr**

A technical report based on a geoscience research project conducted by a fourth year Major student in Geology or Geophysics. Selection of a project and supervisor to be arranged prior to registration, submitted in writing to and approved by the department head. This course is for students in the Major program only and is available during the student's final year of study before graduation. Not to be held with GEOL 4870. Technical reports written for this course are not considered compliant with National Instrument 43-101.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 3130 and permission of department head.

**Mutually Exclusive:** GEOL 4870

## German (GRMN)

**GRMN 1120 Beginning German (A) 6 cr**

(Lab required) Three hours of lectures, plus one hour of language lab or conversation class per week. The course is intended for students with little or no previous knowledge of German. Basic grammar is included, but emphasis is placed on the development of broad reading and speaking skills. Satisfactory completion of this course enables students to proceed to GRMN 2100 or GRMN 2103. Students may not hold credit for GRMN 1120 and any of: GRMN 1123 or GRMN 1125 or the former GRMN 1121. Students with Grade 12 German or its equivalent may not normally take the course for credit. Not open to students who have previously obtained credit for GRMN 2100 or GRMN 2103 or GRMN 2105 or the former GRMN 2101.

**Equiv To:** GRMN 1121

**Mutually Exclusive:** GRMN 1123, GRMN 1125

**Attributes:** Humanities, Recommended Intro Courses

**GRMN 1300 Masterpieces of German Literature in English Translation (C) 3 cr**

Language of instruction: English. The course introduces students to representative works (prose, poetry, and drama) by German-speaking writers such as Goethe, Kleist, Thomas Mann, Kafka, and Rilke, with an emphasis on the ages of Classicism, Romanticism, and Modernism. Stresses the development of English reading and writing skills. The course is designed for students who have little or no prior knowledge of German literature.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 1310 Love in German Culture in English Translation (C) 3 cr**

Language of instruction: English. An introduction to the discourse and meaning of love through German culture from the Middle Ages to the present; analyzes the expression of different concepts of love (spiritual, courtly, erotic, romantic, sexual, free, same-sex, familial, virtual) in literature and other cultural forms. Stresses the development of English reading and writing skills. The course is designed for students who have little or no prior knowledge of German culture.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2100 Intermediate German (A) 6 cr**

Grammar review, exercises, development of practical oral skills, conversation and modern usage. Introduction to German poetry and prose. Students may not hold credit for GRMN 2100 and any of: GRMN 2103 or GRMN 2105 or the former GRMN 2101.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [German 40S] or [GRMN 1120 or GRMN 1125 or the former GRMN 1121] or written consent of department head.

**Equiv To:** GRMN 2101

**Mutually Exclusive:** GRMN 2103, GRMN 2105

**Attributes:** Humanities, Recommended Intro Courses

**GRMN 2110 Discovering German Life and Culture (C) 3 cr**

Language of instruction: English. An introduction to German life and culture with an emphasis on experiential and reflective learning. The course will cover topics like popular music, film, memory culture, multiculturalism, environmentalism, food, and family structures in Germany. These topics will be addressed through the analysis of, among others, short texts, songs, movies, and graphic novels. Involvement of the German-Canadian community in Manitoba and of presenters from German-speaking countries is an integral part of this course.

**Attributes:** Humanities

**GRMN 2120 Introduction to German Culture from 1918 to the Present (C) 3 cr**

Language of instruction: English. An introduction to the culture of contemporary German-speaking countries; analyzes literature and other cultural forms since the end of World War I, including the Weimar Republic, the Third Reich and the Holocaust, divided Germany, Re-Unification, and the European Union.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2130 Introduction to German Culture from the Beginnings to 1918 (C) 3 cr**

Language of instruction: English. An introduction to the culture of the German-speaking countries from the Romans to the end of World War I; analyzes literature and other cultural forms and their relation to the rise of the German Nation in the 19th century and its first "fall" in the 20th century.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2140 Exploring German Literature (B) 3 cr**

Language of instruction: German. In this intermediate course, we will read and discuss a number of works belonging to different literary genres by major German-speaking authors, such as Kafka, Mann, Brecht, Böll, Grass, Jelinek, Wolf, and others. Activities and assignments in this course will focus on the development of reading competency in different literary genres, the expansion of students' German vocabulary, and the development of German written and oral expression.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2100 or GRMN 2105 or GRMN 3200 or GRMN 3201 or the former GRMN 2101] or written consent of department head.

**Attributes:** Humanities, Recommended Intro Courses

**GRMN 2480 Special Topics in German (B) 3 cr**

Language of instruction: German. Topics dealing with German literature and culture. Course content will vary from year to year depending on the interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2100 or GRMN 2105 or GRMN 3200 or GRMN 3201 or the former GRMN 2101] or written consent of department head.

**Attributes:** Humanities

**GRMN 2500 Special Topics in German in English Translation (C) 3 cr**

Language of instruction: English. Topics dealing with German literature and culture. Course content will vary from term to term depending on the interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** GRMN 2520, GRMN 2530

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2510 German Fairy Tales from the Brothers Grimm to Hollywood (C) 3 cr**

Language of instruction: English. Study of the German fairy tales with a specific emphasis on the "folk fairy tales" collected by the Brothers Grimm and their adaptations in the 20th and 21st centuries in film (Disney, DEFA, among others), literature, and music. The course familiarizes students with the historical, cultural, and national contexts of the original fairy tales, and trains students in different approaches to understanding those fairy tales (gender, psycho-analysis, child developmental psychology, horror, and others).

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**GRMN 2520 Spies: Stories of Secret Agents, Treason, and Surveillance (C) 3 cr**

Language of instruction: English. Discusses German stories of espionage in film, television series, historical novel, literary fiction, autobiography, and comic books. The course familiarizes students with spying in its cultural techniques and forms, its imaginary power, its gender patterns, and the complexities and ambiguities of concepts such as treason, performance, truth, good and evil. May not be held with GRMN 2500 when titled "Spies: Stories of Secret Agents, Treason, and Surveillance."

**Mutually Exclusive:** GRMN 2500

**Attributes:** Humanities

**GRMN 2530 My Friend the Tree: Environment and Ecology in German Culture in English Translation (C) 3 cr**

Language of instruction: English. Discusses the representation of nature in German culture through the analysis of a broad variety of texts (novels, short stories, movies, television series etc.). The course familiarizes students with how the German-speaking world conceptualizes nature and climate change and introduces them to the field of Ecocriticism. May not be held with GRMN 2500 when titled "My Friend the Tree: Environment and Ecology in German Culture in English Translation."

**Mutually Exclusive:** GRMN 2500

**Attributes:** Humanities

**GRMN 3200 Deutsche Sprachpraxis 1 (A) 6 cr**

Modern German usage through conversation, writing and practical exercises; study of contemporary fictional and non-fictional texts and films. Emphasis on vocabulary and structural and stylistic problems. Students may not hold credit for both GRMN 3200 and GRMN 3201.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRMN 2100 or GRMN 2105 or the former GRMN 2101 or written consent of department head.

**Equiv To:** GRMN 3201

**Attributes:** Humanities

**GRMN 3220 Deutsche Sprachpraxis 2 (A) 3 cr**

Advanced work on various aspects of the German language, involving intensive practice in writing and conversational skills; translation of literary and non-literary materials from and into German; and exercise in stylistic and structural analysis of literary and non-literary German in a variety of registers and contexts.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRMN 3200 or GRMN 3201.

**Attributes:** Humanities

**GRMN 3230 Business German (A) 3 cr**

An introduction to the contemporary terminology and usage of German in the workplace. Listening, speaking, reading, and writing skills will be developed through a variety of activities. This course also aims at developing cross-cultural awareness. The course prepares the student for the business exam Zertifikat für den Beruf. Students may not hold credit for both GRMN 3230 and GRMN 3211.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2100 or GRMN 2105 or GRMN 3200 or GRMN 3201 or the former GRMN 2101] or written consent of department head.

**Mutually Exclusive:** GRMN 3211

**Attributes:** Humanities

**GRMN 3232 Introduction to German Translation (A) 3 cr**

Language of instruction: German. An introduction to the art of translation (German to English) with a focus on translation principles, language analysis, and hands-on translation of texts from a variety of fields.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3234 Special Topics in German Language (A) 3 cr**

Language of instruction: German. Topics dealing with learning the German language. Advanced German language practice. Course content will vary from year to year depending on the interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3240 German Enlightenment and Classicism (B) 3 cr**

Language of instruction: German. A study of selected texts of the German Enlightenment and Classicism, including works by Lessing, Schiller, Goethe and others; advanced language practise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3250 German Romanticism (B) 3 cr**

Language of instruction: German. Study of selected fairy tales, novellas, letters, poetry and other texts by authors such as Novalis, Tieck, E.T.A. Hoffmann, and Kleist; topics discussed include the relationship between Enlightenment and Romanticism, the role of women, the discovery of the uncanny, the role of the fantastic, and romantic vampires, advanced language practise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3260 Representations of the Holocaust (B) 3 cr**

Language of instruction: German. This course will focus on the literary rendering, including film versions and German memorial culture, of the Holocaust experience by authors from the German-speaking countries, such as Anna Seghers, Jurek Becker, Paul Celan, Max Frisch, Peter Weiss, Ruth Klüger, W.G. Sebald, and others. Students may not hold credit for both GRMN 3260 and GRMN 3262.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Equiv To:** GRMN 3262

**Attributes:** Humanities

**GRMN 3262 Representations of the Holocaust in English Translation (C) 3 cr**

Language of instruction: English. This course will focus on the literary rendering, including film versions and German memorial culture, of the Holocaust experience by authors from the German-speaking countries, such as Anna Seghers, Jurek Becker, Paul Celan, Max Frisch, Peter Weiss, Ruth Klüger, W.G. Sebald, and others. Students may not hold credit for both GRMN 3262 and GRMN 3260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Equiv To:** GRMN 3260

**Attributes:** Humanities, Written English Requirement

**GRMN 3270 Studies in Contemporary German Cinema (C) 3 cr**

Language of instruction: English. Studies the major accomplishments of East and West German cinema of the postwar period, as well as cinematic trends since German unification. We will consider questions of narrative, genre, and authorship, examine film's relationship to other media, and focus on the dynamic interaction between film history and social history.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Attributes:** Humanities, Written English Requirement

**GRMN 3282 Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C) 3 cr**

Language of instruction: English. Explores a wide range of literary and cultural texts that deal with sex and gender in the German-speaking world. Discussion will address topics such as representation of women and men in literature and the social and historical climate in which the literature was and is produced. Students may not hold credit for both GRMN 3282 and the former GRMN 3280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Equiv To:** GRMN 3280

**Attributes:** Humanities, Written English Requirement

**GRMN 3290 History in Literature in German-Speaking Countries (B) 3 cr**

Language of instruction: German. Analyzes how history is represented and remembered in literature and other genres. The course will focus on the representation of one historical period such as the Weimar Republic or the Nazi Third Reich. Please consult the instructor for details on which historical period as it appears in literature will be considered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3390 German Representations of War (C) 3 cr**

Language of instruction: English. Focuses on representations of war, particularly World War II from a German and European perspective in fiction, historiography, film, photography, and memorial culture. Students may not hold credit for both GRMN 3390 and the former GRMN 3392.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Equiv To:** GRMN 3392

**Attributes:** Humanities, Written English Requirement

**GRMN 3500 Special Topics in German (B) 3 cr**

Language of instruction: German. Topics dealing with German literature and culture. Course content will vary from year to year depending on interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRMN 2140 or GRMN 3200 or GRMN 3201] or written consent of department head.

**Attributes:** Humanities

**GRMN 3510 Special Topics in German in English Translation (C) 3 cr**

Language of instruction: English. Topics dealing with German literature and culture. Course content will vary from year to year depending on interests and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Attributes:** Humanities, Written English Requirement



**GRMN 3530 Special Topics in Comparative German and Slavic Studies (C) 3 cr**

Language of instruction: English. Topics comparing German and Slavic – Ukrainian, Russian, Polish – literatures and cultures. Course is co-taught by a member from the German and one from the Slavic Section. Course content will vary from year to year depending on interests and needs of students and staff. Possible topics include Memory of World War II, Cold War and Post-Cold War, and Modernism. Students may not hold credit for both GRMN 3530 and SLAV 3530 when topic is the same. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Attributes:** Humanities, Written English Requirement

**GRMN 4200 Literary and Cultural Theory (C) 3 cr**

Language of instruction: English. A survey of the major theoretical approaches to German literatures and cultures. Discusses the aesthetics of Enlightenment and Idealism, Nietzsche, Freud, Prague Structuralism, hermeneutics, semiotics, the Frankfurt School, collective memory, gender studies, and multi-culturalism; application of theories to German literary texts and other cultural examples.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4210 Survey of Second Language Acquisition and Methods of Language Teaching in German (B) 3 cr**

Language of instruction: German. For advanced undergraduate students with a high proficiency in German who are interested in the learning and teaching of German as a foreign / second language; the course provides a general introduction to theories and approaches in second language acquisition (SLA) and to methods of the teaching of German as a foreign language. This course is not acceptable for credit in a Bachelor of Education program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4540 Introduction to German Language Structure (B) 3 cr**

Language of instruction: German. An introduction to the scientific study of the German language and to the role of the language teacher in the examination, analysis, and description of the German language. Topics include grammar, word formation, meaning, sound systems, language acquisition and change, and language in society.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4570 Honours Thesis in German Studies (B,C) 3 cr**

The Thesis presents the results of an independent research project supervised by a faculty member. The thesis can be written in German or in English.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4600 Senior Seminar in German Studies (B) 3 cr**

Language of instruction: German. Introduces basic methodology of German literary and cultural studies (genres, periods, resources, bibliographical methods). Examines German culture during critical periods in German history with specific emphasis on literature. Students work closely with a faculty advisor during the semester and are expected to produce a major research paper.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4660 Special Topics in German (B) 3 cr**

Language of instruction: German. The specific content of this course will vary from year to year. A description of the course is available in advance at the Department Office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**GRMN 4670 Special Topics in German in English Translation (C) 3 cr**

Language of instruction: English. The specific content of this course will vary from year to year. A description of the course is available in advance at the Department Office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

## Global Political Economy (GPE)

**GPE 1700 Social Justice in the 21st Century: Global Political Economy and Environmental Change 3 cr**

Introduces students to political economy and cultural geography through the close analysis of contemporary world events, including but not limited to instances of violent conflict, environmental change, international negotiations, political processes and events, social movements, and policy developments. A multimedia approach will advance students' understanding of geopolitical events from political economy and spatial perspectives. Specific content of the course will change year-by-year in response to developments in national and world politics. Also offered by Clayton H. Riddell Faculty of Environment, Earth, and Resources as GEOG 1700. Students may not hold credit for both GPE 1700 and GEOG 1700.

**Equiv To:** GEOG 1700

**Attributes:** Social Science, Recommended Intro Courses

**GPE 2700 Perspectives on Global Political Economy 3 cr**

An interdisciplinary seminar exploring issues in political economy at the global level from the perspectives of Anthropology, History, Economics, Political Studies, and Sociology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of Global Political Economy coordinator.

**Attributes:** Social Science, Written English Requirement

**GPE 3700 A Survey of Global Political Economy 3 cr**

Provides students with a systemic intellectual history of the field of Global Political Economy. The course delineates Global Political Economy as a distinctive scholarly tradition, discusses the separation of economics and politics, and surveys the tradition from classical political economy through historical materialism, development economics, imperialism, world systems theory, and more. Students will relate these approaches to contemporary issues in GPE such as economic and ecological crises, inequality, or corporate power.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GPE 1700 or GEOG 1700] or written consent of instructor.

**Attributes:** Humanities

**GPE 4510 Global Political Economy Field Placement Seminar 3 cr**

A seminar to be taken concurrently with GPE 4520 in which each student will relate theory and practice. This course is also offered as ECON 4610 and LABR 4510. Students may not hold credit for GPE 4510 and either ECON 4610 or LABR 4510. Intended for students in the Global Political Economy Single Advanced Major.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Global Political Economy Program Coordinator. Corequisite: GPE 4520.

**Equiv To:** ECON 4610, LABR 4510

**Attributes:** Social Science

**GPE 4520 Global Political Economy Field Placement 6 cr**

An educationally directed field experience in which the student will undertake specific tasks and assignments in some aspects of Community Economic Development and/or economic policy. Field placement options include community-based organizations, government departments and agencies, policy and research organizations, unions, and other employers. This course is also offered as ECON 4620 and LABR 4520. Students may not hold credit for GPE 4520 and either ECON 4620 or LABR 4520. Intended for students in the Global Political Economy Single Advanced Major.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Global Political Economy Program Coordinator. Corequisite: GPE 4510.

**Equiv To:** ECON 4620, LABR 4520

**Attributes:** Social Science

**GPE 4700 Studies in Global Political Economy 6 cr**

An advanced interdisciplinary seminar that will study the effects of institutions, structures, and dynamics operating in the current global political economy. Students, working in groups, will be expected to do case studies on selected local (or regional) political economies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of Global Political Economy coordinator.

**Attributes:** Social Science

## Greek (GRK)

**GRK 1010 Introduction to the Reading of Ancient Greek 1 3 cr**

Readings in Ancient Greek poetry and prose with related exercises in grammar and composition intended to prepare students to read Classical and Hellenistic Greek.

**Mutually Exclusive:** GRK 1030

**Attributes:** Humanities, Recommended Intro Courses

**GRK 1020 Introduction to the Reading of Ancient Greek 2 3 cr**

Further readings in Ancient Greek poetry and prose with related exercises in grammar and composition intended to prepare students to read Classical and Hellenistic Greek. Students may not hold credit for both GRK 1020 and GRK 1030.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRK 1010.

**Mutually Exclusive:** GRK 1030

**Attributes:** Humanities, Recommended Intro Courses

**GRK 1030 New Testament Greek 6 cr**

The grammar and syntax of New Testament Greek. Normally taught only in the Approved Teaching Centres. May be used for credit towards the Major or Minor in Greek only with written consent of department head. Students may not hold credit for GRK 1030 and any of: GRK 1010 or GRK 1020.

**Mutually Exclusive:** GRK 1010, GRK 1020

**Attributes:** Humanities, Recommended Intro Courses

**GRK 1060 Introductory Modern Greek 1 3 cr**

A practical introduction to the written and spoken language for those with little or no knowledge of Modern Greek. Personal instruction in script, vocabulary, aural comprehension, pronunciation and syntax is supplemented with the use of audio recording in the laboratory or via other media such as the internet. Not for credit towards the Major or Minor in Classical Studies.

**Attributes:** Humanities, Recommended Intro Courses

**GRK 1070 Introductory Modern Greek 2 3 cr**

The continuation of GRK 1060 with further personal instruction in vocabulary, aural comprehension, pronunciation and syntax supplemented with the use of audio recordings in the laboratory or via other media such as the internet. Not for credit towards the Major or Minor in Classical Studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 1060] or written consent of department head.

**Attributes:** Humanities, Recommended Intro Courses

**GRK 2060 Intermediate Modern Greek 1 3 cr**

Continued study and practice in oral and written communication in Modern Greek. Course work includes conversation, prose composition and reading of selected texts from Greek literary works and popular media. Not for credit towards a Major or Minor in Classical Studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 1070] or written consent of department head.

**Attributes:** Humanities

**GRK 2070 Intermediate Modern Greek 2 3 cr**

Continued study and practice in oral and written communication in Modern Greek. Course work includes conversation, prose composition and reading of selected texts from Greek literary works and popular media. Not for credit towards a Major or Minor in Classical Studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2060] or written consent of department head.

**Attributes:** Humanities

**GRK 2700 Intermediate Readings in Ancient Greek 3 cr**

Further readings in ancient Greek poetry and prose with related exercises in grammar and composition intended to advance the student's skill at reading Classical and Hellenistic Greek. Students may not hold credit for both GRK 2700 and the former GRK 1310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRK 1020 or GRK 1030.

**Equiv To:** GRK 1310

**Attributes:** Humanities

**GRK 2710 The Acts of the Apostles 3 cr**

The complete Book of Acts is read in Greek with attention to related textual, linguistic and historical matters. Students may not hold credit for both GRK 2710 and the former GRK 1330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2700 or the former GRK 1310] or written consent of department head.

**Equiv To:** GRK 1330

**Attributes:** Humanities

**GRK 2732 Readings in Greek Poetry 3 cr**

Readings from the works of selected poets of the Archaic and Classical periods. Students may not hold credit for both GRK 2732 and the former GRK 2730.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRK 2700 or the former GRK 1310.

**Equiv To:** GRK 2730

**Attributes:** Humanities

**GRK 2752 Readings in Greek Prose Literature 3 cr**

Readings from the works of selected prose authors of the Classical period. Students may not hold credit for both GRK 2752 and the former GRK 2750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRK 2700 or the former GRK 1310.

**Equiv To:** GRK 2750

**Attributes:** Humanities

**GRK 2770 Greek Prose Composition and Sight Translation 3 cr**

Assignments in writing Greek prose and practice in the techniques for effective reading of prose and poetry at sight.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRK 2700 or the former GRK 1310.

**Attributes:** Humanities

**GRK 2790 History of the Greek Language 3 cr**

A survey of the language from its Indo-European pre-history to the modern era. The phonological, morphological and lexical aspects of the language are investigated in the light of Greek literary and inscriptional documents and some comparative evidence from cognate languages.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2700 or the former GRK 1310] or [a working knowledge of Modern Greek and written consent of department head].

**Attributes:** Humanities

**GRK 2810 Prose Writings of the Hellenistic and Greco-Roman Periods 3 cr**

Reading of selected literary and historical documents relating to Judaism and early Christianity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRK 2700 or GRK 2710 or the former GRK 1310 or the former GRK 1330.

**Attributes:** Humanities

**GRK 3750 Homer 3 cr**

At least three complete books of the Iliad or Odyssey are read with attention to compositional technique and metre.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750] or written consent of department head.

**Attributes:** Humanities

**GRK 3770 Greek Poetry of the Archaic Period 3 cr**

Reading of selections from Hesiod, the Homeric Hymns and such lyric poets as Sappho, Alcaeus, Anacreon, Pindar and Bacchylides.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750] or written consent of department head.

**Attributes:** Humanities

**GRK 3790 The Greek Tragedians 3 cr**

Reading of at least one tragedy from among those of Aeschylus, Sophocles or Euripides.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750] or written consent of department head.

**Attributes:** Humanities

**GRK 3810 Aristophanes 3 cr**

Reading of at least one complete comedy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750] or written consent of department head.

**Attributes:** Humanities

**GRK 3830 The Greek Historians 3 cr**

Selected readings from the works of Herodotus and Thucydides and/or the historical works of Xenophon.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750] or written consent of department head.

**Attributes:** Humanities

**GRK 3850 Plato 3 cr**

Readings of two of the shorter dialogues or of selections from several dialogues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750] or written consent of department head.

**Attributes:** Humanities

**GRK 3870 The Attic Orators 3 cr**

Readings from the works of such orators as Isocrates, Lysias and Demosthenes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750] or written consent of department head.

**Attributes:** Humanities

**GRK 3930 Advanced Studies in Greek Prose Literature 3 cr**

Readings in a particular genre such as philosophy, history, or rhetoric with substantial reading in secondary critical or interpretive literature. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750 or written consent of department head.

**Attributes:** Humanities

**GRK 3940 Advanced Studies in Greek Poetry 3 cr**

Readings in a particular genre such as epic, tragedy, comedy, lyric or epigram with substantial reading in secondary critical or interpretive literature. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRK 2732 or GRK 2752 or the former GRK 2730 or the former GRK 2750 or written consent of department head.

**Attributes:** Humanities

## Health Studies (HEAL)

**HEAL 1500 Foundations of Human Biology 1 3 cr**

This course starts by describing simple molecules and cells and progressively introduces the student to more sophisticated aspects of human biology. The course will detail the general organization of the human body and describe many of the main systems responsible for its function. Students registered in a Major or Honours program in Biological Sciences can use this course only as an elective.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Biology 40S (or equivalent) or Chemistry 40S or CHEM 1018.

**HEAL 1502 Foundations of Human Biology 2 3 cr**

This course will introduce various elements of human biology encompassing the nervous, endocrine, and reproductive systems. It will also provide basic knowledge in genetics and microbiology. Students registered in a Major or Honours program in Biological Sciences can use this course only as an elective.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HEAL 1500 (C+).

**HEAL 1600 Health and Health Professions 3 cr**

(Formerly BIOL 1110) Students discuss the Inter-relationship between health, health determinants, and the impact that sciences, health-science, behavioural-social sciences, and technology, have on health care and the health professions. Participants will consider their own role as health care consumers. Not to be held with BIOL 1110.

**Equiv To:** BIOL 1110

**HEAL 2600 Integration of Health Determinants of Individuals 3 cr**

Students study, integrate and apply the determinants that affect the health of individuals throughout the lifespan to selected case or learning scenarios. The case or learning scenarios present a variety of issues in the delivery of health-related services that are intended to benefit individual health.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: One of CHEM 1100 (the former CHEM 1300) or BIOL 1020 or HEAL 1502 or STAT 1000; and [one of PSYC 1200, (PSYC 1211 and PSYC 1221), the former PSYC 1201, or SOC 1000, or the former SOC 1200] or consent of instructor.

**HEAL 3000 Introduction to Social Epidemiology 3 cr**

This course provides an overview of the basic concepts, principles and methods of social epidemiology and their applications for research and practice from a human ecology perspective. Applications to social determinants of health across the life course may include but are not limited to income and food security, early child development and others. May not be held with the former HMEC 3000.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HNSC 2000 or PSYC 2250 [or the former HMEC 2000 or the former HMEC 2050] and HEAL 2600 [or the former HMEC 2030].

**Equiv To:** HMEC 3000

**HEAL 3600 Integration of Health Determinants for Communities 3 cr**

Students study, integrate and use community level determinants of population health in selected case or learning scenarios. These cases present a variety of issues in the design of health related services that are intended to benefit population health.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HEAL 2600 and 39 credit hours in the Curriculum for Interdisciplinary Health or consent of instructor.

**HEAL 3610 Mechanisms of Disease 1 3 cr**

This course will provide an overview of cellular processes and immunology, followed by an introduction to common processes underlying the development of human diseases. These include: cell injury and death (including metabolism and aging); neoplasia, inflammation; toxins and trauma; genetic diseases and susceptibility; and immune dysregulation. The focus will be on both local and systemic disease processes, and the progression of cells and tissues from a healthy to a pathological state. For IHP students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BGEN 2000 and (one of CHEM 2740, CHEM 2720, CHEM 2721) and (one of CHEM 2700, CHEM 2701, MBIO 2700, MBIO 2701, CHEM 2730, MBIO 2730, the former CHEM 2360, the former CHEM 2361, the former MBIO 2360, the former MBIO 2361, the former CHEM 2770, the former MBIO 2770).

**HEAL 4600 Integration of Health Determinants for Canada and the World 3 cr**

Students use selected case or learning scenarios to study the determinants of population health that depend on decision making in governmental or international agencies. The case scenarios present a variety of issues in the governance and management of population health.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HEAL 3600 and 57 credit hours in the Curriculum for Interdisciplinary Health or consent of instructor.

**HEAL 4610 Health Studies Capstone 3 cr**

Students will explore selected topics from the social sciences to synthesize and evaluate actions that can affect the health of people. The course summarizes the social sciences knowledge that forms the basis for all health related professional work. Restricted to students in Health Sciences and Health Studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HEAL 3600 (C+) and 57 credit hours in the Curriculum for Interdisciplinary Health or consent of instructor.

**Equiv To:** HEAL 4620

**HEAL 4620 Health Sciences Capstone 3 cr**

Students will explore selected topics from the biological sciences to synthesize and evaluate actions that can affect the health of people. The course summarizes the biological science knowledge that forms the basis for all health related professional work. May not hold with HEAL 4610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HEAL 3600 (C+) and 57 credit hours in the Curriculum for Interdisciplinary Health or consent of instructor.

**Equiv To:** HEAL 4610

**HEAL 4630 Mechanisms of Disease 2 3 cr**

This course will expand upon the concepts learned in HEAL 3610 by exploring systemic diseases. The focus will be on understanding how some disease processes are not constrained by individual tissues and/or organs and may progress to affect the patient systemically. Specific diseases such as cancer, diabetes, multiple sclerosis, and HIV will be used as examples. For Bachelor of Health Sciences students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: HEAL 3610 (B).

**HEAL 4640 Mechanisms of Disease 3 6 cr**

(Lab required) Students will learn experimental techniques commonly used in modern biomedical science through lectures and laboratory sessions. Students will have the opportunity to conduct hands-on experiments in a modern research setting by rotating through five laboratory modules that will explore biomedical science methods such as histology and microscopy, cell culture, molecular biology, systems biology and proteomics, and HLA genotyping. These modules will be based on the diseases discussed in HEAL 4630, and will allow students to establish a direct connection between their experimental work and disease mechanisms. For students in the Bachelor of Health Sciences program only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: HEAL 4630 (B) and HEAL 3610 (B) and instructor permission required.

**HEAL 4650 Selected Topics in Interdisciplinary Health 3 cr**

The opportunity to carry out study in a health-related area. The course content will vary depending on the topic selected for study. Students can take this course more than once for credit only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Consent of instructor and director.

## Hebrew (HEB)

**HEB 1120 Biblical Hebrew (A) 6 cr**

(Formerly SEM 1120) An introductory course with emphasis on basic grammar and syntax. Students will learn to read simple biblical narratives. Students may not hold credit for HEB 1120 and any of: RLGN 1120 or the former SEM 1120.

**Equiv To:** RLGN 1120, SEM 1120

**Attributes:** Humanities, Recommended Intro Courses

**HEB 1250 Hebrew 1 6 cr**

(Formerly SEM 1250) For students with a minimal experience with the language yet with a basic ability to read it. Following current methods in the teaching of a second/ foreign language, the listening-comprehension, speaking, reading and writing skills are developed. Language lab and organized conversation are part of the course. Intended for students with a strictly elementary standing. Students may not hold credit for both HEB 1250 and the former SEM 1250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: written consent of program coordinator.

**Equiv To:** SEM 1250

**Attributes:** Humanities, Recommended Intro Courses

**HEB 1260 Hebrew 2 6 cr**

(Formerly SEM 1260) For students who have taken HEB 1250 or the former SEM 1250 or the equivalent. Spoken and written Hebrew - vocabulary and grammar, organized conversation and reading of selected texts. In addition to regular sessions, either one hour of lab or directed conversation per week is required. Students may not hold credit for both HEB 1260 and the former SEM 1260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: written consent of program coordinator.

**Equiv To:** SEM 1260

**Attributes:** Humanities, Recommended Intro Courses

**HEB 2210 Modern Hebrew Literature 6 cr**

(Formerly SEM 2210) Uri Zvi Greenberg, Lamdan, Sholonsky, Agnon, Burla, Hazzaz, Yizhar, Shamir Amihay, S. Shalom - poetry and prose. The modern Isreal short story. Students may not hold credit for both HEB 2210 and the former SEM 2210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: written consent of program coordinator.

**Equiv To:** SEM 2210

**Attributes:** Humanities

**HEB 2250 Rabbinic Hebrew 6 cr**

(Formerly SEM 2250) Study of the style, vocabulary, grammar, and syntax of halakhic and aggadic rabbinic texts. A representative selection of Talmud, Midrashim Codes, and Responsa will be drawn from both the medieval and modern periods. Students may not hold credit for both HEB 2250 and the former SEM 2250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: written consent of program coordinator.

**Equiv To:** SEM 2250

**Attributes:** Humanities

**HEB 2280 Introduction to Hebrew Literature 6 cr**

(Formerly SEM 2280) A study of the history and forms of Hebrew Literature from biblical to modern times. Students may not hold credit for both HEB 2280 and the former SEM 2280 (055.228).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: [HEB 1260 or the former SEM 1260] or written consent of program coordinator.

**Equiv To:** SEM 2280

**Attributes:** Humanities

**HEB 2350 Hebrew 3 6 cr**

(Formerly SEM 2350) For students who have taken HEB 1260 or the former SEM 1260 or the equivalent. Further oral practise, vocabulary expansion and grammar review, and development of reading and writing skills. Students may not hold credit for both HEB 2350 and the former SEM 2350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: written consent of program coordinator.

**Equiv To:** SEM 2350

**Attributes:** Humanities

**HEB 3360 Hebrew Communication Arts 6 cr**

(Formerly SEM 3360) A study of all aspects of Hebrew communication. For advanced students with reasonable fluency in the language. The writing skill on general subjects will be developed as well as comprehension and vocabulary expansion in the reading of more technical texts. Students may not hold credit for both HEB 3360 and the former SEM 3360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: written consent of program coordinator.

**Equiv To:** SEM 3360

**Attributes:** Humanities

**HEB 3370 Hebrew Language and Literature 6 cr**

(Formerly SEM 3370) A study of the structure and usage of modern Hebrew, examination of selections of Major modern writers and development of speaking and writing skills. Review of the history of Hebrew and the application of linguistics to the understanding of the language. Students may not hold credit for both HEB 3370 and the former SEM 3370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of program coordinator.

**Equiv To:** SEM 3370

**Attributes:** Humanities

**HEB 3380 The Creation of Modern Hebrew 6 cr**

(Formerly SEM 3380) An advanced study of the revival of Hebrew as a spoken language. Other attempts at language planning and revival will be observed. Lectures and discussions will be in Hebrew. Students may not hold credit for both HEB 3380 and the former SEM 3380.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of program coordinator.

**Equiv To:** SEM 3380

**Attributes:** Humanities

## History (HIST)

**HIST 1200 An Introduction to the History of Western Civilization (G) 6 cr**

An introductory survey of the cultural history of the Western world from the ancient Greeks to the present. Students may not hold credit for HIST 1200 and any of: HIST 1201 or HIST 1350 or HIST 1360.

**Equiv To:** HIST 1201

**Mutually Exclusive:** HIST 1203, HIST 1205, HIST 1350, HIST 1360

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1260 New Directions in History: Inquiries into the Cultural Basis of the Modern World (G) 3 cr**

The history of cultural change focusing on such topics as leisure and popular culture, sexuality and history, and the social consequences of creativity and genius. The specific content will vary from year to year.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1270 New Directions in History: Inquiries into the Power Relations of the Modern World (G) 3 cr**

The history of the social and cultural impact of factors such as changes in technology and communication, warfare, and revolution. The specific content will vary from year to year.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1350 An Introduction to the History of Western Civilization to 1500 (G) 3 cr**

An introductory survey of the cultural history of the Western World from the earliest civilizations to 1500. Students may not hold credit for HIST 1350 and any of: HIST 1200 or HIST 1201.

**Mutually Exclusive:** HIST 1200, HIST 1201, HIST 1203, HIST 1205

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1360 An Introduction to the History of Western Civilization from 1500 (G) 3 cr**

An introductory survey of the cultural history of the Western World from 1500 to the present. Students may not hold credit for both HIST 1360 and any of: HIST 1200 or HIST 1201.

**Mutually Exclusive:** HIST 1200, HIST 1201, HIST 1203, HIST 1205

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1370 Modern World History: 1500-1800 (M) 3 cr**

A study of the forces which created the modern world, including the rise of capitalism and the encounter of Western and non-Western societies. Students may not hold credit for both HIST 1370 and the former HIST 1500.

**Mutually Exclusive:** HIST 1500

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1380 Modern World History: 1800-Present (M) 3 cr**

A study of the forces which created the modern world, including industrialization, imperialism, decolonization, and the emergence of revolution and counter-revolution. Students may not hold credit for both HIST 1380 and the former HIST 1500.

**Mutually Exclusive:** HIST 1500

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1390 History of Colonial Canada: 1500-1885 (C) 3 cr**

A study of settler colonialism and the creation of Canada, from its colonial origins to Confederation and the consolidation of nationhood through war and expansion. Emphasis is on understanding Canada in a transimperial perspective that foregrounds the connections between empire, Indigenous-settler relations, French Canada, American relations, and early social, political, and economic life. May not be held with HIST 1401, HIST 1403, HIST 1440 or the former HIST 1441.

**Mutually Exclusive:** HIST 1401, HIST 1403, HIST 1440, HIST 1441

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1400 History of the Canadian Nation since 1867 (C) 3 cr**

A study of the national development of Canada to the present. Emphasis is placed on French Canada, the regional life and social organization of the country, the impact of continentalism, the development of the economy, and the rise of a national sentiment. May not be held with HIST 1401, HIST 1403, HIST 1440 or the former HIST 1441.

**Mutually Exclusive:** HIST 1401, HIST 1403, HIST 1440, HIST 1441

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1420 Asian Civilizations to 1500 (B) 3 cr**

A study of major themes in the history and culture of China and Japan, the Indian subcontinent and Southeast Asia from ancient times to around 1500. Also offered as Asian Studies ASIA 1420. May not be held with ASIA 1420 or the former HIST 1410.

**Equiv To:** ASIA 1420

**Mutually Exclusive:** HIST 1410

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1430 Asian Civilizations from 1500 (B) 3 cr**

A study of major themes in the history and culture of China and Japan, the Indian subcontinent and Southeast Asia in modern times. Also offered as Asian Studies ASIA 1430. May not be held with ASIA 1430 or the former HIST 1410.

**Equiv To:** ASIA 1430

**Mutually Exclusive:** HIST 1410

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 1440 History of Canada (C) 6 cr**

A survey history of the areas that became Canada from earliest times to the present day. Major themes include Indigenous societies before and after European contact, settler colonialism, the fur trade, French Canada, industrialism and modernization, immigration, nationalism and Canada's relationships with the world. In addition to political and economic history, a major focus of this course will be social history. Themes such as social class, gender, and ethnicity will be explored in an attempt to understand the roots of change in Canadian society. Students may not hold credit for HIST 1440 and any of: HIST 1390, HIST 1400, HIST 1401, HIST 1403, or the former HIST 1441.

**Equiv To:** HIST 1441

**Mutually Exclusive:** HIST 1390, HIST 1400, HIST 1401, HIST 1403

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2010 Indigenous History in Canada (C) 6 cr**

A historical survey of Indigenous peoples in Canada from early times to the present. The course will cover pre-contact peoples, responses to the European arrival, military alliances, the fur trade, the Métis, treaties, government policies and Indigenous responses, and cultural resurgence and political organizing since 1945. Also offered as INDG 2012. May not be held for credit with INDG 2012, the former NATV 2012, or the former HIST 2280.

**Equiv To:** INDG 2012, NATV 2012

**Mutually Exclusive:** HIST 2280

**Attributes:** Humanities, Written English Requirement

**HIST 2020 The Métis in Canada (C) 3 cr**

A history of the Métis in Canada. Also offered as INDG 2020. May not be held for credit with INDG 2020 or the former NATV 2020.

**Equiv To:** INDG 2020, NATV 2020

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2140 Colonial Latin America (A) 3 cr**

A survey of the major developments in Latin America from the Indigenous cultures and European Conquest to Independence in 1821.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2150 Independent Latin America (A) 3 cr**

A survey of the major developments in Latin America from Independence in 1821 to the present.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2180 The History of Catholicism to 1540 (G) 3 cr**

The history of Roman Catholicism from the first century to 1540. Emphasis will be placed on the external forces and internal developments that have shaped Catholicism.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2200 Labour History: Canada and Beyond (C) 3 cr**

This course explores the history of working people's struggles, victories and defeats in Canada, with attention to gender, "race" and ethnicity. Topics include the origins and evolution of labour unions and workplace rights and the role of politics and social movements. Also offered as LABR 2200. May not be held with LABR 2200.

**Equiv To:** LABR 2200

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2210 History of Britain, 1485 to the Present (E) 6 cr**

A general survey of British history from 1485 to the present. Emphasis is placed on constitutional, political, and diplomatic themes; social, economic, and cultural factors are also discussed. Students may not hold credit for both HIST 2210 and HIST 2211.

**Equiv To:** HIST 2211

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2220 The Shaping of Modern Ireland, 1500-Present (E) 6 cr**

The history of Ireland from 1500 to the end of the twentieth century focusing on changes in political, social, religious, economic and cultural relationships in shaping Modern Ireland.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2230 History of the United States from 1607 (A) 6 cr**

A survey of the development of the American people and their institutions from Colonial times to the present day. Students may not hold credit for HIST 2230 and any of: HIST 2750 or HIST 2760 or HIST 2761.

**Mutually Exclusive:** HIST 2041, HIST 2750, HIST 2760, HIST 2761

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2240 History of Antisemitism and the Holocaust (E) 6 cr**

A survey of the role of the Jewish minority in Christian Europe over the past two thousand years. First term will focus on the evolution of anti-Jewish ideas and policies. Second term will be a study of the Nazi German Holocaust and, in particular, the role of antisemitism as a causal factor therein. Students may not hold credit for both HIST 2240 and the former JUD 2940.

**Equiv To:** JUD 2940

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2250 Social History of the Jews: Antiquity to Present (G) 6 cr**

A social, economic, and political history of the Jewish experience from the beginnings of the Jewish diaspora to the present, covering Jewish communities in medieval and modern Europe, the Middle East, and North America.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2282 Inventing Canada (C) 3 cr**

This course examines the "invention" and "reinvention" of Canada both before and after Confederation. It examines the process of invention from a range of different perspectives: political, cultural, economic, and social.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2286 Modern Canada (C) 3 cr**

Since the First World War, Canada has grappled simultaneously with modern pressures and the legacies of its colonial foundations. This course delves into topics such as: social change and continuity, economic boom and bust, political trends, struggles for equality, Indigenous life, international and internal affairs, immigration, and nationalism. May not be held with the former HIST 2970, the former HIST 2971, or the former HIST 3050.

**Mutually Exclusive:** HIST 2970, HIST 2971, HIST 3050

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2288 History of Social Movements in Canada (C) 3 cr**

This course examines how Canadian democracy has historically been contested, debated, and challenged. It will focus on the post-Confederation history of social movements, citizen engagement, and state responses to dissent. The course will discuss grassroots movements of workers, the poor, women, indigenous peoples, and racial and ethnic minorities. Students may not hold credit for both HIST 2288 and the former HIST 2284.

**Equiv To:** HIST 2284

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2350 Europe 1789-1870 (E) 3 cr**

The History of Europe during the French Revolution and the conservative reaction to it, focusing on political ideologies and national and international politics. Students may not hold credit for both HIST 2350 and the former HIST 2370.

**Mutually Exclusive:** HIST 2370

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2360 Europe 1870 to the Present (E) 3 cr**

The history of Europe since 1870, focusing on industrialisation, imperialism, political ideologies, and national and international politics. Students may not hold credit for HIST 2360 and either HIST 2361 or the former HIST 2370.

**Mutually Exclusive:** HIST 2370

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2390 Early Modern Europe, 1450-1789 (E) 6 cr**

This course is a survey of early modern European history. It will include such major topics as the Renaissance, the printing revolution, the Reformation, European interactions with the rest of the world and imperialism, the military revolution, the witch trials and the Enlightenment.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2400 History of Human Rights and Social Justice in the Modern World (M) 3 cr**

Introductory course examining the emergence of the modern human rights era and social justice movements globally. Possible topics of study: human rights as global norm; non-Western conceptions of rights; workplace rights; indigenous rights; women's and gender rights.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2420 The Medieval World (D) 6 cr**

A survey of the society and culture of the Middle Ages, from 500-1500.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2500 History of Africa (R) 6 cr**

A broad survey of African history from pre-colonial times through colonialism to the post-colonial present.

**Mutually Exclusive:** HIST 2215

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2502 The Modern Middle East: A Critical Survey (R) 6 cr**

Survey of the major issues in the history of the modern Middle East. Emphasis on understanding today's social and political context in the Middle East through the lens of history. Students may not hold credit for both HIST 2502 and HIST 2900 with the topic "The Middle East from the Rise of Islam to the Nation State."

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2600 Introduction to Ukraine (E) 3 cr**

A history of Ukraine and its people, beginning with medieval Kievan Rus' and ending in the 18th century with Ukraine's absorption into Russian and Austrian empires.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2610 Making of Modern Ukraine (E) 3 cr**

A history of cultural, religious, economic and political forces, in the period 1800 to the present, that stimulated Ukraine's struggle for national independence from foreign domination.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2654 History of the People's Republic of China, 1949-Present (B) 3 cr**

This course examines the history of the People's Republic of China from its founding in 1949 through the present day. The course considers continuity and change between the Maoist and post-1976 periods as well as changing meanings of socialism and their impact on state power and social orders.

**Mutually Exclusive:** HIST 2089

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2660 History of the Soviet Union (E) 3 cr**

Attention will be given in particular to the Russian Revolution, the nature of the Soviet political system, the major social and economic experiments, and the Soviet role in international politics. Students may not hold credit for HIST 2660 and any of: HIST 2661 or the former HIST 2490 or the former HIST 3471.

**Equiv To:** HIST 2661

**Mutually Exclusive:** HIST 2490, HIST 3471

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2670 History of Capitalism (M) 3 cr**

A study of the emergence and evolution of the capitalist system stressing its effects on human culture from the 15th to the 20th Centuries. Students may not hold credit for both HIST 2670 and HIST 2671.

**Equiv To:** HIST 2671

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement



**HIST 2680 A History of Socialism from the French Revolution to the Present (M) 3 cr**

The history of socialism, both revolutionary and nonrevolutionary from the French Revolution to the present. The course covers the history of theory and political action, and of both European and non-European socialism.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2730 Modern World History, 1914-1945: The 30 Years' Crisis (M) 3 cr**

A global economic, social, political and cultural history of the twentieth century history from World War I to the eve of the Cold War, emphasising the impact of war and economic crisis. Students may not hold credit for HIST 2730 and any of: HIST 2381 or the former HIST 2380.

**Mutually Exclusive:** HIST 2380, HIST 2381

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2732 Modern World History, 1945-1992: The Age of Three Worlds (M) 3 cr**

A global, economic, social, political and cultural history of the twentieth century from the onset of the Cold War and decolonization to the collapse of the Soviet Union. Students may not hold credit for HIST 2732 and any of: HIST 2381 or the former HIST 2380 or the former HIST 2720.

**Mutually Exclusive:** HIST 2380, HIST 2381, HIST 2720

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2734 Modern World History, 1980-Present: New World Order? (M) 3 cr**

A global, economic, social, political and cultural history of the twenty-first century, emphasizing the on-going development of the post Cold War international economic and political order. Students may not hold credit for HIST 2734 and any of: HIST 2381 or the former HIST 2380 or the former HIST 2720.

**Mutually Exclusive:** HIST 2380, HIST 2381, HIST 2720

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2750 History of the United States from 1607 to 1877 (A) 3 cr**

A survey of the development of the American people and their institutions from Colonial times to Reconstruction. Students may not hold credit for HIST 2750 and any of: HIST 2230 or HIST 2041.

**Equiv To:** HIST 2041

**Mutually Exclusive:** HIST 2230

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2760 History of the United States from 1877 (A) 3 cr**

A survey of the development of the American people from Reconstruction to the present. Students may not hold credit for HIST 2760 and any of: HIST 2761 or HIST 2230.

**Equiv To:** HIST 2761

**Mutually Exclusive:** HIST 2230

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2840 A History of Russia to 1917 (E) 3 cr**

A survey of the historical development of Russia from its beginnings to the end of the Imperial period. Students may not hold credit for HIST 2840 and any of: HIST 2841 or the former HIST 2490 or the former HIST 3471.

**Equiv To:** HIST 2841

**Mutually Exclusive:** HIST 2490, HIST 3471

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2900 Topics in Social History (G) 6 cr**

The content of this course will vary from year to year. A description of the course is available in advance at the History Department Office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 2990 The History of Catholicism since 1540 (G) 3 cr**

The history of Roman Catholicism from about 1540 to the present. Emphasis will be placed on Catholic responses to the modern world and to movements of theological and institutional reform. Students may not hold credit for both HIST 2990 and HIST 2991.

**Equiv To:** HIST 2991

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**HIST 3020 South America since 1945 (A) 3 cr**

Major developments since 1945 on the continent of South America, with special emphasis on major political movements, Marxism and populism, the impact of industrialization, and South America's international role.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3052 Canada since the 1960s (C) 3 cr**

Examines fundamental topics and themes in Canada's politics, economy and society from the 1960s to the present, including: Quebec nationalism after 1960; western regionalism and the reassertion of provincial rights since the 1970s; the women's movement and first nations' activism since the 1960s; constitutional reform, patriation and the Charter of Rights and Freedoms in the 1980s and 1990s; free trade and globalization since the 1980s.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3054 Canada and the United States (C) 3 cr**

This course will undertake a detailed and comprehensive study of Canada's relationship with its neighbour from the eighteenth century to the present. Students may not hold credit for both HIST 3054 and the former HIST 3220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Mutually Exclusive:** HIST 3220

**Attributes:** Humanities

**HIST 3062 German and German-Jewish History, 1618 to the Present (E) 6 cr**

The history of Germany from 1618 to the present with a focus on the experience of German Jewry. Students may not hold credit for HIST 3062 and any of: the former HIST 3060 or the former HIST 3064 or the former HIST 3066.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Mutually Exclusive:** HIST 3060, HIST 3064, HIST 3066

**Attributes:** Humanities

**HIST 3080 Consumer Culture in the United States (A) 3 cr**

This course will trace the development of American consumer society from the colonial era to the present. Topics addressed include the histories of: branding, mass distribution, department stores, advertising, mass-market magazines, consumer organizing, and consumer protest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3090 Studies in Asian History (B) 3 cr**

The content of this course will vary. It is designed to provide in-depth examination of specialized themes or areas in modern Asian history. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3110 Topics in History 1 (G) 3 cr**

An opportunity for the intensive study of selected topics or themes in history. The content varies, but may include work in social and cultural history or on specialized subjects. Consult the History Department and the Registration Guide for particulars. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Mutually Exclusive:** HIST 3504, HIST 3506

**Attributes:** Humanities

**HIST 3138 History of Medieval Italy, 1300-1500 (D) 3 cr**

An examination of the political, social, economic and cultural history of the Italian peninsula during the later Middle Ages. Students may not hold credit for both HIST 3138 and the former HIST 3140.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Mutually Exclusive:** HIST 3140

**Attributes:** Humanities

**HIST 3212 Global Sweatshops, Global Struggles (M) 3 cr**

This course explores the past and present of sweated work in various industries in the Global North and South. We explore circumstances that support sweatshops, including off-shoring and the new international division of labour, migrant, child and female labour forces; global supply chains and the role of retailers and contractors. We also compare and evaluate strategies to eliminate sweatshops, include NGO activities, government regulations, consumer boycotts and the international labour, student and social justice movements. Also offered as Labour Studies LABR 3220. Students may not hold credit for both HIST 3212 and LABR 3220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of History or written consent of the department head] or [three credit hours of 1000 level Labour Studies or written consent of the Labour Studies coordinator].

**Equiv To:** LABR 3220

**Attributes:** Humanities

**HIST 3214 Canada's Left: Rebellion and Repression (C) 3 cr**

This course traces the emergence and evolution of Canada's left from the late nineteenth century to the present, with an emphasis on its two main streams, communism and social democracy. Topics include the relationship between popular, party, labour, and ethnic lefts; left parties and mainstream politics; the left in the evolution of human rights and in other public policies; the treatment within various lefts of gender, race, sexuality and ethnicity; popular movements; legal constraints and state repression. Also offered as LABR 3214. Not to be held with LABR 3214.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of History or written consent of department head] or [three credit hours of 1000 level Labour Studies or written consent of Labour Studies coordinator].

**Equiv To:** LABR 3214

**Attributes:** Humanities

**HIST 3250 Canada and the World, 1867 to the Present (C) 6 cr**

This course deals with the history of Canada in an international context. While focused mainly on the period after 1867, Canada's colonial origins are also emphasized. The course surveys other topics, including Canada's dealings with First Nations, empires, and wartime enemies, global developments (like wars and trade deals), the Cold War, the threat of nuclear destruction, and migration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of C or better in six credit hours of history or written consent of department head.

**Attributes:** Humanities

**HIST 3260 Commerce, Rights and Empire in European Thought, 500-2000 (M) 3 cr**

This course will scrutinize the intersection of commerce and governance in Europe from c.500 to the present, paying particular attention to the way that debates about commerce, war and peace have generated notions of human rights over the past three centuries. We will explore whether and how debates about the proper way to govern trade played important roles not only in the creation of the modern categories of the "state" and the "economy," but also in understandings of the person as a rational actor of politics with substantial rights.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3272 The Métis Nation: The Modern Era 3 cr**

A study of the dispossession of the Métis Nation after 1870, their resurgence in the 1950s and contemporary issues affecting Métis people in Canada. Also offered as INDG 3270. May not be held for credit with INDG 3270 or the former NATV 3270.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of Canadian History] or written consent of department head.

**Equiv To:** INDG 3270, NATV 3270

**Attributes:** Humanities

**HIST 3290 The United States from World War II to the War on Terror (A) 6 cr**

This course offers a social, cultural, economic, and political exploration of the United States from World War II to the present day. It examines how actual military conflicts (World War II, Vietnam) and metaphoric wars (the War on Poverty, the War on Drugs) have shaped American Society.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3340 Studies in the History of Digital Culture (G) 3 cr**

This course will examine the social-cultural meanings of computer and communications technologies. The course will predominantly treat the twentieth and twenty-first centuries, examining the evolution of technologies from the 1930s to today. Focused on the global west, the course will also consider the worldwide implications and reach of digital cultures and technologies. Students may not hold credit for both HIST 3340 and the former HIST 3120 with the topic "History of Digital Culture."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3430 Britain, 1714-1815 (E) 6 cr**

An examination of the political structure, constitutional developments, colonial problems, and social and religious changes, the impact of the industrial revolution, and the reaction to the French Revolution in Britain during this period.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3442 Race, Colonialism, and Migration in Canadian History (C) 3 cr**

This course examines topics in the history of race, colonization, and migration in Canada. It explores histories of colonialism and migration, how ideas of race, nation, and ethnicity have been shaped by them, and how these histories have shaped the experience of Indigenous people, racialized people, and Canada as a whole. Specific topics may include colonization and imperialism, slavery, immigration policy, as well as racialized, Indigenous, and ethnic communities. Students may not hold credit for both HIST 3442 and HIST 3780 with the topic "Race and Immigration in Canadian History."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Mutually Exclusive:** HIST 3780

**Attributes:** Humanities

**HIST 3504 Apartheid South Africa and the Struggle for Human Rights (R) 3 cr**

An examination of the apartheid system and its impact with special emphasis on local and international struggles against the system. Students may not hold credit for both HIST 3504 and HIST 3110 with the topics "Nelson Mandela from Prisoner to President" and "Apartheid and the Struggle for Democracy and Human Rights."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Mutually Exclusive:** HIST 3110

**Attributes:** Humanities

**HIST 3506 History of South Africa: From Jan van Riebeck to Nelson Mandela (R) 3 cr**

This course explores the various intersections of statecraft, the economy, society and identity by looking at how resources, labour and political control played out in changing mechanisms of power, accommodation and resistance in South Africa during the colonial and apartheid eras.

Students may not hold credit for both HIST 3506 and HIST 3110 with the topic "History of South Africa: from Jan van Riebeck to Nelson Mandela."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Mutually Exclusive:** HIST 3110

**Attributes:** Humanities

**HIST 3550 Popular Culture, Crime and Punishment in England, 1550-1850 (E) 3 cr**

A history of crime and the institutions for its control and punishment in England from the Tudor period to the turn of the nineteenth century. We will trace the connections between crime and larger processes such as war, the economy and urbanization. Topics will include the changing patterns of crime, the role of gender in the application of law, the reform of the criminal law and the emergence of imprisonment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3574 Disease and Society in the Modern World (M) 3 cr**

This course will emphasize the relationship between disease and imperialism, capitalist development, and war; and examine social and state responses. The course will explore connections between the biological and the cultural aspects of infectious disease experiences. Students may not hold credit for both HIST 3574 and HIST 3110 with the topics "History of Disease" and/or "History of Health and Disease."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3576 History of Women, Gender and Sexuality in Canada (C) 3 cr**

This course examines the history of women, gender, and sexuality in Canada's past. Specific topics may include women, gender and sexuality in Indigenous peoples, English and French colonization, nation-building, immigration and urbanization, politics, race, migration and racialization, violence, war, and protest. This course is also offered as WOMN 3576. May not be held with WOMN 3576, the former HIST 3570, or the former HIST 3572.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 6 credit hours in History; or 3 credit hours in Women's and Gender Studies; or written consent of department head.

**Equiv To:** WOMN 3576

**Mutually Exclusive:** HIST 3570, HIST 3572

**Attributes:** Humanities

**HIST 3580 Topics in Recent World History (M) 3 cr**

An in-depth treatment of selected topics in world history since 1945. The content of the course will vary from year to year, and a precise description is available in advance from the History department office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3730 A History of Western Canada (C) 6 cr**

This course traces the history of modern day Western Canada, through exploring the social, political, and economic forces that shaped the environments and societies that have emerged since European contact. Topics may include the history of Indigenous polities, trade and alliance, the fur-trade, Metis society and politics, gender and settler-colonization, environment and economy, labour and radical politics, and Indigenous resistance and decolonization.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of C or better in six credit hours of history or written consent of department head.

**Attributes:** Humanities

**HIST 3740 Topics in Latin American History (A) 3 cr**

The contents of this course will be announced each year. Consult the History Department. It is designed to provide in-depth studies of specialized subjects and themes in modern Latin American history. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3750 Indigenous Peoples in Modern Latin America (A) 3 cr**

A study of indigenous peoples in modern Latin America. Topics to be discussed will include the construction of racial hierarchies and exclusionary nation-states, indigenous engagements with leftist politics and revolution as well as struggles for political autonomy and cultural rights. Students may not hold credit for both HIST 3750 and HIST 3740 with the topic "Indigenous Peoples and the Nation-State in Modern Latin America."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3760 Problems in United States History (A) 3 cr**

The subject matter of this course will be announced each year. Consult the History department. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both HIST 3760 and HIST 3761.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Equiv To:** HIST 3761

**Mutually Exclusive:** HIST 3095

**Attributes:** Humanities

**HIST 3780 Studies in Canadian History 1 (C) 3 cr**

This is a Special Topics course. The content will be set by the instructor each time it is offered. For more information check with the course instructor. Students can earn multiple credits for this course, but not for the same course topic. May not be held with the former HIST 3781 when the topic is the same.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of C or better in six credit hours of history or written consent of Department Head.

**Mutually Exclusive:** HIST 3031, HIST 3442

**Attributes:** Humanities

**HIST 3800 History of Winnipeg (C) 3 cr**

A study of the social history of the city of Winnipeg from its origins through to the Aboriginal Justice Inquiry (1991). Students may not hold credit for both HIST 3800 and the former HIST 3790 with the topic "History of Winnipeg."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3910 The Ukrainians in Canada (C) 3 cr**

A history of the Ukrainian community in Canada. Topics to be discussed will include immigration, social and political organizations, churches, cultural assimilation, Ukrainian contributions to Canada, and relations with Ukraine.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of history] or written consent of department head.

**Attributes:** Humanities

**HIST 3990 Seminar in Selected History Topics (G) 6 cr**

This course will provide a systematic introduction to advanced research seminars, paying particular attention to the development of: oral skills and public presentation of ideas and research; focused historiographical discussion and analysis; and advanced historical research and writing skills. This course provides the skills and preparation for Year IV of the History Honours program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of History] and written consent of department head.

**Attributes:** Humanities

**HIST 4000 Topics in History (G) 3 cr**

The content of this course will vary. It is designed to provide students with specialized topics and themes in History. A description of the course is available in advance at the History Department Office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4010 Imperialism, Decolonization and Neo-Colonialism, 1700 to the Present (M) 6 cr**

Studies in the theories and practise of imperialism from an historical perspective.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4040 The Later Middle Ages (D) 6 cr**

Selected topics in economics, social, cultural, art, and religious history of the later medieval world.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4050 England in the Long Eighteenth Century (E) 6 cr**

Selected themes in the history of England's long eighteenth century, from 1660-1840. Specific topics will vary from year to year, but will generally include the transformation of political culture, the consequences of war, the question of national identities, the emergence of commercial society and the changes in social structure.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the department head.

**Attributes:** Humanities

**HIST 4060 Gender History in Canada (C) 6 cr**

Gender history explores the roles, images, and experiences of masculinity and femininity in the past. This course will familiarize students with the changing theoretical and historiographical terrain of gender history. It will draw on the international literature but focus on the history of gender in Canada, examining how historians analyse masculinity, femininity, the family, sexuality, politics, race/ethnicity, moral regulation, class, nation, and colonialism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4070 Issues in Modern Asian History 1: Selected Topics (B) 3 cr**

The content of this course will vary. Emphasis will be on analysis of important issues and recent developments in the history and historiography of modern Asia. Consult the History Department for particulars. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4100 Studies in United States History Since 1877 (A) 6 cr**

An examination of United States history from the close of the Reconstruction era to the present. Students will gain exposure to the political, economic, social and/or cultural history of the United States. Course content may vary according to the instructor.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4110 Selected Topics in British History (E) 6 cr**

A seminar course whose content will vary. A description of the course is available in advance at the History department office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head. .

**Attributes:** Humanities

**HIST 4120 History of Aboriginal Rights (C) 6 cr**

A study of Aboriginal rights from early contact to the present with a particular emphasis on treaties, the courts, and Aboriginal efforts to enforce specific forms of rights.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4150 The Social History of the Latin American State (A) 6 cr**

Readings on the history of Latin America since colonial times, focused on the dynamic relationship between different social groups and the state. Based on an interdisciplinary theoretical framework, this historical overview will cover different geographical areas, issues, and social factors.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4280 Topics in the Cultural History of Canada (C) 6 cr**

A seminar course focusing on various themes in the cultural history of the place called Canada. How have people there expressed their understanding of factors like religion, gender, war, empire, class, etc.? What have historians done to help us understand the beliefs, works of art, popular movements, laws, or institutions that emerged?

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4310 Topics in Social History (G) 6 cr**

The content of this course will vary. It is designed to provide students with specialized topics and themes in Social history. A description of the course is available in advance at the History department office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4320 Studies in Modern World History (M) 6 cr**

Advanced historical study of topics in world and global history. Specific thematic, methodological, and theoretical approaches may vary by instructor.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4340 Introduction to Archival Science (G) 6 cr**

A thorough introduction to archival theory and practise with special emphasis on the history and development of archives and their place in modern society, terminology, collection development, appraisal arrangement, access, conservation, research aids and related archival principles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4400 Historical Method and Historiography (G) 6 cr**

A study of historical methods and historiography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**HIST 4500 Jewish and European History and Historiography (E) 6 cr**

This seminar examines issues relating to Jewish history and historiography in the context of European history and historiography.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: written consent of department head.  
**Attributes:** Humanities

**HIST 4580 The Great Historians (G) 6 cr**

The readings of a select number of modern and classical historians. Preparation of a research paper on a particular historiographic problem.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: written consent of department head.  
**Attributes:** Humanities

**HIST 4660 History of Health and Disease (G) 6 cr**

Introduction to some of the principal issues and approaches in the history of health and disease. It is not meant to be a strictly chronological survey. Topics and themes may include the development of nursing and medical professions; transformation of the hospital; mental health; alternative therapies; colonization, infectious disease and aboriginal health; and health and the state.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: written consent of department head.  
**Attributes:** Humanities

**HIST 4680 Social History of Health and Disease in Modern Canada (C) 6 cr**

This course explores the history of health and health care in Canada, with a focus on the late 19th and 20th centuries. Topics will include colonization, infectious disease, and Aboriginal health; the evolution of medical and nursing professions; the emergence of the modern hospital; mental health, psychiatry and the asylum; cancer; alternative therapies; childbirth; health and old age; and health and the state. Analytical categories of gender, race, ethnicity, class, and sexuality will run throughout the material.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: written consent of department head.  
**Attributes:** Humanities

**HIST 4870 Contemporary Latin America (A) 6 cr**

A study of selected historical developments in Latin America since the Cuban Revolution, with emphasis on most recent themes.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: written consent of department head.  
**Attributes:** Humanities

**HIST 4890 Canadian Social History (C) 6 cr**

Canadian Social History focuses on the ways in which people's lives shaped and were shaped by their physical and social environments, relationships of power, and legal and political forces.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: written consent of department head.  
**Attributes:** Humanities

**HIST 4960 Studies in European History (E) 6 cr**

A seminar course whose content will vary from year to year. Students can earn multiple credits for this course only when the topic subtitle is different.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: written consent of department head.  
**Attributes:** Humanities

**HIST 4990 Selected Topics 6 cr**

A program of independent reading and/or research on selected topics, undertaken and arranged by a student in consultation with prospective instructor, upon the written approval of the department head. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.  
**Attributes:** Humanities

## Human Anat. and Cell Science (ANAT)

**ANAT 1030 Human Anatomy 3 cr**

To present the essentials of the organization and structure of the human body. Surface, functional and applied anatomy will be taken into consideration. For Pharmacy students only.

**ANAT 4010 Human Embryology 3 cr**

This course will provide an overview of human embryology and development from gamete production and fertilization to birth. Students will study the prenatal timeline and organ system development which includes the nervous, cardiovascular, alimentary, musculoskeletal, urogenital and special senses systems. Students will also be exposed to congenital anomalies specific to each system as well as multisystem anomalies

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (BIOL 1410 (C+) or BIOL 1411 (C+)), (BIOL 2520(C+) or BIOL 2521 (C+) or BGEN 2000 (C+)), and (CHEM/MBIO 2730 (C+) and CHEM 2740 (C+)) or [(CHEM/MBIO 2700 (C+) or CHEM/MBIO 2701 (C+)) and (CHEM 2720 (C+) or CHEM 2721 (C+))].

## Human Ecology General (HMEC)

**HMEC 4060 Special Studies in Human Ecology 3 cr**

Independent study and/or directed research within a specialized area. Before approval is granted, the student must submit a detailed proposal of the study.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Prerequisite: Permission of advisor.

## Human Nutritional Sciences (HNSC)

**HNSC 1100 Nutrition for Healthy Living 3 cr**

An introduction to nutrition and practical approaches for healthy diet and disease prevention. Not to be held with HNSC 1210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Enrollment in the Aboriginal Community Wellness Diploma program.

**Equiv To:** HNSC 1210

**HNSC 1200 Food: Facts and Fallacies 3 cr**

This course will present facts and fallacies about food from harvest to market forms. Emphasis will be placed on technological development, consumer concerns and factors affecting nutritional quality. Current issues related to food safety and nutritional trends will also be discussed.

**Attributes:** Recommended Intro Courses

**HNSC 1210 Nutrition for Health and Changing Lifestyles 3 cr**

This course addresses the relationship between nutrition and health. The focus is on healthy eating and on strategies for modifying food patterns within the context of lifestyle and culture. May not be held with HNSC 1100. Not available to students who hold credit for HNSC 2170.

**Equiv To:** HNSC 1100

**Mutually Exclusive:** HNSC 2170

**Attributes:** Recommended Intro Courses

**HNSC 2000 Research Methods and Presentation 3 cr**

(Lab required) An introduction to research designs, methods and techniques, as well as the practice of disseminating results, in the context of selected determinants of health. Applications in natural and social sciences will be presented. Skills related to presenting research findings will be taught. May not be held with HMEC 2000 or HMEC 2050.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: AGRI 2400 (D) or STAT 1000 (STAT 1001) (D) or STAT 1150 (D).

**Mutually Exclusive:** HMEC 2000, HMEC 2050

**Attributes:** Written English Requirement

**HNSC 2130 Nutrition Through the Life Cycle 3 cr**

Examination of nutritional needs throughout the life cycle, the nutritional concerns of different age groups and the development of healthy eating practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HNSC 1210.

**HNSC 2140 Basic Principles of Human Nutrition 3 cr**

The scientific principles underlying nutrient function and dietary requirements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (CHEM/MBIO 2700 (CHEM/MBIO 2701) or CHEM/MBIO 2730, or the former CHEM/MBIO 2770 or the former CHEM/MBIO 2360 the former CHEM/MBIO 2361)) and [(HNSC 1200 and HNSC 1210) or FOOD 2500]. Pre- or corequisites: CHEM 2720 (CHEM 2721) or CHEM 2740 or the former CHEM/MBIO 2770 or the former CHEM/MBIO 2360 (the former CHEM/MBIO 2361).

**HNSC 2150 Composition, Functional and Nutritional Properties of Foods 3 cr**

Food composition, food market forms, food composition data for nutritional assessment and labelling.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HNSC 1200 and HNSC 1210 and CHEM 1100 (CHEM 1101) (or the former CHEM 1300 or the former CHEM 1301).

**HNSC 2160 Principles of Food Preparation and Preservation 3 cr**

(Lab required) Food preparation, preservation, handling and storage; quality and safety implications; scientific basis for culinary practice; use and application of equipment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [HNSC 1200 or HNSC 1210] and CHEM 1100 (CHEM 1101), (or the former CHEM 1300 or CHEM 1301).

**HNSC 2170 Nutrition for Health Professionals 2 cr**

An examination of the fundamentals of nutrition and the relationship between nutrition and health within the context of the health professions. The focus is on nutritional strategies used to promote health and in the treatment of common health conditions. May not be held with HYG 2370, or the former ORLB 2150, ORLB 2330, or the former PHRM 2420. This course is restricted to students registered in Nursing or Pharmacy.

**Mutually Exclusive:** HNSC 1210, HYG 2370, ORLB 2150, ORLB 2330, PHRM 2420

**HNSC 3220 Food and Nutrition Literacy Education 3 cr**

Students will develop a critical understanding of the influences on food and nutrition behaviours and how to impact these positively through evidence-informed food and nutrition education strategies. May not be held with the former HNSC 3320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [PSYC 1200 or SOC 1000 (or the former SOC 1200)] and HNSC 2130 and HNSC 2140.

**Equiv To:** HNSC 3320

**HNSC 3260 Food Quality Evaluation 3 cr**

(Lab required) Discussion of quality concepts and quality assurance principles for food applications, and of methods for evaluation of sensory, chemical and physical aspects of quality. The course will include food industry visits and demonstrations of food testing techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: A minimum grade of D in AGRI 2400 or STAT 2000 or STAT 2001 and a minimum 60 credit hours completed (or a minimum 30 credit hours completed from a second degree program).

**HNSC 3300 Vitamins and Minerals in Human Health 3 cr**

The physiological importance of vitamins and minerals in the human body, including factors affecting dietary requirements, metabolism and roles in disease progression and prevention.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM/MBIO 2750 and CHEM 2740 (or the former CHEM/MBIO 2780)) or (CHEM/MBIO 2710 (CHEM/MBIO 2711) and CHEM 2720 (CHEM 2721) (or the former CHEM/MBIO 2370 (the former CHEM 2371)))] and HNSC 2140 and [BIOL 1412 (BIOL 1413) or BIOL 2420 (BIOL 2421)].

**HNSC 3310 Macronutrients and Human Health 3 cr**

Macronutrient functions and metabolic roles in human health, including the prevention and pathogenesis of various diseases.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [CHEM/MBIO 2750 and CHEM 2740 (or the former CHEM/MBIO 2780) or CHEM/MBIO 2710 and CHEM 2720 (or the former CHEM/MBIO 2370 (CHEM 2371))] and HNSC 2140 and [BIOL 1412 (BIOL 1413) or BIOL 2420 (BIOL 2421)].

**HNSC 3330 Ingredient Technology for Designed Foods 3 cr**

Chemical and functional properties of ingredients and their application in designed foods: low fat, low calorie, high fibre, high energy and innovative food products.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (CHEM/MBIO 2700 (CHEM/MBIO 2701) or CHEM/MBIO 2730, or the former CHEM/MBIO 2770 or the former CHEM/MBIO 2360 (the former CHEM/MBIO 2361)) and [HNSC 2150 or FOOD 2500]. Pre- or corequisites: CHEM 2720 (CHEM 2721) or CHEM 2740 or the former CHEM/MBIO 2770 or the former CHEM/MBIO 2360 (the former CHEM/MBIO 2361).

**HNSC 3342 Management for Food and Nutrition Professionals 3 cr**

Management strategies and cost control principles as applied to food and nutrition organizations. Topics include leadership, organizational design, teamwork, human resource management, performance improvement, cost management, and the interpretation of financial statements. May not be held with HNSC 3340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: A minimum grade of D in [HNSC 2150 or HNSC 2160] and [GMGT 1010 or ABIZ 1000].

**Equiv To:** HNSC 3340

**HNSC 3350 Culture and Food Patterns 3 cr**

(Lab required) A study of the cultural, sociological and psychological aspects of food patterns and behaviour.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PSYC 1200 or SOC 1000 or the former SOC 1200) and (HNSC 1200 or HNSC 1210).

**HNSC 3400 Nutrition Assessment and Counselling 3 cr**

(Lab required) Introduction to the fundamentals of professional dietetic practice, nutrition assessment, interviewing and counselling as part of the nutrition care process. For students registered in the Human Nutritional Sciences degree.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: HNSC 3310 (D).

**HNSC 3870 Food Geographies 3 cr**

This course provides a critical examination of the geographies of food at a variety of scales, from the body to the global. The course focuses on themes in three interconnected areas: 1) food production and the global food system from farm to plate including agribusiness and alternative food production and distribution models; 2) food consumption habits and beliefs and foodways as geographically contingent material culture; and 3) food (in) security and its relationship to health and wellbeing. This course is cross-listed with GEOG 3870.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GEOG 1280, GEOG 1281, GEOG 1200 or HNSC 1200, or permission of the department head.

**Equiv To:** GEOG 3870

**HNSC 4100 Current Issues in Food and Human Nutrition 3 cr**

Integration of current issues in food and human nutritional sciences. Emphasis on ethics, equity, economics, and professional approaches to challenges in food and human nutritional sciences using case studies, team work, and scientific communication to specialists and the public. This is a capstone course restricted to students in year 4 of the B.Sc. Human Nutritional Sciences degree programs. May not be held with FOOD 4100 or AGRI 4100 or the former HNSC 4160.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HNSC 2000 (or the former HMEC 2000) and Faculty approval.

**Equiv To:** HNSC 4160

**Mutually Exclusive:** AGRI 4100, FOOD 4100

**HNSC 4120 Senior Thesis 3 cr**

The preparation and presentation of a report based on a survey of the literature or on a laboratory investigation of an approved topic. Application required. Enrolment limited. Not to be held with HNSC 4122 or HNSC 4600.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Students must be registered in their final year of Human Nutritional Sciences program or the Minor in Human Nutrition and Metabolism.

**Mutually Exclusive:** HNSC 4122, HNSC 4600

**HNSC 4122 Research Project in Human Nutritional Sciences 6 cr**

A research project in any aspect of human nutritional sciences, chosen in consultation with the supervising faculty member. A written report and a poster or oral presentation required at the end of the project. Students must be registered in their final year of Human Nutritional Sciences program. Application required. Enrolment limited. May not be held with HNSC 4120 or HNSC 4600.

**Mutually Exclusive:** HNSC 4120, HNSC 4600

**HNSC 4140 Quantity Food Production and Management 3 cr**

(Lab Required) Menu planning. Food costing. Experience in standard methods of institutional food production and service.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HNSC 3342 (D) and a valid Food Handlers Certificate.

**HNSC 4260 Selected Topics in Human Nutrition 3 cr**

Recent developments in human nutrition research.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**HNSC 4270 Sensory Evaluation of Food 3 cr**

(Lab Required) Sensory perception, principles of the sensory analysis of food, requirements for sensory testing, test methods, selection and training of panelists, statistical analysis and interpretation of data.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: A minimum grade of D in AGRI 2400 or STAT 2000 or STAT 2001 and a minimum 60 credit hours completed (or a minimum 30 credit hours completed from a second degree program).

**HNSC 4280 Food Product Development 3 cr**

This course will help the student gain an understanding of the product development procedure as it relates to the food industry. Emphasis will be on application of basic knowledge of foods and food processing in designing a new product. May not be held with FOOD 4510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MKT 2210 and [ABIZ 1000 or GMGT 1010] and [AGRI 2400 or STAT 2000 or STAT 2001] and [FOOD 3010 or HNSC 3330].

**Equiv To:** FOOD 4510

**HNSC 4290 Food, Nutrition and Health Policies 3 cr**

Principles and applications of policies, regulations and legislation in the areas of food and health that address nutrition and health problems of populations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HNSC 2000 (or the former HMEC 2000 or the former HMEC 2050) (D) and HNSC 2130 (D).

**HNSC 4300 Community Nutrition Intervention 3 cr**

Principles of planning and evaluating nutrition related interventions. Examples of community needs assessments, program planning strategies and types of program evaluation will be examined.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HNSC 3220 (or the former HNSC 3320).

**HNSC 4310 Nutrition and the Elderly 3 cr**

The role of nutrition in health promotion and disease prevention during aging.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Corequisite: HNSC 2140

**HNSC 4340 Maternal and Child Nutrition 3 cr**

The role of nutrition in normal human development from conception through childhood.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or Corequisite: HNSC 2140.

**HNSC 4350 Nutrition in Exercise and Sport 3 cr**

The application of nutritional regimens to meet exercise requirements and improve athletic performance. Current practices and recommendations for different types of sports will be examined.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: A minimum 60 credit hours and a C in HNSC 1210 and [BIOL 1412 or KPER 3470].



**HNSC 4362 Nutrition Option Practicum 6 cr**

Practical applications of nutrition principles in a variety of nutrition-related field placements in the community. This course is open to students in 3rd or 4th year of the Human Nutritional Sciences degree program. Application to the department is required. Limited enrolment. **PR/CR: A minimum grade of C is required unless otherwise indicated.** Prerequisite: HNSC 2000 (or the former HMEC 2000). Pre or co-requisite: HNSC 3220 (or the former HNSC 3320).

**HNSC 4364 Foods Industry Option Practicum 6 cr**

This course involves supervised application of food quality, safety, and management principles in a commercial or government setting. Requirements include 280 hours of work related to the field experience. Application to Department is required. Limited enrolment. This practicum course is to be completed in the final year of the Food Industry Option. **PR/CR: A minimum grade of C is required unless otherwise indicated.** Prerequisites: HNSC 3260 (D) and HNSC 3330 (D) and FOOD 4150 (D) and [GMGT 1010 or ABIZ 1000] (D).

**HNSC 4500 Clinical Nutrition I 3 cr**

An introduction to the principles of patient care in the hospital settings. Students will gain theoretical and practical knowledge to assess and apply recommendations and guidelines to specific clinical disease states. May not be held with the former HNSC 4320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or corequisites: HNSC 3220 (or the former HNSC 3320), HNSC 3310, HNSC 3300 and HNSC 3400.

**Equiv To:** HNSC 4320

**HNSC 4540 Functional Foods and Nutraceuticals 3 cr**

This course will examine the bioactive components of functional foods and nutraceuticals, their sources, chemistry, process technology, efficacy, safety and regulation. Also offered as FOOD 4540. May not be held with FOOD 4540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHEM/MBIO 2730 and CHEM 2740 (or the former CHEM/MBIO 2770) or CHEM/MBIO 2700 (CHEM/MBIO 2701) and CHEM 2720 (CHEM 2721) (or the former CHEM/MBIO 2360 or the former CHEM/MBIO 2361).

**Equiv To:** FOOD 4540

**HNSC 4550 Clinical Nutrition II 3 cr**

Practical application of patient care: Nutritional assessment and dietary management of acute and chronic disease states. In this interactive course, students will build upon the basic principles covered in the HNSC 4500 (Clinical Nutrition I) integrating the theory with practical practice. May not be held with the former HNSC 4320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Co-requisite: HNSC 4500.

**Equiv To:** HNSC 4320

**HNSC 4600 Practice-based Research in Human Nutritional Sciences 3 cr**

A practice-based research project for students pre-selected into the Manitoba Partnership Dietetic Education Program. Enrolment limited to pre-selected students; to be taken in the Winter term in the same year that their Dietetic Internship starts. Departmental approval required. May not be held with HNSC 4120 or HNSC 4122.

**Mutually Exclusive:** HNSC 4120, HNSC 4122

## Human Res. Mgmt/Indus Relat. (HRIR)

**HRIR 2440 Human Resource Management 3 cr**

Introduction to principles and procedures in the management of human resources. Topics include diversity management, conflict resolution, employment, law, planning, job analysis, performance appraisal, staffing, compensation, union-management relations, and current issues. May not be held with HRIR 2441 or ABIZ 2620 or AGRI 3030 when titled "Agricultural Human Resource Management" or the former DAGR 0530.

**Equiv To:** HRIR 2441

**Mutually Exclusive:** ABIZ 2620, AGRI 3030, DAGR 0530

**HRIR 3430 Selected Topics in Industrial Relations 3 cr**

Analysis of specific topics or issues in the employment relationships in an industrial society.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [HRIR 2440 (D)] and [HRIR 3450 (D)] or consent of instructor.

**HRIR 3450 Labour and Employment Relations 3 cr**

This course is to enhance knowledge and understanding of labour and employment relations in Canada and beyond. It addresses various issues and debates about these relations; their history, structure, and functioning; management employment relations practices; the role of labour unions; collective bargaining; and contemporary developments and alternatives.

**HRIR 4410 Staffing and Management Development 3 cr**

A review of: employment planning; recruitment and selection; internal placement; out placement; performance appraisal; career development. Training needs analysis, methods and evaluation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HRIR 2440 (D).

**Equiv To:** HRIR 4411

**HRIR 4420 Compensation 3 cr**

A review of the major concepts and design of compensation systems including: strategy, internal equity, external competitiveness, rewarding individual contributions, performance incentives, employee benefits, government regulations, union role in compensation; budgets and administration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: HRIR 2440 (D).

**Equiv To:** HRIR 4421

**HRIR 4480 Collective Bargaining and Administration 3 cr**

Focuses on the legal framework, processes and issues pertaining to the negotiation and administration of collective agreements, building on the foundation provided by HRIR 3450. Students will learn practical strategies for collective bargaining by participating in mock collective bargaining and how to conduct in-depth analysis of grievance arbitration cases. May not be held with HRIR 4481.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HRIR 3450 (D) or HRIR 3451 (D).

**Equiv To:** HRIR 4481

**HRIR 4520 Comparative Industrial Relations and Human Resource Management 3 cr**

To provide an international perspective on industrial relations (IR) and human resource management (HRM) through analysis and comparison of IR systems and HRM practice across selected countries and of current developments therein. Also covers theories and issues relevant to these topics. Students are encouraged, but not required, to complete HRIR 3450 (D) prior to taking this course.

**Equiv To:** HRIR 4521

## Hungarian (HUNG)

**HUNG 1000 Introduction to Hungarian 1 3 cr**

(Lab required) The course is intended for students with little or no previous knowledge of Hungarian. Students are introduced to basic grammar and vocabulary as well as aspects of Hungarian culture. Emphasis is placed on communication skills. Satisfactory completion of this course enables students to proceed to HUNG 1002 Introduction to Hungarian 2.

**Attributes:** Humanities, Recommended Intro Courses

**HUNG 1002 Introduction to Hungarian 2 3 cr**

(Lab required.) The course is intended for students with some elementary knowledge of Hungarian. Students will expand their understanding of basic grammar and vocabulary, as well as aspects of Hungarian culture. Emphasis is placed on communication skills.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [HUNG 1000] or written consent of department head.

**Attributes:** Humanities, Recommended Intro Courses

**HUNG 2100 Hungarian Culture and Language 6 cr**

Taught in English. This course is an immersive study experience in Budapest and Szeged in Hungary. The program features an exploration of Hungarian culture, life and society in excursions, classes, and guest lectures, and some practical language training of introductory conversational Hungarian.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of Department Head.

**Attributes:** Humanities

## Icelandic (ICEL)

**ICEL 1200 Introduction to Icelandic 6 cr**

(Lab required) Language of instruction: English. Intended for students with little or no previous knowledge of Icelandic. Emphasis will be placed on functional spoken and written comprehension and communication, with some basic Icelandic grammar. Pronunciation and conversation skills are developed in weekly language laboratory sessions. May not be held with the former ICEL 1240. Not open to students with native oral fluency.

**Equiv To:** ICEL 1240

**Attributes:** Humanities, Recommended Intro Courses

**ICEL 1210 Conversational Icelandic 3 cr**

This course is offered as part of the Summer Session course offerings. Intensive study of conversational Icelandic during a field trip to Iceland. Students will be trained in groups in a classroom setting before they try their language skills in authentic situations. The course is designed for beginners as well as intermediate students. Regular attendance is obligatory. Taught in English. Open to all students.

**Attributes:** Humanities, Recommended Intro Courses

**ICEL 1300 Introduction to Swedish 3 cr**

The course is intended for beginners. Emphasis will be placed on conversation skills and reading comprehension, and students will also learn the basic grammatical structures of the language and how to write short compositions. Pronunciation is developed in weekly language laboratory exercises. Open to all students.

**Attributes:** Humanities, Recommended Intro Courses

**ICEL 1400 Introduction to Contemporary Culture in Iceland 3 cr**

The aim of this course is to study and explore a selection of literature, music, and visual art, and cultural critique. Students will also get an opportunity to study and explore both global and local Icelandic cultural characteristics and the fusion of cultural influences in contemporary Iceland. Open to all students. Taught in English. Students may not hold credit for both ICEL 1400 and the former ICEL 1220.

**Mutually Exclusive:** ICEL 1220

**Attributes:** Humanities, Recommended Intro Courses

**ICEL 1410 Introduction to Culture in Medieval Iceland 3 cr**

The aim of this course is to study a selection of sagas, history fragments and mythological sources. Students will also get an opportunity to explore the way in which world-renowned modern poets and writers have been drawn to, and seriously seduced by, the culture of medieval Iceland. Open to all students. Taught in English. Students may not hold credit for both ICEL 1410 and the former ICEL 1220.

**Mutually Exclusive:** ICEL 1220

**Attributes:** Humanities, Recommended Intro Courses

**ICEL 2200 Intermediate Icelandic 1 6 cr**

Languages of instruction: English and Icelandic. Emphasis on expanding the vocabulary and knowledge of more complex grammatical structures. Students develop their spoken and written comprehension and communication through conversational practice, oral presentations, watching films and television shows, studying fictional as well as non-fictional texts and writing short papers in Icelandic. May not be held with the former ICEL 2240.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ICEL 1200 or the former ICEL 1240, or written consent of instructor.

**Equiv To:** ICEL 2240

**Attributes:** Humanities

**ICEL 2220 Modern Icelandic Literature in Translation 3 cr**

A study of modern Icelandic literature through an analysis of a selection of works by Icelandic writers in English translation from around 1900 until the present.

**Attributes:** Humanities

**ICEL 2230 Icelandic-Canadian Literature 3 cr**

A survey of poetry, prose and drama by Icelandic-Canadian authors from the late 19th century settlement to the present. The course will examine the literature's individual characteristics and its place within the broader field of Canadian and world literature. All works will be in English or English translation.

**Attributes:** Humanities

**ICEL 2310 An Introduction to Old Icelandic Language and Literature 6 cr**

Text: Sigríð Valfellis and James E. Cathey. *Old Icelandic: An Introductory Course* (Oxford, 1981).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**ICEL 2400 Icelandic Folktales in a European Context 3 cr**

Reading of Icelandic legends and fairy tales and how they compare with stories from Northern and Central Europe. For the analysis, students will be introduced to central concepts and approaches to the study of folktales. Open to all students. Taught in English. Students may not hold credit for both ICEL 2400 and the former ICEL 2250 (012.225).

**Equip To:** ICEL 2250

**Attributes:** Humanities

**ICEL 2410 Special Topics 3 cr**

Topics dealing with Icelandic literature, culture or language. Course content will vary from year to year depending on interest and needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Humanities

**ICEL 2420 Poetics of Immigration in Icelandic-Canadian Literature 3 cr**

A study of Icelandic-Canadian literature, focusing on the poetics of immigration in the writings of Icelandic settlers and the first generation of Icelandic-Canadians. As a special assignment, students will study the voice of the poet, philosopher, and social prophet Stephan G. Stephansson, and the universal references of his poetics. Taught in English. Open to all students. Students may not hold credit for both ICEL 2420 and the former ICEL 2300.

**Mutually Exclusive:** ICEL 2300

**Attributes:** Humanities

**ICEL 2430 Translation of Cultures in Icelandic-Canadian Literature 3 cr**

A study of Icelandic-Canadian literature, focusing on the translation of cultures in the writings of modern and contemporary Icelandic-Canadian poets and writers. Students will read a selection of prose and poetry. They will also study ideas on the indispensable role of the translation of cultures in the context of world literature. Open to all students. Taught in English. Students may not hold credit for both ICEL 2430 and the former ICEL 2300.

**Mutually Exclusive:** ICEL 2300

**Attributes:** Humanities

**ICEL 3200 Intermediate Icelandic 2 6 cr**

Language of instruction: Icelandic. Emphasis on advanced syntax and grammar, word formation, and the use of idiomatic phrases. Reading of selected fictional and non-fictional texts, spoken and written discussion, translation exercises, oral presentations and written composition. May not be held with the former ICEL 3230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ICEL 2200 or the former ICEL 2240, or written consent of instructor. Pre- or corequisite: LING 1000 or LING 1440 or the former LING 1200 or the former ENGL 2470 or written consent of instructor.

**Equip To:** ICEL 3230

**Attributes:** Humanities

**ICEL 3210 Romanticism in Icelandic Literature 3 cr**

The aim of this course is to study the concept of Romanticism in Icelandic literature and the key players in the Romantic movement in nineteenth century Iceland. A selection of poems, prose texts, and fragments will be read carefully, in particular the writings of Jónas Hallgrímsson. Taught in English.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 30 credit hours of university level coursework] or written consent of department head.

**Attributes:** Humanities

**ICEL 3320 Old Norse Mythology 3 cr**

The myths and cults of the pre-Christian gods in the Nordic countries studied on the basis of the original sources (in English translation) and related to pre-Christian Nordic society. Open to all students; taught in English.

**Attributes:** Humanities

**ICEL 3330 Icelandic Sagas in Translation 3 cr**

The Medieval Icelandic sagas tell stories of outlaws, blood feuds and epic Viking battles. They also contain evidence of Norse pagan practices, the arrival of Christianity in Northern Europe, as well as the earliest documented contact between Europeans and North America's Indigenous peoples. In this course students will explore several of the Icelandic sagas in English translation through a variety of literary, historical and cultural contexts. Open to all students; taught in English. ICEL 3320 is recommended, but not required.

**Attributes:** Humanities

**ICEL 3400 Old Icelandic Literature 6 cr**

A study of selected Icelandic sagas and Eddic poems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**ICEL 4420 History of the Icelandic Language 3 cr**

A study of the development of the Icelandic language from the twelfth century to the present day.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**ICEL 4440 The Icelanders in Canada 3 cr**

A history of the emigration of Icelanders to North America and the Icelandic communities in Canada, their social and political organizations, churches, and cultural assimilation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**ICEL 4460 Special Topics 3 cr**

A seminar course whose content will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

## Immunology (IMMU)

**IMMU 2000 Fundamentals in Immunology 3 cr**

This course will provide an overview of the basic processes of immune cells and general immunology. Throughout the course the emphasis is upon the human immune system and how its successes, failures, and compromises affect the lives of each and everyone one of us.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HEAL 1502 or BIOL 1030.

## Indigenous (INDG)

### **INDG 1000 Orientation Course: The Colonizers and the Colonized 3 cr**

The course which is offered as part of the summer session consists of an introduction to the colonization process as it regards Indigenous peoples and the processes of decolonization undertaken by the peoples since 1970. May not be held with the former NATV 1000. Registration is restricted and written consent must be obtained from the instructor prior to registration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: this is a special course designed for first year entering Indigenous students.

**Equip To:** NATV 1000

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1200 Indigenous Peoples in Canada 6 cr**

A survey of the political, social, and economic situations of the contemporary First Nations, Métis, and Inuit Peoples in Canada. May not be held with any of: INDG 1220, INDG 1240, the former NATV 1200, the former NATV 1220, the former NATV 1240.

**Equip To:** NATV 1200

**Mutually Exclusive:** INDG 1220, INDG 1240, NATV 1220, NATV 1240

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1220 Indigenous Peoples in Canada, Part 1 3 cr**

A survey of the political, social, and economic situations of the contemporary First Nations, Métis, and Inuit Peoples of Canada from pre-contact to 1945. May not be held with any of: INDG 1200, the former NATV 1200, the former NATV 1220.

**Equip To:** NATV 1220

**Mutually Exclusive:** INDG 1200, NATV 1200

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1240 Indigenous Peoples in Canada, Part 2 3 cr**

A survey of the political, social, and economic situations of the contemporary First Nations, Métis, and Inuit Peoples of Canada from 1945 to the present. This course may include a field trip component. May not be held with any of: INDG 1200, the former NATV 1200, the former NATV 1240.

**Equip To:** NATV 1240

**Mutually Exclusive:** INDG 1200, NATV 1200

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1250 Introductory Cree 1 3 cr**

(Lab required) Practical course intended for students who are not fluent in Cree. Emphasis will be on oral work for the purpose of learning basic sounds and grammatical patterns. Some attention will be given to the structural differences between Cree and English. Regular attendance and active participation are obligatory. This course is a prerequisite for INDG 1260 Introductory Cree 2. May not be held with the former NATV 1250.

**Equip To:** NATV 1250

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1260 Introductory Cree 2 3 cr**

(Lab required) Continuation of INDG 1250 Introductory Cree 1. Practical course intended for students who are not fluent in Cree. Emphasis will be on oral work for the purpose of learning basic sounds and grammatical patterns. Some attention will be given to the structural differences between Cree and English. Regular attendance and active participation are obligatory. May not be held with the former NATV 1260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 1250 or the former NATV 1250.

**Equip To:** NATV 1260

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1270 Introductory Anishinaabemowin (Ojibwe) 1 3 cr**

Practical course intended for students who are not fluent in Anishinaabemowin (Ojibwe). Emphasis will be on oral work for the purpose of learning basic sounds and grammatical patterns. Some attention will be given to the structural differences between Anishinaabemowin and English. Regular attendance and active participation are obligatory. This course is a prerequisite for INDG 1280 Introductory Anishinaabemowin 2. May not be held with the former NATV 1270.

**Equip To:** NATV 1270

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1280 Introductory Anishinaabemowin (Ojibwe) 2 3 cr**

Continuation of INDG 1270 Introductory Anishinaabemowin (Ojibwe) 1. Practical course intended for students who are not fluent in Anishinaabemowin. Emphasis will be on oral work for the purpose of learning basic sounds and grammatical patterns. Some attention will be given to the structural differences between Anishinaabemowin and English. Regular attendance and active participation are obligatory. May not be held with the former NATV 1280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 1270 or the former NATV 1270.

**Equip To:** NATV 1280

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1300 Selected Topics in Introductory Indigenous Language 3 cr**

An introduction to an Indigenous language in Canada. Depending on the instructor, this course may have a field component. The content of this course may vary. Students can earn multiple credits for this course only when the topic subtitle is different. May not be held with the former NATV 1300 when the subtitle is the same.

**Mutually Exclusive:** NATV 1300

**Attributes:** Humanities, Recommended Intro Courses

### **INDG 1310 Introductory Anishinaabemowin (Ojibwe) Immersion 3 cr**

Practical course intended for beginner level students who have no knowledge of Anishinaabemowin (Ojibwe). This course uses immersion methodologies, so very little English is used in the instruction. Emphasis will be on oral work for the purpose of learning very basic communication skills in Ojibwe. Regular attendance and active participation are obligatory. May not be held with the former NATV 1310.

**Equip To:** NATV 1310

**Attributes:** Humanities, Recommended Intro Courses

**INDG 1320 Anishinaabemowin (Ojibwe) Literacy for Fluent Speakers 3 cr**

Practical course intended for students who are fluent Anishinaabemowin speakers that are not literate in Ojibwe. Emphasis will be on reading and in writing in the Double Vowel Ojibwe Orthography. Regular attendance and active participation are obligatory. May not be held with the former NATV 1320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Equiv To:** NATV 1320

**Attributes:** Humanities, Recommended Intro Courses

**INDG 2000 Selected Topics in Indigenous Studies 3 cr**

The content of this course will vary. Depending on instructor, this course may have a field component. Contact the Department of Indigenous Studies for details. Students can earn multiple credits for this course only when the topic subtitle is different. May not be held with the former NATV 2000 when the topic subtitle is the same.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [INDG 1220 or the former NATV 1220] or [INDG 1240 or the former NATV 1240] or written consent of department head.

**Mutually Exclusive:** NATV 2000

**Attributes:** Humanities

**INDG 2012 Indigenous History in Canada 6 cr**

A historical survey of Indigenous peoples in Canada from early times to the present. The course will cover pre-contact peoples, responses to the European arrival, military alliances, the fur trade, the Métis, treaties, government policies and Indigenous responses, and cultural resurgence and political organizing since 1945. Also offered as HIST 2010. May not be held with any of: HIST 2010, the former HIST 2280, the former NATV 2012.

**Equiv To:** HIST 2010, NATV 2012

**Mutually Exclusive:** HIST 2280

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**INDG 2020 The Métis in Canada 3 cr**

A history of the Métis in Canada. Also offered as HIST 2020. May not be held with any of: HIST 2020, the former NATV 2020.

**Equiv To:** HIST 2020, NATV 2020

**Attributes:** Humanities, Written English Requirement

**INDG 2030 Working with Indigenous Elders 3 cr**

This course provides an opportunity for students to develop culturally relevant community service skills in Indigenous Studies and to acquire an understanding of traditional teachings by Elders from the Cree and Anishinaabe (Ojibwe) traditions. The course normally includes participation in the annual Elders and Traditional Teachers Gathering conference. May not be held with any of: the former NATV 2000 when titled "Working with Elders", the former NATV 2030.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor or department head.

**Equiv To:** NATV 2030

**Mutually Exclusive:** NATV 2000

**Attributes:** Humanities

**INDG 2040 The Dakota, Lakota, and Nakota Nations 3 cr**

An interdisciplinary study of the history and traditional cultures of the Indigenous Peoples of the Northern Plains. May not be held with the former NATV 2040.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Attributes:** Humanities

**INDG 2050 Methods in Indigenous Studies 3 cr**

This course introduces students to a survey of core methods used by Indigenous Studies scholars. Methods that will be covered include archival, mapping, oral history and interviewing, data organization, critical statistical literacy, and research creation.

**Attributes:** Humanities

**INDG 2060 Eastern Woodlands Encounters Columbus to Confederation 3 cr**

An interdisciplinary study of the history and traditional cultures of the Indigenous peoples of the Great Lakes and Maritimes. Emphasis will be on the Anishinaabe (Ojibway, Saulteaux), Haudenosaunee (Iroquois Confederacy) and Maritime Algonquin Nations. May not be held with the former NATV 2060.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of department head.

**Equiv To:** NATV 2060

**Attributes:** Humanities

**INDG 2070 Cree, Innu, and Dene Nations 3 cr**

This course will examine the subsistence organization, social organization and cosmology of both the Cree and Dene. We will further examine the history of the Indigenous-European encounter and the impact of colonialism on contemporary political and land rights struggles. While we will consider the region as a whole, we will specifically focus on the James Bay Cree and Rock Cree of Northern Manitoba, and secondly on the Saisi Dene, north of the Churchill River. This course may include a field trip component. May not be held with the former NATV 2070.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of department head.

**Equiv To:** NATV 2070

**Attributes:** Humanities

**INDG 2080 Inuit Society and Culture 3 cr**

An examination of the subsistence organization, social organization, cosmology and ceremonies of Inuit from a regional and comparative perspective. While this course will focus on Eastern Arctic Inuit comparison will also be made to Greenlanders, Inuvialuit, Inupiat and Yup'ik. We will conclude the course by examining colonial history and the rise of Nunavut. The course may include a field trip component. May not be held with the former NATV 2000 when titled "Inuit Society and Culture" or the former NATV 2080.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of department head.

**Equiv To:** NATV 2080

**Mutually Exclusive:** NATV 2000

**Attributes:** Humanities

**INDG 2100 Indigenous Spirituality 3 cr**

This course allows students to work with Indigenous elders or traditional teachers, exposing them to cultural and spiritual concepts. Emphasis is on Anishinaabe or Cree teachings, though other First Nations approaches may be offered. This course may include a field trip component. May not be held with any of: the former NATV 2000 when titled "Indigenous Wisdom and Spirituality", the former NATV 2100, the former NATV 3000 when titled "Indigenous Wisdom and Spirituality."

**Equiv To:** NATV 2100

**Mutually Exclusive:** NATV 2000, NATV 3000

**Attributes:** Humanities

**INDG 2110 Introduction to Indigenous Community Development 3 cr**

Community development is the main strategy available for achieving the level of governance that most Indigenous communities seek. It involves a plan that captures the spirit of a community and stirs the imagination of the members. Obstacles include lack of time, resources, vision and understanding of what a community plan for development can accomplish. This course will examine community development within an Indigenous context. May not be held with any of: the former NATV 2000 when titled "Introduction to Indigenous Community Development," the former NATV 2110.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of department head.

**Equiv To:** NATV 2110

**Mutually Exclusive:** NATV 2000

**Attributes:** Humanities, Written English Requirement

**INDG 2220 Indigenous Societies and the Political Process 3 cr**

An analysis of contemporary Canadian (and U.S.) political and administrative processes as they affect Indigenous people. Depending on instructor, this course may have a field trip. Contact the Department of Indigenous Studies for details. May not be held with the former NATV 2220.

**Equiv To:** NATV 2220

**Attributes:** Humanities

**INDG 2252 Intermediate Cree 1 3 cr**

(Lab required) The course is intended for students who have limited literal and verbal fluency in the Cree language. Focus will be the use of verbs in the first and second person plurals in the subjunctive form. Emphasis will also be on oral work (Lab) for the purpose of learning the various patterns of different verbs in the Cree language. Much of lesson content will be based on vocabulary related to the Cree lifestyles and occupations, plus everyday conversations and topics. May not be held with the former NATV 2250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 1260 (or the former NATV 1260) or [Matriculation Cree] or written consent of instructor or department head.

**Mutually Exclusive:** NATV 2250

**Attributes:** Humanities

**INDG 2254 Intermediate Cree 2 3 cr**

(Lab required) The course is a continuation of INDG 2252 intended for students who have some limited literal and verbal fluency in the Cree language. Focus will be the use of verbs in the first and second person plurals in the subjunctive form, plus further application of previous verbs in new advanced levels. Oral work (Lab) will be a huge part of the course to promote more verbal and written use of the language. Concept based vocabulary such as the traditional teachings and values is also introduced and intergraded at the conclusion of the course. May not be held with the former NATV 2250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 2252 or [Matriculation Cree] or written consent of instructor or department head.

**Mutually Exclusive:** NATV 2250

**Attributes:** Humanities

**INDG 2272 Intermediate Anishinaabemowin (Ojibwe) 1 3 cr**

This course is a continuation of Introductory Anishinaabemowin (Ojibwe) 1 and 2 and the entry level course for fluent speakers. It focuses on development of conversational fluency, Anishinaabemowin orthography, composition and translation. May not be held with any of: the former NATV 2270, the former NATV 2272.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1280 or the former NATV 1280] or [Matriculation Anishinaabemowin] or written consent of instructor.

**Equiv To:** NATV 2272

**Mutually Exclusive:** NATV 2270

**Attributes:** Humanities

**INDG 2274 Intermediate Anishinaabemowin (Ojibwe) 2 3 cr**

This course is a continuation of Intermediate Anishinaabemowin (Ojibwe) 1. It focuses on the further development of conversational fluency, Anishinaabemowin orthography, and translation and also offers an introduction to the linguistic structure of Anishinaabemowin. May not be held with any of: the former NATV 2270, the former NATV 2274.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 2272 or the former NATV 2272 or written consent of instructor or department head.

**Equiv To:** NATV 2274

**Mutually Exclusive:** NATV 2270

**Attributes:** Humanities

**INDG 2276 Intermediate Anishinaabemowin (Ojibwe) Immersion 3 cr**

Practical course intended for students who are not yet fully proficient in Anishinaabemowin (Ojibwe). Emphasis will be on oral work for the purpose of improving fluency. This course will use immersion methods and so all instruction will be in Ojibwe. Regular attendance and active participation are obligatory. May not be held with the former NATV 2276.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 1280 (or the former NATV 1280) or INDG 1310 (or the former NATV 1310) or written consent of instructor.

**Equiv To:** NATV 2276

**Attributes:** Humanities

**INDG 2300 Cree Literature 3 cr**

A survey of Cree literature based on the extensive study of particular texts in cultural, historical and spiritual contexts. May not be held with the former NATV 2300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 2300

**Attributes:** Humanities

**INDG 2310 Anishinaabe (Ojibwe) Literature 3 cr**

A survey of Anishinaabemowin (Eastern, Western, Chippewa, Saulteaux, Odawa, others) literature based on the extensive study of particular texts in cultural, historical and spiritual contexts. May not be held with the former NATV 2310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 2310

**Attributes:** Humanities

**INDG 2410 Indigenous Literature in Canada 3 cr**

A study of literature by and about Indigenous peoples in Canada, Indigenous oral tradition, personal narratives, protest literature, poetry, plays and novels will be explored to give an appreciation of Indigenous philosophies, experiences, traditions and cultures. May not be held with the former NATV 2410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 2410

**Attributes:** Humanities

**INDG 2420 Inuit Literature in Translation 3 cr**

An examination of various literary forms produced by Inuit including oral tradition and songs, life histories, contemporary novels and modern political writings. May not be held with the former NATV 2420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor

**Equiv To:** NATV 2420

**Attributes:** Humanities

**INDG 2430 Indigenous Women's Stories 3 cr**

This course will investigate through the media of film and literature, including life writing, fiction, creative non-fiction and poetry, the experiences of Indigenous women in North America, particularly Canada, as articulated in their own voices. Also offered as WOMN 2430. May not be held with any of: WOMN 2430, the former NATV 2430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) or INDG 1240 (or the former NATV 1240)] or [WOMN 1500 or WOMN 1600] or written consent from either the Women's and Gender Studies Coordinator or Indigenous Studies Department Head.

**Equiv To:** NATV 2430, WOMN 2430

**Attributes:** Humanities

**INDG 2450 Images of the "Indian" in North American Society 3 cr**

This course will trace the portrayal of Indigenous peoples 1492 to the present. Emphasis will be on material and theoretical depictions, and will require reading as well as study of art pieces, tourist objects, cartoons, movies and so forth. May not be held with the former NATV 2450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 2450

**Attributes:** Humanities

**INDG 2510 Indigenous Experience in the U.S. to 1860 3 cr**

This course is a survey of the Indigenous experience in the U.S. from contact to 1860. The participation of Indigenous nations in the political and military conflicts leading to American Independence will be highlighted as well as the development of Federal Indian Policy as the United States struggled to create its own identity. May not be held with the former NATV 2510.

**Equiv To:** NATV 2510

**Attributes:** Humanities

**INDG 2520 Indigenous Experience in the U.S. 1860-Present 3 cr**

This course will examine the historical experience of the Indigenous peoples in North America with respect to their cultures and the policies developed in the United States to force detribalization and assimilation from 1860 to the present. May not be held with the former NATV 2520.

**Equiv To:** NATV 2520

**Attributes:** Humanities

**INDG 2530 Introduction to Indigenous Theory 3 cr**

This course will address the ways that Indigenous worldviews constitute theoretical approaches and alternative methodologies to address issues of Indigenous history, politics, and literature, and how they relate to notions of Indigenous self-determination, feminism(s), cultural production, gender, as demonstrated in scholarly and theoretical texts, film, personal narratives, and fiction. May not be held with the former NATV 2530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 2530

**Attributes:** Humanities

**INDG 2540 Indigenous in the City 3 cr**

This course introduces students to the field of Urban Indigenous Studies through studying Indigenous-settler relations in the urban context. This course considers how cities are dynamic places shaped by Indigenous and settler societies, and how cities have, in turn, shaped Indigenous Peoples and citizens of first world settler-colonial nation-states. May not be held with the former NATV 2540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)].

**Equiv To:** NATV 2540

**Attributes:** Humanities

**INDG 2630 Indigenous Feminisms 3 cr**

With reference to scholarship, activism, and literary, narrative, and/or creative works, this course critically engages differences and shared priorities across Indigenous feminisms past and present. Also offered as WOMN 2630. May not be held with any of: WOMN 2630, the former NATV 2630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) or INDG 1240 (or the former NATV 1240)] or [WOMN 1500 or WOMN 1600] or written consent from either the Women's and Gender Studies Coordinator or Indigenous Studies Department Head.

**Equiv To:** NATV 2630, WOMN 2630

**Attributes:** Humanities

**INDG 3000 Selected Topics 3 cr**

The content of this course will vary. Contact the department for a course description. Students can earn multiple credits for this course only when the topic subtitle is different. May not be held with the former NATV 3000 when the topic subtitle is the same.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [(INDG 1220 or the former NATV 1220) and (INDG 1240 or the former NATV 1240)] or written consent of department head.

**Mutually Exclusive:** NATV 3000

**Attributes:** Humanities

**INDG 3100 Indigenous Healing Ways 3 cr**

This course allows students to work with Indigenous elders or traditional teachers on concepts of healing and wellness. Emphasis is on Anishinaabe or Cree healing practices, though other First Nations approaches may be offered. This course may include a field trip component. May not be held with any of: the former NATV 3000 when titled "Exploring Indigenous Healing," the former NATV 3100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 2100 (or the former NATV 2100) or written consent of the instructor.

**Equiv To:** NATV 3100

**Mutually Exclusive:** NATV 3000

**Attributes:** Humanities

**INDG 3120 Exploring Indigenous Economic Perspectives 3 cr**

Explore the impact of legal, constitutional and governance issues on the internal and external operating environment affecting Indigenous economic development. Current strategies for successful partnerships between industry and Indigenous peoples will also be examined. May not be held with any of: ECON 2350, the former IDM 3000, the former NATV 3120, the former NATV 4310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3120

**Mutually Exclusive:** ECON 2350, IDM 3000, NATV 4310

**Attributes:** Humanities

**INDG 3140 Indigenous Resistance Literature 3 cr**

This course will trace and explore the history and practice of Indigenous resistance literature in Canada. Attention will be given to political and creative writing in contrapuntal response to the Canadian colonial situation. Classes will be based largely on seminar discussions and readings. May not be held with the former NATV 3140.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 or the former NATV 1200] or [(INDG 1220 or the former NATV 1220) and (INDG 1240 or the former NATV 1240)]

**Equiv To:** NATV 3140

**Attributes:** Humanities

**INDG 3150 Residential School Literature 3 cr**

This course focuses on the analysis of literary responses to Residential Schools in the form of memoirs, fiction, poetry, and plays; it will also include aesthetic representations of school experiences through other media like film and art. May not be held with the former NATV 3150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3150

**Attributes:** Humanities

**INDG 3160 Fundraising for Indigenous Organizations 3 cr**

This course examines effective fundraising skills as critical for the longevity of many programs in the Indigenous community. While government fundraising is an important source, understanding grantsmanship and other funding strategies are critical for sustained program existence and effective use of scarce human and financial resources. May not be held with any of: the former NATV 3000 when titled "Financing Strategies for Indigenous Non-Profit Initiatives," the former NATV 3160.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3160

**Mutually Exclusive:** NATV 3000

**Attributes:** Humanities

**INDG 3170 Indigenous Peoples and Racism in Canada 3 cr**

This course will trace the historical and colonial roots of racism Indigenous peoples experienced in Canadian history as well as examine its practices in contemporary society and culture. Concepts such as systemic racism, cultural difference and anti-racist education may be explored. Class format will include readings, seminar discussions, some films and lectures. Critical reading and analysis is expected. May not be held with any of: the former NATV 3000 when titled "Racism and Indigenous Peoples," the former NATV 3170.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3170

**Mutually Exclusive:** NATV 3000

**Attributes:** Humanities

**INDG 3180 Advanced Anishinaabemowin (Ojibwe) 1 3 cr**

This course is a continuation of INDG 2274 Intermediate Anishinaabemowin (Ojibwe) 2. Students will learn advanced verb forms, new vocabulary, and to speak, read and write Anishinaabemowin. May not be held with the former NATV 3180.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 2274 (or the former NATV 2274) or written consent of the instructor.

**Equiv To:** NATV 3180

**Attributes:** Humanities

**INDG 3190 Advanced Anishinaabemowin (Ojibwe) 2 3 cr**

Continuation of INDG 3180 Advanced Anishinaabemowin (Ojibwe) 1. Students will learn advanced verb forms, new vocabulary, and to speak, read and write Anishinaabemowin. May not be held with the former NATV 3190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 3180 (or the former NATV 3180) or written consent of the instructor.

**Equiv To:** NATV 3190

**Attributes:** Humanities



**INDG 3222 Structure of Anishinaabemowin (Ojibwe) Language 3 cr**

A detailed structural analysis of Anishinaabe (Ojibwe) with special attention to the problem of dialect variation and to the contrastive analysis of Anishinaabemowin and English. May not be held with any of: INDG 3224, LING 3320, the former NATV 2330, the former NATV 3222, the former NATV 3224.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 2274 (or the former NATV 2274) or the former NATV 2270 or written consent of instructor

**Equiv To:** LING 3320, NATV 3222

**Mutually Exclusive:** INDG 3224, NATV 2330, NATV 3224

**Attributes:** Humanities

**INDG 3224 Structure of the Cree Language 3 cr**

A detailed structural analysis of Cree with special attention to the problem of dialect variation and to the contrastive analysis of Cree and English. May not be held with any of: INDG 3222, LING 3320, the former NATV 2320, the former NATV 3222, the former NATV 3224.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 2252 and INDG 2254 (or the former NATV 2250) or written consent of the instructor.

**Equiv To:** LING 3320, NATV 3224

**Mutually Exclusive:** INDG 3222

**Attributes:** Humanities

**INDG 3240 Indigenous Medicine and Health 3 cr**

The health, disease, and medical practices of North American Indigenous peoples. A survey of the health and health care of North American Indigenous peoples from pre-contact to modern times. Special attention will be paid to traditional concepts of health and healing practices. May not be held with the former NATV 3240.

**Equiv To:** NATV 3240

**Attributes:** Humanities

**INDG 3270 The Métis Nation: The Modern Era 3 cr**

A study of the dispossession of the Métis Nation after 1870, their resurgence in the 1950s and contemporary issues affecting Métis people in Canada. Also offered as HIST 3272. May not be held with any of: HIST 3272, the former NATV 3270.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of department head.

**Equiv To:** HIST 3272, NATV 3270

**Attributes:** Humanities

**INDG 3280 Indigenous Peoples and the Canadian Justice System 3 cr**

A study of Indigenous peoples' relationships to civil and criminal law in modern Canadian society. May not be held with the former NATV 3280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of department head.

**Equiv To:** NATV 3280

**Attributes:** Humanities

**INDG 3290 Independent Research 3 cr**

Supervised research or field work. Results will be presented in a form appropriate to the subject of study. Written consent of department head, based on a written research proposal, must be obtained before registration. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. May not be held with the former NATV 3290 when the topic subtitle is the same.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Mutually Exclusive:** NATV 3290

**Attributes:** Humanities

**INDG 3300 Indigenous Language Planning and Development 3 cr**

The social and political setting of the Indigenous languages in North America. Issues and methods in language policy development, maintenance, standardization, and innovation. May not be held with the former NATV 3300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of "C" or better in six credit hours of Indigenous Languages at the second year level.

**Equiv To:** NATV 3300

**Attributes:** Humanities

**INDG 3310 Canadian Law and Indigenous Peoples 3 cr**

A survey of laws relating to Indigenous peoples in Canada. Topics will include legal aspects of Indigenous title, First Nations treaties, First Nation and Métis land claims, the Indian Act, hunting and fishing rights, self-government, and constitutional issues. May not be held with the former NATV 3310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3310

**Attributes:** Humanities

**INDG 3330 Indigenous People, Science and the Environment 3 cr**

This course will examine current Indigenous environmental and development issues both locally and internationally. The basic principles of Indigenous philosophy and how present forms of development on Indigenous land has conflicted with this philosophy will be examined. May not be held with the former NATV 3330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240) or written consent of instructor.

**Equiv To:** NATV 3330

**Attributes:** Humanities

**INDG 3350 Indigenous Organizations 6 cr**

A study of local, regional and national Indigenous organizations in contemporary North America and their interaction with government and private agencies. A field component may be included depending on instructor. Contact the Department of Indigenous Studies for details. May not be held with any of: the former NATV 3320, the former NATV 3350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3350

**Mutually Exclusive:** NATV 3320

**Attributes:** Humanities

**INDG 3360 Indigenous Women in Canada 3 cr**

This course explores and critically examines from interdisciplinary and post-colonial perspectives historical and contemporary processes, representation, experiences and social issues specific to Indigenous women in Canada. May not be held with the former NATV 3360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3360

**Attributes:** Humanities

**INDG 3370 Political Development in the North 3 cr**

An examination of historical and contemporary political processes in Nunavut, Northwest Territories, and Yukon including the negotiation and implementation of Indigenous land claims. May not be held with the former NATV 3370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3370

**Attributes:** Humanities

**INDG 3380 Gender and Indigenous Societies 3 cr**

An examination of the theoretical issues that surround the cultural construction of Indigenous gender leading into detailed ethnographic and historical case studies. May not be held with the former NATV 3380.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 3380

**Attributes:** Humanities

**INDG 4100 Seminar in Advanced Anishinaabemowin (Ojibwe) Language Studies 3 cr**

This course will further investigate the grammar of the language. Various types of stories in different dialects will be used to illustrate the complexities of Anishinaabemowin. The students will translate English stories into Anishinaabemowin. The students will also learn to transcribe oral stories in Anishinaabemowin and translate them. May not be held with the former NATV 4100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 3190 (or the former NATV 3190) or written consent of the instructor.

**Equiv To:** NATV 4100

**Attributes:** Humanities

**INDG 4110 Algonquin Creative Writing 3 cr**

This course is intended for students who are fluent and literate in Ojibwe, Cree or Ojicree or have taken Intermediate or Advanced level Ojibwe. Emphasis will be on learning the principles of storytelling, writing compositions in an Algonquian language and editing. May not be held with the former NATV 4110.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: INDG 3190 (or the former NATV 3190) or written consent of the instructor.

**Equiv To:** NATV 4110

**Attributes:** Humanities

**INDG 4200 First Nations' Government 3 cr**

A review and critical examination of the evolution of First Nations' self-government with a focus on contemporary issues, models and trends. May not be held with the former NATV 4200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Equiv To:** NATV 4200

**Attributes:** Humanities

**INDG 4210 Seminar in Contemporary and Historical Métis Issues 3 cr**

A study of the literature, both primary and secondary, dealing with the Métis people in Canada. May not be held with the former NATV 4210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Equiv To:** NATV 4210

**Attributes:** Humanities

**INDG 4220 Environment, Economy and Indigenous Peoples 3 cr**

An analysis of sustainable development issues discussed within a cultural context. Depending on the instructor, this course may have a field component. Contact the Department of Indigenous Studies for details. May not be held with the former NATV 4220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Equiv To:** NATV 4220

**Attributes:** Humanities

**INDG 4230 Traditional Knowledge and Indigenous Studies Research 3 cr**

A study of issues influencing oral histories, case studies, interviews, and other techniques used in research with Indigenous peoples. Depending on the instructor, this course may have a field component. Contact the Department of Indigenous Studies for details. May not be held with the former NATV 4230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Equiv To:** NATV 4230

**Attributes:** Humanities

**INDG 4240 Arctic Lifestyles 3 cr**

An interdisciplinary study of the interrelationships between culture, economy, and ecology in the Arctic region. Depending on instructor, this course may have a field component. Contact the Department of Indigenous Studies for details. May not be held with the former NATV 4240.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Equiv To:** NATV 4240

**Attributes:** Humanities

**INDG 4250 Indigenous Identities 3 cr**

An interdisciplinary study of Indigenous values, cultures and contemporary identities with emphasis on the impact of colonization. May not be held with the former NATV 4250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 4250

**Attributes:** Humanities

**INDG 4280 Missionaries, Colonialism, and Indigenous People 3 cr**

A study of Indigenous responses to Christian missions with a particular emphasis on resistance, syncretism, and "prophet" movements. May not be held with the former NATV 4280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** NATV 4280

**Attributes:** Humanities

**INDG 4290 Independent Research 3 cr**

Supervised research or field work. Results will be presented in a form appropriate to the subject of study. The course content may vary.

Students can earn multiple credits for this course only when the topic subtitle is different. May not be held with the former NATV 4290 when the topic subtitle is the same.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor, based on a written research proposal, must be obtained before registration.

**Mutually Exclusive:** NATV 4290

**Attributes:** Humanities

**INDG 4300 Advanced Selected Topics in Indigenous Studies 3 cr**

The course content will vary from year to year. Students can earn multiple credits for this course only when the topic subtitle is different. Contact the Department for a course description. May not be held with the former NATV 4300 when the topic subtitle is the same.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: INDG 2530 or the former NATV 2530 or written consent of department head.

**Mutually Exclusive:** NATV 4300

**Attributes:** Humanities

**INDG 4320 Indigenous Economic Leadership 3 cr**

An analysis of current leadership strengths and challenges facing Indigenous organizations. Out of this analysis will come understanding of strategies for working effectively with Indigenous organizations. May not be held with any of: the former NATV 4230, the former IDM 4090.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 1200 (or the former NATV 1200)] or [INDG 1220 (or the former NATV 1220) and INDG 1240 (or the former NATV 1240)] or written consent of instructor.

**Equiv To:** IDM 4090, NATV 4320

**Attributes:** Humanities

**INDG 4330 Indigenous Aesthetics 3 cr**

This course will be centered on Indigenous philosophies and aesthetic theories regarding literature, film, theatre and visual arts produced by Indigenous writers, artists and filmmakers in Canada with special emphasis on conceptualizations of an oral "communitist," activist and resistance aesthetics. May not be held with the former NATV 4330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Equiv To:** NATV 4330

**Attributes:** Humanities

**INDG 4340 Representation and Discourse 3 cr**

This course examines the discourse of representation surrounding Indigenous peoples and Canada's historical and cultural productions. Although the focus is on Canadian material and experience, the course draws on international post-colonial approach in the critical study of archival and historical records, literary works and contemporary Indigenous expressions. Method of study includes historiography, film and literary criticism and post-colonial theory. May not be held with the former NATV 4340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [INDG 2410 or the former NATV 2410] or written consent of instructor.

**Equiv To:** NATV 4340

**Attributes:** Humanities

## Intensive English Program (IEP)

IEP 1500 English - Beginner II 0 cr

IEP 2000 English - Intermediate I 0 cr

IEP 2500 English - Intermediate II 0 cr

IEP 3000 English - Advanced I 0 cr

IEP 3500 English - Advanced II 0 cr

IEP 4000 English - Advanced III 0 cr

## Interdisciplinary Management (IDM)

IDM 1010 Communication for Career Management 1.5 cr

In this course, students will build foundational skills to enable them to design a career plan and identify strategies to achieve their career goals. Topics covered will be fundamentals of career management including, career assessment, identifying strengths and motivators, career goal setting, exploring career options through employment research, résumé and cover letter writing, interview preparation, job search strategies, networking, salary negotiations, and using social media to manage one's career. This course is restricted to Asper students.

IDM 1020 Data Software for Business 1.5 cr

This course teaches contemporary data software skills that are widely used by businesses for managing and analyzing data. The course will focus more on advanced skills such as mathematical and statistical calculations, financial functions, pivot tables, macros, linking different data files, and creating graphs and charts.

IDM 2010 Indigenous Peoples and Canadian Business 3 cr

(Lab required) This course will provide business students with the foundational knowledge necessary to develop and maintain positive business relationships with the Indigenous Peoples of Canada. An overview of the emerging and rapidly growing Indigenous economy in Canada will be examined. Students will learn about the past, present, and future aspects of Indigenous peoples and settler society, and how these shape Indigenous business and economic development. The course will encompass treaty-making relationships, assimilation attempts, reconciliation, and a future-oriented state of a reconciled Canada. Economic and social contributions of Indigenous businesses will also be discussed. Course is restricted to students in Year 2 and above.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of: GMGT 1010, GMGT 1011, INDG 1200 (the former NATV 1200), or INDG 1220 (the former NATV 1220), and a minimum of 45 credit hours of university level courses.

**IDM 2020 Introduction to Business Analytics 3 cr**

This course introduces students to data analytics applications in business contexts. It discusses the importance of evidence-based decision making, the process of data analysis, legal and ethical issues of privacy, and provides an overview of techniques and tools used for business analytics. It includes hands-on exercises of data visualization in business contexts using contemporary software and techniques. May not be held with MIS 3010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (STAT 1000 or STAT 1001 or STAT 1150) and IDM 1020, or permission from the Asper Undergraduate Program Office.

**Mutually Exclusive:** MIS 3010

**IDM 2982 Co-op Work Term 1 1 cr**

Work assignment in business, industry, or government for students registered in the Asper School of Business co-operative option. For Asper students only. May not be held with IDM 2983 or the former IDM 2980.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: IDM 1010 and written permission from the Asper School of Business Co-operative Education Office.

**Equiv To:** IDM 2983

**Mutually Exclusive:** IDM 2980

**IDM 3010 Sustainable Business 3 cr**

This course presents sustainable business theory and best practice from a holistic and integrative perspective. A sustainable approach is presented for each of the key functions of business in a way that highlights how they fit with each other and with the social and ecological environment. The course focuses on how business can sustainably create positive social and ecological impact.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisites: (ACC 1110 (D) or ACC 1111 (D)) and (FIN 2200 (D) or FIN 2201 (D) and (HRIR 2440 (D) or HRIR 2441 (D)) and (MKT 2210 (D) or MKT 2211 (D)) and (SCM 2160 (D) or SCM 2161 (D)).

**IDM 3982 Co-op Work Term 2 1 cr**

Work assignment in business, industry, or government for students registered in the Asper School of Business co-operative option. For Asper students only. May not be held with the former IDM 3980.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: IDM 2982 with a minimum grade of C and written permission from the Asper School of Business Cooperative Education Office.

**Mutually Exclusive:** IDM 3980, IDM 3983

**IDM 4050 Readings in Management 3 cr**

Supervised readings in one of the areas of Management. Students are limited to a maximum of six hours of readings and research courses.

**Mutually Exclusive:** ACT 4010

**IDM 4070 Management Research 1 3 cr**

Individually supervised preparation of a detailed research proposal for an advanced study in one of the areas of Management. Students are limited to a maximum of six hours of readings and research courses.

**IDM 4080 Management Research 2 3 cr**

Individually supervised research and preparation of a paper in one of the areas of Management based on the proposal developed in IDM 4070. Students are limited to a maximum of six hours of readings and research courses.

**IDM 4982 Co-op Work Term 3 1 cr**

Work assignment in business, industry, or government for students registered in the Asper School of Business co-operative option. For Asper students only. Not to be held with the former IDM 4980.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: IDM 3982 with a minimum grade of C and written permission from the Asper School of Business Co-operative Education Office.

**Mutually Exclusive:** IDM 4980, IDM 4983

## International Business (INTB)

**INTB 2200 International Management 3 cr**

Analysis of the practice of management in an international setting. Examines the cultural, political, and economic environments which influence managerial decision-making in an international context.

## Italian (ITLN)

**ITLN 1080 Introductory Italian 6 cr**

An introduction to the Italian language for students with little or no knowledge of Italian. The course emphasizes the learning and practise of vocabulary, grammar and the development of both written and spoken Italian. A language laboratory will help students practise and improve their oral Italian. Not open to students who have previously obtained credit in ITLN 2080.

**Attributes:** Humanities, Recommended Intro Courses

**ITLN 2080 Intermediate Italian 6 cr**

This course consists of a thorough review of grammatical structures for students with previous knowledge of Italian. Readings of a number of twentieth-century Italian authors are used as a basis for discussion. Language study and practise is emphasized in the classroom and in the language laboratory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ITLN 1080] or written consent of department head.

**Attributes:** Humanities

**ITLN 2090 Speaking in Italian 3 cr**

Offers extensive practice in idiomatic spoken language. Grammar review with a focus on oral fluency. Conversation will be based on social, political, and cultural aspects of Italian life.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ITLN 1080] or written consent of department head.

**Attributes:** Humanities

**ITLN 2100 Writing in Italian 3 cr**

This course strengthens writing skills in Italian, with special emphasis on the grammatical structure of the Italian language for effective communication.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ITLN 1080] or written consent of department head.

**Attributes:** Humanities

**ITLN 2200 Let's Get Graphic: Italian through Graphic Novels 3 cr**

In this language course you will learn the four basic skills (speaking, listening, reading and writing) in the context of popular fumetti (graphic novels) in Italian culture. By the end of the course you will be able to describe people, events and situations, in the present, past and future, and you will have acquired the necessary vocabulary to communicate about everyday situations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ITLN 1080] or written consent of department head.

**Attributes:** Humanities

**ITLN 2300 Special Studies in Italian 3 cr**

The content of this course will vary from year to year depending on the needs and interests of instructors and students. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ITLN 1080 or written consent of department head.

**Attributes:** Humanities

**ITLN 3050 Italian Through Literature 3 cr**

Through the study of selected works and authors, students will gain a better understanding of Italy's history and culture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ITLN 2080] or [ITLN 2090 and ITLN 2100] or written consent of department head.

**Attributes:** Humanities

**ITLN 3060 Italian Through Film 3 cr**

The aim of this course is to better understand modern and contemporary Italy, by viewing, meditating upon and discussing those films produced in Italy which most reflect the country, its language and culture, and its literature.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ITLN 2080] or [ITLN 2090 and ITLN 2100] or written consent of department head.

**Attributes:** Humanities

**ITLN 3760 Italian Translation Workshop 3 cr**

A practical course on translating many types of text from and into Italian, as well as terminology development. Special emphasis on the use of the Internet and other computer-mediated resources.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ITLN 2080] or [ITLN 2090 and ITLN 2100] or written consent of department head.

**Attributes:** Humanities

**ITLN 3770 Modern Italian Usage 3 cr**

Polish your Italian for business and professional work situations from client relations to terminology, including e-mail and Internet. Course will be customized according to students' professional interests.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ITLN 2080] or [ITLN 2090 and ITLN 2100] or written consent of department head.

**Attributes:** Humanities

**ITLN 3780 A Voyage through the Italian Mind: An Italian Culture Course 3 cr**

This course aims to portray what it means to be Italian from an Italian's point of view. You will discover the exciting richness of the people, trends and passions, food, and pop culture of Italy, while also exploring the extraordinary contribution that Italy has made to the world. The course will be taught in English and has no prerequisite.

**Attributes:** Humanities

## Judaic Civilization (JUD)

**JUD 2340 Contemporary Israel 3 cr**

A study of the history and development of modern Israel. Topics discussed include the economic, social, cultural and religious structures of the contemporary Jewish state. Attention will also be focused on the status of Israeli minorities such as Moslems and Christians.

**Attributes:** Humanities

**JUD 2370 Jewish-Gentile Relations 3 cr**

A socio-historical study of the cultural, religious, and intellectual interaction between Jewish and non-Jewish cultures, e.g., the relationship of Judaism with other cultures of the ancient Near East and Hellenism, with medieval and modern Christendom and Islam, and with modern/contemporary secularism.

**Attributes:** Humanities

**JUD 2650 Field Studies in Biblical Lands 6 cr**

Offered as a Travel/Study course, the course consists of an on-campus orientation session followed by a period of travel while visiting and studying at some major sites and points of interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Humanities

**JUD 3010 Topics in Jewish Studies 3 cr**

An opportunity for the study of selected topics or themes in Jewish Studies. Consult the Judaic Studies program office or website for details. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Humanities

## Kinesio, Phys Ed, & Recreation (KPER)

**KPER 1200 Physical Activity, Health and Wellness 3 cr**

An examination of the importance of physical activity for health and wellness. Provides an overview of the present and recommended levels of physical activity, the factors influencing participation in physical activity, Indigenous peoples' approaches to health, the role of recreation in health and wellness, and individual, organizational and national interventions for increasing physical activity. May not be held with the former PHED 1200 or the former PERS 1200.

**Equiv To:** PERS 1200, PHED 1200

**Attributes:** Recommended Intro Courses

**KPER 1400 Concepts of Recreation and Leisure 3 cr**

The nature and scope of recreation and leisure, the past influences and implications for the future. An overview of the types and roles of various components of the leisure service delivery system. May not be held with the former PERS 1400 or the former REC 1400.

**Equiv To:** PERS 1400, REC 1400

**Attributes:** Recommended Intro Courses

**KPER 1500 Foundations of Physical Education and Kinesiology 3 cr**

An introduction to physical education and kinesiology as a profession and a discipline, including an overview of sub-disciplines, resources, and careers; a personal physical assessment; and principles for achieving physical fitness. This course includes a field trip component. May not be held with the former PERS 1500 or the former PHED 1500.

**Equiv To:** PERS 1500, PHED 1500

**Attributes:** Recommended Intro Courses

**KPER 2000 Special Topics (Introductory) 3 cr**

An introductory examination of selected topics in the fields of kinesiology, physical education and recreation. Topics will vary depending on faculty expertise and student need. This course can be completed as a topics course multiple times under different titles.

**KPER 2120 Academic Skills in Kinesiology and Recreation Management 3 cr**

This course provides interdisciplinary and multidisciplinary academic preparation and communication skills for students pursuing undergraduate degrees from the Faculty of Kinesiology and Recreation Management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 1400 (or the former PERS 1400 or the former REC 1400), or KPER 1500 (or the former PERS 1500 or the former PHED 1500).

**Attributes:** Written English Requirement

**KPER 2170 History of Physical Activity and Leisure 3 cr**

This course examines the post-Confederation history of Canadian sport, physical education, physical fitness and recreation, as well as the growth of public programs. Using the concepts of social class, gender, race, and ethnicity, the focus is on the ways in which Canadian physical activity, recreation, and sport have been organized since Confederation and the processes by which people have fashioned them, within the dynamic of economic, social, and political struggles and changes. May not be held with the former PERS 3170 or the former KIN 3170, or the former PHED 3170, or the former PHED 3070.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [KPER 1200 (or the former PERS 1200, or the former PHED 1200)] and KPER 2120.

**Equiv To:** KIN 3170, PERS 3170, PHED 3070, PHED 3170

**KPER 2200 Planning Principles 3 cr**

While contexts in practice may vary, planning is an essential competency for all professional in recreation, kinesiology, and physical education.

This course emphasizes principles and processes in effective planning, implementation, and evaluation. May not be held with the former PERS 2200 or the former PHED 3080 or the former REC 2530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [KPER 1200 (or the former PERS 1200 or the former PHED 1200)] or [KPER 1400 (or the former PERS 1400 or the former REC 1400)] or [KPER 1500 (or the former PERS 1500 or the former PHED 1500)].

**Equiv To:** PERS 2200

**Mutually Exclusive:** PHED 3080, REC 2530

**KPER 2320 Human Anatomy 3 cr**

(Lab required) Structure of the skeletal, articular, and muscular systems of the human body. May not be held with the former KIN 2320 or the former PHED 2320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 1412 or BIOL 1413 or BIOL 2420, or BIOL 2421 or the former ZOO 1330.

**Equiv To:** KIN 2320, PHED 2320

**Mutually Exclusive:** REHB 1480, REHB 1490, REHB 1500

**KPER 2330 Biomechanics 3 cr**

(Lab required) The mechanical and anatomical analysis of human movement. May not be held with the former KIN 2330 or the former PHED 2330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 2320 (or the former KIN 2320 or the former PHED 2320).

**Equiv To:** KIN 2330, PHED 2330

**Mutually Exclusive:** PHED 2310

**KPER 2350 Introduction to Research 3 cr**

(Lab required) Students will become familiar with the basic principles and methods of research in the humanities, biological, life and social sciences. Students will develop the conceptual foundations and practical skills needed to locate, understand, and evaluate primary research publications. May not hold with the former PERS 3350, the former KIN 3350, the former REC 3350 or the former REC 2010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STAT 1000 (D) or STAT 1001 (D) or STAT 1150 (D).

**Equiv To:** KIN 3350, PERS 3350, REC 2010, REC 3350

**KPER 2540 Psychology of Sport and Physical Activity 3 cr**

This course provides students with an understanding of psychological variables affecting individuals within sporting and activity contexts.

Topics to be explored include motivation, arousal/anxiety, group dynamics and youth involvement in sport. May not be held with the former KIN 2540 or the former PHED 2540.

**Equiv To:** KIN 2540, PHED 2540

**KPER 2700 Motor Control and Learning 3 cr**

(Lab required) Principles underlying human motor performance and motor skill learning. May not be held with the former KIN 3450 or the former PHED 3450.

**Equiv To:** KIN 3450, PHED 3450

**KPER 3100 Inclusive Physical Activity and Leisure 3 cr**

This course introduces the foundations of inclusive physical activity and leisure and the application of this knowledge to individuals from diverse backgrounds and experiences with a focus on people with various forms of impairment. May not hold with the former PERS 3100, the former PHED 3390, or the former REC 3060.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2120.

**Equiv To:** PERS 3100, PHED 3390, REC 3060

**KPER 3140 Health Promotion 3 cr**

An introduction to health promotion with emphasis on the benefits of physical activity for health and wellness, factors influencing participation in physical activity, health promotion strategies, and interventions for increasing physical activity applied at the individual, organizational, and national levels.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [KPER 2200 (or the former PERS 2200)] and [KPER 2350 (or the former PERS 3350 or the former KIN 3350 or the former REC 3350 or the former REC 2010)].

**KPER 3460 Sociology of Physical Activity and Leisure 3 cr**

This course examines sociological factors that influence and shape participation in the areas of physical activity, sport and leisure. The exploration of students' own experiences in this field is emphasized, using an analytical model examining experiences as they arise out of the interplay of social structure and individual agency. May not be held with the former PERS 3460 or the former PHED 3460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2120.

**Equiv To:** PERS 3460, PHED 3460

**KPER 3470 Exercise Physiology 3 cr**

(Lab required) Physiological and functional responses to acute and chronic exercise, focusing on the cardiovascular, respiratory and neuromuscular systems. May not be held with the former KIN 3470, the former PHED 3470, or the former PHED 3430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 1412, (or the former ZOO 1330), or BIOL 1413, or BIOL 2420 (D), (or the former ZOO 2540), or BIOL 2421 (D).

**Equiv To:** KIN 3470, PHED 3430, PHED 3470

**KPER 3512 Principles of Fitness Training 3 cr**

(Lab required) Theoretical concepts of designing programs employing the principles of overload and adaptation are applied over the entire healthy population, from inactive sedentary individuals to elite athletes, for all age groups. May not be held with the former KIN 3512, the former KIN 3090, or the former PHED 3090.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 3470 (or the former KIN 3470, or the former PHED 3470, or the former PHED 3430).

**Equiv To:** KIN 3090, KIN 3512, PHED 3090

**KPER 3550 Growth and Motor Development 3 cr**

Detailed study of physical growth and motor development from conception to adolescence, with implications for physical activity programs. May not be held with the former PHED 2550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2700 (or the former KIN 3450 or the former PHED 3450).

**Equiv To:** PHED 2550

**KPER 3630 Service and Experiential Learning 3 cr**

This service-learning course combines cognitive learning and affective service to enhance student learning by connecting theory with practical experience and thinking with action. In a holistic learning environment, students apply service and experiential learning theories to community issues in physical activity and leisure while reflecting on their experiences and gaining deeper appreciation and skill development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2200 or PERS 2200 or the former PHED 3080 or the former REC 2530.

**KPER 4000 Special Topics 3 cr**

A theoretical and practical examination of selected topics in the fields of recreation, leisure, physical education and kinesiology. Topics will vary depending on faculty expertise and student need. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [KPER 1200 (or the former PERS 1200 or the former PHED 1200)] or [KPER 1400 (or the former PERS 1400 or the former REC 1400)] or [KPER 1500 (or the former PERS 1500 or the former PHED 1500)] or department approval.

**KPER 4020 Philosophy of Physical Activity and Leisure 3 cr**

Issues in sport, physical education and recreation will be examined from a philosophical perspective. May not be held with the former PERS 3340, the former KIN 3340, the former REC 3340, or the former PHED 2340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2120.

**Equiv To:** KIN 3340, PERS 3340, PHED 2340, REC 3340

**KPER 4100 Current Issues 3 cr**

This is a capstone course to be completed in the final term. The course will examine current issues and strategies for addressing themes in the broad fields related to kinesiology, recreation management and physical education. May not be held with the former PERS 4100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 90 credit hours of course work in the BKin or BRMCD degree.

**Equiv To:** PERS 4100

**KPER 4110 The Olympics and the Global Sporting Event 3 cr**

Critical examination of the sporting and cultural significance of the modern Olympic Games and other global events, with emphasis given to the Olympic and Paralympic Games that occur in the year the course is offered. May not be held with the former PERS 4110.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 3460, (or the former PERS 3460 or the former PHED 3460).

**Equiv To:** PERS 4110

**KPER 4310 Physical Activity Counselling 3 cr**

This course introduces students to physical activity counselling and the associated interpersonal and counselling skills as well as the relevant theories that underpin behaviour change and counselling techniques.

Through case studies, readings, research, discussions, simulations, role plays and real counselling work, students will learn, reflect on and practice proven counselling skills to build motivation and facilitate behaviour change. may not be held with the former PERS 4310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [KPER 2540 (or the former KIN 2540 or the former PHED 2540)] or [REC 3180] or [PSYC 2660 (or the former PSYC 3660)].

**Equiv To:** PERS 4310

**KPER 4320 Sport and the Body 3 cr**

A critical analysis of current interdisciplinary topics pertaining to sport and the body. This course tackles difficult and controversial questions related to the active body. May not be held with the former PERS 4320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 3460 (or the former PERS 3460 or the former PHED 3460) or permission of the instructor.

**Equiv To:** PERS 4320

**KPER 4340 Sport, Film and Society 3 cr**

This seminar format course encourages students to use films as "texts" through which important socio-cultural themes related to the study of sport, recreation, physical activity, dance, and physical education can be explored. It builds upon themes explored in courses such as KPER 3460 and uses film as a way to examine the intersections between the representations of key historical and sociological concepts such as class, gender, and race/ethnicity and the representations of sport and the moving body. The course is organized around these themes and includes a variety of film genres, primarily feature films and documentaries. Each seminar includes one or more screening upon which class discussions are based. The course concludes with a screening of the films made by students themselves, a key component of the course evaluation. May not be held with the former PERS 4340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 3460 (or the former PERS 3460 or the former PHED 3460) or permission of the instructor.

**Equiv To:** PERS 4340

**KPER 4600 Directed Study 3 cr**

Completion of an independent study or fieldwork experience, including a major written submission, approved by the department and under the direction of a faculty member. This course can be completed as a topics course multiple times under different titles.

**KPER 4630 Supervised Fieldwork Experience 12 cr**

The fieldwork practicum is a professionally supervised field experience that provides an opportunity to apply knowledge gained in academic courses and exposure to new concepts of professional practice in the fields of physical activity, health and wellness or leisure. Students are placed for a 13-week period of full time work within a suitable agency. This course is evaluated on a pass/fail basis. May not be held with the former PERS 4630, the former REC 3080, the former PHED 4620, or the former KIN/REC 4630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 90 credit hours of course work in the BKin or BRMCD degree and a minimum DGPA of 2.5 and permission of instructor.

**Equiv To:** KIN 4630, PERS 4630, PHED 4620, REC 3080, REC 4630

**KPER 4632 Supervised Fieldwork Experience A 6 cr**

The fieldwork practicum is a professionally supervised field experience that provides an opportunity to apply knowledge gained in academic courses and exposure to new concepts of professional practice in the fields of physical activity, health and wellness or leisure. Students are placed in a professional environment with a mentor/direct supervisor. This course is evaluated on a pass/fail basis. May not be held with the former PERS 4630 or the former KIN 4630 or the former REC 4630 or the former REC 3080 or the former PHED 4620.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 90 credit hours of course work in the BKin or BRMCD degrees and a minimum DGPA of 2.5 and permission of instructor.

**Mutually Exclusive:** KIN 4630, PERS 4630, PHED 4620, REC 3080, REC 4630

**KPER 4634 Supervised Fieldwork Experience B 6 cr**

The fieldwork practicum is a professionally supervised field experience that provides an opportunity to apply knowledge gained in academic courses and exposure to new concepts of professional practice in the fields of physical activity, health and wellness or leisure. Students are placed in a professional environment with a mentor/direct supervisor. This course is evaluated on a pass/fail basis. May not be held with the former PERS 4630 or the former KIN 4630 or the former REC 4630 or the former REC 3080 or the former PHED 4620.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Successful completion of 90 credit hours of course work in the BKin or BRMCD degrees and a minimum DGPA of 2.5 and permission of instructor.

**Mutually Exclusive:** KIN 4630, PERS 4630, PHED 4620, REC 3080, REC 4630

**KPER 4810 Senior Thesis Preparation 3 cr**

An opportunity for continuing FCRM students in 4th year to participate in independent research. Under the supervision of a faculty member, each student will create and defend a research prospectus and literature review, and then develop a methodology to conduct a research study.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 2120 and (KPER 2320 or the former PERS 3550) and a minimum DGPA of 3.0 and approval of instructor.

**KPER 4820 Senior Thesis Research Project 3 cr**

A 4th year research experience involving the delivery and dissemination of a research project under the supervision of a faculty member. Students will create, produce, and defend a written research document building on skills developed in KPER 4810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 4810 and approval of instructor.

## Kinesiology (KIN)

**KIN 2200 Basic Trauma and Life Support 3 cr**

(Lab required) Assessment and management of medical emergencies common to sports. Topics will include on-field primary and secondary surveys, airway management, assessment and management of head, spinal, chest, abdominal and extremity trauma. Open only to Athletic Therapy students or with permission of the instructor. May not be held with the former KIN 3200 or the former PHED 3200.

**Mutually Exclusive:** KIN 3200, PHED 3200

**KIN 2610 Health and Physical Aspects of Aging 3 cr**

An introduction to health, well-being and aging. Emphasis on health as multidimensional including physical, social and mental health. Integration of theory and research in examining selected issues related to health and physical aspects of aging. This is an Option in Aging course and may not be held for credit with PHED 2610 or NURS 2610.

**Equiv To:** NURS 2610, PHED 2610

**KIN 2750 Athletic Therapy Skills 3 cr**

This course will focus upon the theoretical study and practical application of massage therapy (basic and advanced) and sport specific taping, splinting and bracing techniques. The intent of this course is to help prepare students for their future in the profession of Athletic Therapy. May not hold for credit with PHED 2020 or PHED 3180. Open to Athletic Therapy students only.

**Mutually Exclusive:** PHED 2020, PHED 3180

**KIN 3160 Pathology and Sport Medicine 3 cr**

(Lab required) Analysis of types of injuries and emergency procedures, and practical experience in first aid, taping and wrapping, massage, and various preventive techniques. May not be held with the former PHED 3160 or the former PHED 3060.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2320 (or the former KIN 2320 or the former PHED 2320).

**Equiv To:** PHED 3060, PHED 3160

**KIN 3320 Advanced Human Anatomy 3 cr**

(Lab Required) This course will concentrate on the structure and function of the human body's various tissues, organs and systems with particular emphasis upon basic histology, function and gross anatomy. This course will help prepare students who are interested in pursuing careers in Athletic Therapy and Kinesiology. Note: A fieldwork fee is attached to the course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2320 (or the former KIN 2320 or the former PHED 2320).

**KIN 3330 Functional Assessment and Restoration A 3 cr**

(Lab required) General principles of assessment and restoration; assessment of acute and chronic musculo-skeletal injuries of the lower extremity; rehabilitation techniques to ensure full restoration of function. May not be held with KIN 3300 (PHED 3300).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KIN 3320. Corequisite: KIN 3912 or permission of instructor.

**Mutually Exclusive:** KIN 3300, PHED 3300



**KIN 3332 Functional Assessment and Restoration B 3 cr**

(Lab required) Assessment of acute and chronic musculo-skeletal injuries of the upper extremity and spine; rehabilitation techniques to ensure full restoration of function. May not be held with KIN 3300 (PHED 3300).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KIN 3330.

**Mutually Exclusive:** KIN 3300, PHED 3300

**KIN 3400 Therapeutic Modalities 3 cr**

(Lab required) This course will concentrate on the use of therapeutic modalities commonly utilized in the profession of Athletic Therapy. It will introduce the student to various thermal mechanical, and electromagnetic agents used for therapeutic purposes. May not be held with the former PT 2720.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KIN 3320 or permission of instructor.

**Equiv To:** PT 2720

**KIN 3510 Physical Activity and Aging 3 cr**

The study of the aging process and the effects of exercise and lifestyle factors on the health and fitness of the aging adult. This is an Option in Aging course. May not be held with the former KIN 4500 or the former PHED 4500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 3470 (or the former KIN 3470, or the former PHED 3470, or the former PHED 3430), or permission of the instructor.

**Equiv To:** KIN 4500, PHED 4500

**KIN 3700 Advanced Motor Control and Learning 3 cr**

This course focuses on the fundamentals of the nervous system as they relate to human movement and the application to motor control and learning. Emphasis is placed on an advanced understanding and application of theories and models of motor control and learning, including the introduction to how different components of the central and peripheral nervous systems contribute to movement.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2700 (or the former KIN 3450 or the former PHED 3450).

**KIN 3912 Athletic Therapy Practicum 4 cr**

To provide clinical and on-field internship experiences on campus and in the community for prospective Athletic Therapy candidates. This course is evaluated on a pass/fail basis. May not hold for credit with the former PHED 3910 or the former KIN 3910.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [KIN 2750 (or the former PHED 2020 or the former PHED 3180)] and [KIN 2200 (or the former KIN 3200 or the former PHED 3200)].

Co-requisite: KIN 3330 or permission of instructor.

**Mutually Exclusive:** KIN 3910, PHED 3910

**KIN 3914 Clinical Block Placement 2 cr**

Clinical internship experiences on campus and in the community for prospective Athletic Therapy candidates. This course is evaluated on a pass/fail basis. May not be held for credit with KIN 3910 (PHED 3910).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (KIN 3332, KIN 3400, and KIN 3912) or permission of instructor.

**KIN 4040 Advanced Exercise and Health Psychology 3 cr**

This course provides students with an advanced understanding of research, theory and contemporary issues in exercise and health psychology. Using a variety of methods, such as case studies, narrative, and research articles, students will learn to critically read and evaluate research in the field. Students will also explain and apply influential theories and models. Contemporary research topics covered in this class include psychological influences on health behaviours, including exercise, as well as the psychological outcomes of these health behaviours.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2540 ( or the former KIN 2540 or the former PHED 2540) or permission of instructor.

**KIN 4060 Drugs and Ergogenic Aids in Sport 3 cr**

A multidisciplinary examination of drugs, hormones, dietary supplement and methods used by athletes in attempting to enhance athletic performance. Ethical concerns and mechanisms of action will be examined for steroids, stimulants, masking agents, blood doping, and hormonal and dietary supplements among others. May not hold for credit with PHED 4060. Recommended prerequisite BIOL 1412 (ZOO 1330) or BIOL 2420 (ZOO 2540).

**Equiv To:** PHED 4060

**KIN 4070 Development and Movement Disorders 3 cr**

This course is designed to provide the student with an understanding of neuroscience as it relates to motor control and learning through consideration of foundational content in how the central and peripheral nervous systems contribute to movement control and the contributions of sensory feedback. The role of the nervous system for motor function will be explored through an understanding of a selection of developmental and acquired neurological disorders. Students will have an opportunity to examine the application of a selection of the content and theories to the study of a sample of neurological and/or developmental disorders. May not be held with the former PERS 4200 when titled "Developmental and Movement Disorders."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2700, or the former KIN 3450, or permission of the instructor.

**Mutually Exclusive:** PERS 4200

**KIN 4160 Advanced Pathology and Sport Medicine 3 cr**

Basic principles of pathology and clinical manifestations of cardiac respiratory, and neurologic disorders. Preventative measures, assessments and treatment methods employed in care of patients with these disorders will also be examined. May not be held for credit with PHED 4050.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [KIN 3160 (or the former PHED 3160, or the former PHED 3060)] and [KIN 3320] and [KPER 3470 ( or the former KIN 3470, or the former PHED 3470, or the former PHED 3430)].

**Equiv To:** PHED 4050

**KIN 4260 Human Factors and Ergonomics 3 cr**

This course reviews principles of human factors and ergonomics and explores the systematic application of human capabilities, limitations and behaviours with regard to the design of usable elements within specific environments. Emphasis is placed on the interactive nature of human-machine systems, the development of ergonomic models, and the techniques used to assess the design of modern work and living environments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2700 (or the former KIN 3450 or the former PHED 3450).

**KIN 4330 Advanced Biomechanics 3 cr**

(Lab required) A biomechanical analysis of the skills and techniques of the major sports, games, and exercises. May not be held with the former PHED 4360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2330 (or the former KIN 2330 or the former PHED 2330 or the former PHED 2310).

**Equiv To:** PHED 4360

**KIN 4370 Physiology of Exercise in Extreme Environments 3 cr**

Learn how humans exercise and work under five environmental extremes: heat, cold, hypobaria (altitude), hyperbaria (under water) and microgravity (space). After learning how each environment limits exercise and poses health risks, students will then apply knowledge of exercise physiology to determine how training and acclimatization can mitigate these limitations to maximize performance. Knowledge attained in this course will be valuable professionally (e.g., providing training for athletes in heat and cold), for personal recreation (e.g., mountaineering, SCUBA diving), or research (e.g., microgravity). May not be held with KPER 4000 or the former PERS 4200 when titled "Physiology of Exercise in Extreme Environments."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KIN 3470.

**Mutually Exclusive:** PERS 4200

**KIN 4400 Therapeutic Exercise Rehabilitation 3 cr**

This course will concentrate on therapeutic exercise for the upper and lower extremities, torso and spine. Content will focus upon using exercise and basic therapy techniques to restore function by addressing deficiencies in range of motion, flexibility, strength, power, endurance, proprioception, coordination, agility and speed. Prerequisites [KIN 3160 (or the former PHED 3160 or the former PHED 3060)] and [KPER 3512 (or the former KIN 3512, or the former KIN 3090, or the former PHED 3090)] and [KIN 3332] or permission of instructor.

**KIN 4460 Fitness Appraisal and Lifestyle Counselling 3 cr**

(Lab required) Theoretical knowledge and practical training related to physical activity, fitness and lifestyle appraisal and counselling. Note: This course prepares students for certification as a Certified Personal Trainer (CPT) by the Canadian Society for Exercise Physiology. B.Kin. students who wish to prepare for certification as a Certified Exercise Physiologist (CEP) by the Canadian Society for Exercise Physiology, should consult the Undergraduate Program Administrator for information. May not be held for credit with PHED 4460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 3470 (or the former KIN 3470 or the former PHED 3470 or the former PHED 3430). Pre- or Co-requisites: [KPER 1200 (or the former PERS 1200 or the former PHED 1200)] and [KIN 3512 (or the former KIN 3090 or the former PHED 3090)]. Requires an active Recreation Services Membership.

**Equiv To:** PHED 4460

**KIN 4470 Advanced Exercise Physiology 3 cr**

An advanced examination of the physiological factors that affect human performance during physical activity. This will include exposure to related research and the development of techniques for its critical assessment. May not be held with PHED 4410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 3470 (or the former KIN 3470, or the former PHED 3470, or the former PHED 3430).

**Equiv To:** PHED 4410

**KIN 4540 Advanced Topics in Sport Psychology 3 cr**

This course will provide the student with a deeper understanding of psychological variables affecting individuals within sport contexts, including an exploration of various research methods and theories/ research related to motivation, youth, and applied work in sport psychology. May not hold with the former PHED 4540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2540 (or the former KIN 2540 or the former PHED 2540).

**Equiv To:** PHED 4540

**KIN 4560 Advanced Fitness Appraisal and Lifestyle Counselling 3 cr**

(Lab required) Advanced theoretical knowledge and experiential learning related to physical activity, fitness and lifestyle assessment, counselling, and exercise prescription for apparently healthy and clinical populations. Prepares students for certification as a Certified Exercise Physiologist (CEP) by the Canadian Society of Exercise Physiology. Requires an active Recreation Services membership. May not be held with the former PHED 4350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [KIN 4460 (or the former PHED 4460)] and [KPER 3512 (or the former KIN 3512, or the former KIN 3090, or the former PHED 3090)].

**Equiv To:** PHED 4350

**KIN 4910 Athletic Therapy Practicum 6 cr**

To provide clinical and on-field internship experiences on campus and in the community for prospective Athletic Therapy candidates. May not be held for credit with PHED 4910. Evaluated pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KIN 3914 (KIN 3910, PHED 3910) and KIN 3320.

**Mutually Exclusive:** PHED 4910

## Labour Studies (LABR)

**LABR 1260 Working for a Living 3 cr**

An introduction to the study of working lives in the contemporary world and the global transformation that has made working for wages central to human existence. Students may not hold credit for both LABR 1260 and the former LABR 1270.

**Equiv To:** LABR 1270

**Attributes:** Social Science, Recommended Intro Courses, Written English Requirement

**LABR 1290 Introduction to the Canadian Labour Movement 3 cr**

An introduction to the development of the contemporary working-class movement in Canada and to workplace issues today.

**Attributes:** Social Science, Recommended Intro Courses, Written English Requirement

**LABR 2100 The Political Economy of Labour 3 cr**

This course examines the dynamics of work organization, the production and reproduction of labour power, labour markets and class conflict in capitalist societies, with attention to contemporary Canada. Students may not hold credit for LABR 2100 and any of: the former LABR 2420 or the former ECON 2420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Mutually Exclusive:** ECON 2420, LABR 2420

**Attributes:** Social Science

**LABR 2110 Special Topics in Labour Studies 3 cr**

This course will vary from term to term depending on the needs of students and the interests of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Social Science

**LABR 2200 Labour History: Canada and Beyond (C) 3 cr**

This course explores the history of working people's struggles, victories and defeats in Canada, with attention to gender, "race" and ethnicity. Topics include the origins and evolution of labour unions and workplace rights and the role of politics and social movements. Also offered as HIST 2200. May not be held with HIST 2200.

**Equiv To:** HIST 2200

**Attributes:** Social Science, Recommended Intro Courses, Written English Requirement

**LABR 2300 Workers, Employers and the State 3 cr**

This course examines the social, economic and political contexts of work and the relations, rules and structures that shape the interactions between workers, employers and the state. Topics include workers' and management rights, the rights, obligations and functions of unions, the legal contexts of labour/management relations, and initiatives for increasing equity. Students may not hold credit for both LABR 2300 and the former LABR 3300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Equiv To:** LABR 3300

**Attributes:** Social Science, Written English Requirement

**LABR 3010 Labour Law 3 cr**

An introduction to legislation and interpretation, legal procedures, and quasi-judicial boards as they concern the organization of trade unions, collective bargaining, settlement of disputes, labour standards, workers' compensation, unemployment insurance and human rights.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LABR 1260 (the former LABR 1270) and LABR 1290] or [HRIR 3450 and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3030 Labour and the Bargaining Process 3 cr**

A course to explain labour's involvement in the negotiation process including the mechanics and the theoretical issues of bargaining. The course focuses on contemporary issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3050 Issues in Occupational Health and Safety and Workers' Compensation 3 cr**

This course will explore historical, legal and political issues surrounding health and safety in Canadian workplaces with an emphasis on Manitoba. It will critically examine both the Workers' Compensation and the Workplace Health and Safety systems as they currently exist and review the role of workers, employers, unions and government in these processes. It will investigate various challenges and emerging issues in health and safety including but not limited to industrial disease, gender concerns, precarious employment and globalization.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LABR 3060] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3060 Workplace Health and Safety 3 cr**

An introduction to occupational health, industrial hygiene and industrial safety emphasizing the impact of chemical hazards on the body, the measure and control of hazards and the causes and prevention of industrial accidents.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LABR 1260 (the former LABR 1270) and LABR 1290] or [HRIR 3450 and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3070 Labour Relations and Occupational Health and Safety Law 3 cr**

The economic costs of workplace injuries and sickness; the history of occupational health and safety laws and their implementation; the history and functions of workers' compensation; collective bargaining on health and safety.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LABR 1260 (the former LABR 1270) and LABR 1290] or [HRIR 3450 and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3080 Labour and Community Organizing 3 cr**

This course examines the theory and practice of collaborative community and labour organizing, with particular emphasis on Latin America, to identify the strengths and limitations of this approach for reviving unions, protecting workers' rights and advancing social justice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3090 Globalization and Labour 3 cr**

An examination of the impact of global capitalism on the lives of workers (both paid and unpaid) in the Global South and North in the early 21st century. Using concepts of class, gender and "race," the course addresses key challenges facing working people, the crisis of workers' movements, and new movements emerging in response to this crisis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Social Science

**LABR 3110 Special Studies in Labour Studies 3 cr**

This course will vary from year to year depending on the needs of students and the interests of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Mutually Exclusive:** LABR 3370, SOC 3370, SOC 3371

**Attributes:** Social Science

**LABR 3120 Special Studies in Labour Studies 3 cr**

This course will vary from year to year depending on the needs of students and the interests of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3130 Employment Legislation and the Protection of Workers 3 cr**

An examination of the legal rights and obligations of workers and employers, and the enforcement mechanisms for the non-unionized workplace, over the course of the employment relationship from hiring through to termination or retirement. Special emphasis will be placed on statutory and common law, personal employment contracts, wrongful and constructive dismissal, human rights legislation and jurisprudence.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LABR 1260 (the former LABR 1270) and LABR 1290] or [HRIR 3450 and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3140 Pensions and Benefits 3 cr**

The nature and role of pensions in the life cycle of workers and the issue of pension funds control on distribution. The role of non-wage benefits in the labour compensation package.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or [HRIR 3450 and six credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3200 Workers' Self-Management 3 cr**

An examination of historical and contemporary examples of self-managed workplaces and the theory of a participatory economy based on workers' self-management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3210 Working People in Hard Times 3 cr**

What have recent changes in work and society meant for people who work for wages or who live with those who do? How did these changes happen? What do they mean for youth today? How do the growing demands of our jobs affect our lives with family and friends? How have employers' actions affected unions, and how have unions responded? This course will explore these questions and others that arise from them.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3214 Canada's Left: Rebellion and Repression (C) 3 cr**

This course traces the emergence and evolution of Canada's left from the late nineteenth century to the present, with an emphasis on its two main streams, communism and social democracy. Topics include the relationship between popular, party, labour, and ethnic lefts; left parties and mainstream politics; the left in the evolution of human rights and in other public policies; the treatment within various lefts of gender, race, sexuality and ethnicity; popular movements; legal constraints and state repression. Also offered as HIST 3214. Not to be held with HIST 3214.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of History or written consent of department head] or [three credit hours of 1000 level Labour Studies or written consent of Labour Studies coordinator].

**Equiv To:** HIST 3214

**Attributes:** Social Science

**LABR 3220 Global Sweatshops, Global Struggles 3 cr**

This course explores the past and present of sweated work in various industries in the Global North and South. We explore circumstances that support sweatshops, including off-shoring and the new international division of labour, migrant, child and female labour forces; global supply chains and the role of retailers and contractors. We also compare and evaluate strategies to eliminate sweatshops, including NGO activities, government regulations, consumer boycotts and the international labour, student and social justice movements. Also offered as HIST 3212. Students may not hold credit for both LABR 3220 and HIST 3212.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies or written consent of the Labour Studies coordinator] or [six credit hours of History or written consent of the department head].

**Equiv To:** HIST 3212

**Attributes:** Social Science

**LABR 3230 Human Rights at Work 3 cr**

This course is an introduction to the basic human rights protections in Canadian workplaces that have developed as a result of collective bargaining, human rights legislation, The Charter of Rights and Freedoms and decisions of courts and tribunals. The course will also examine the concept of human rights on a broader, international and national level. Students may not hold credit for both LABR 3230 and LABR 3110 when titled "Human Rights at Work."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3240 Becoming an Advocate 3 cr**

This course introduces students to concepts and structures pertaining to workers' advocacy and administrative law, including areas such as human rights, occupational health and safety, Workers' Compensation, and the duty of fair representation. Students may not hold credit for LABR 3240 and any of LABR 3110 or LABR 3120 when titled "Becoming an Advocate."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3370 Sociology of Work 3 cr**

An examination of work as a central aspect of human social life; its changing nature and content in response to technological, political, and social change; how work is organized and understood by employers and workers; its consequences for individuals, social institutions, and society. Students may not hold credit for LABR 3370 and any of: SOC 3370, SOC 3371, and LABR 3110 when taught as "Sociology of Work".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LABR 1260 or LABR 1290] or [SOC 1200 or the former SOC 1201] or [both SOC 1211 and SOC 1221].

**Equiv To:** SOC 3370, SOC 3371

**Mutually Exclusive:** LABR 3110

**Attributes:** Social Science

**LABR 3400 Racism and Work 3 cr**

This course explores three central questions: What are racism and colonialism? How do racism and colonialism shape work in Canada? What strategies exist for combating racism at work, and which are most effective? Students may not hold credit for both LABR 3400 and LABR 3110 when titled "Racism and Work."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 3510 Industrial Relations 6 cr**

A study of comparative employer-employee relationships in Canada and other selected countries as affected by market forces, social traditions, and government action. Students may not hold credit for both LABR 3510 and the former ECON 3510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LABR 1260 (the former LABR 1270) and LABR 1290] or [six credit hours of 1000 level Economics].

**Equiv To:** ECON 3510

**Attributes:** Social Science

**LABR 3700 History of Working People and Labour Movements 1700 to the Present 6 cr**

A survey of working class history with emphasis upon the varieties of labour movements and trade unions. The course will refer to the social and political experience of working people in Great Britain, Europe and the United States and will devote one term to Canadian topics. May not be held with the former HIST 3700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of Labour Studies or History] or written consent of the Labour Studies coordinator.

**Equiv To:** HIST 3700

**Attributes:** Social Science

**LABR 4110 Selected Topics in Labour Studies 3 cr**

This course will vary from year to year depending on the needs of students and the interests of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Labour Studies coordinator.

**Attributes:** Social Science

**LABR 4510 Labour Studies Field Placement Seminar 3 cr**

A seminar to be taken concurrently with LABR 4520 in which each student will relate theory and practice. This course is also offered as ECON 4610 and GPE 4510. Students may not hold credit for LABR 4510 and either ECON 4610 or GPE 4510. Intended for students in the Labour Studies Advanced Major.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Labour Studies coordinator.

Corequisite: LABR 4520.

**Equiv To:** ECON 4610, GPE 4510

**Attributes:** Social Science, Written English Requirement

**LABR 4520 Labour Studies Field Placement 6 cr**

An educationally directed field experience in which the student will undertake specific tasks and assignments in some aspects of labour relations. Field placement options include a labour union, professional association, employer, provincial department of labour, public archives. This course is also offered as ECON 4620 and GPE 4520. Students may not hold credit for LABR 4520 and either ECON 4620 or GPE 4520. Intended for students in the Labour Studies Advanced Major.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Labour Studies coordinator.

Corequisite: LABR 4510.

**Equiv To:** ECON 4620, GPE 4520

**Attributes:** Social Science

## Latin (LATN)

**LATN 1080 Introduction to the Reading of Latin 1 3 cr**

Readings in Latin poetry and prose with related exercises in grammar and composition intended to prepare students to read Classical and Medieval Latin.

**Attributes:** Humanities, Recommended Intro Courses

**LATN 1090 Introduction to the Reading of Latin 2 3 cr**

Further readings in Latin poetry and prose with related exercises in grammar and composition intended to prepare students to read Classical and Medieval Latin.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LATN 1080.

**Attributes:** Humanities, Recommended Intro Courses

**LATN 2700 Intermediate Readings in Latin 3 cr**

Further readings in Latin prose and poetry with related exercises in grammar and syntax as continued preparation for the reading of Classical and Medieval Latin. Students may not hold credit for both LATN 2700 and the former LATN 1320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 1090] or written consent of department head.

**Equiv To:** LATN 1320

**Attributes:** Humanities

**LATN 2720 Selected Readings in Republican and Augustan Poetry 3 cr**

Readings from among the comedies of Plautus and Terence, the shorter poems of Catullus, and the Metamorphoses of Ovid.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LATN 2700 or the former LATN 1320.

**Attributes:** Humanities

**LATN 2740 Selected Readings in Republican and Augustan Prose 3 cr**

Readings from among the works of Livy and Caesar and the letters and philosophical writings of Cicero.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LATN 2700 or the former LATN 1320.

**Attributes:** Humanities

**LATN 2760 Latin Prose Composition and Sight Translation 3 cr**

Assignments in writing Latin prose and practice in the techniques for effective reading of poetry and prose at sight.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LATN 2700 or the former LATN 1320.

**Attributes:** Humanities

**LATN 2780 History of the Latin Language 3 cr**

A survey of the language from its Indo-European pre-history to its position as the matrix of the Romance languages. Phonological, morphological and lexical aspects of the language are investigated in the light of Latin documents and some comparative evidence from cognate languages.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LATN 2700 or the former LATN 1320.

**Attributes:** Humanities

**LATN 2800 Readings in Medieval or Renaissance Latin 3 cr**

Selections of prose and poetry written after the beginning of the fourth century after Christ.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LATN 2700 or the former LATN 1320.

**Attributes:** Humanities

**LATN 3740 Roman Comedy 3 cr**

Reading of at least two plays from among the comedies of Plautus and Terence.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 2720 or LATN 2740] or written consent of department head.

**Attributes:** Humanities

**LATN 3760 Orations of Cicero 3 cr**

Reading of at least two complete speeches from among the political and forensic works of Cicero.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 2720 or LATN 2740] or written consent of department head.

**Attributes:** Humanities

**LATN 3780 Roman Satire 3 cr**

Reading of selected Satires of Horace and Juvenal and of excerpts from the Apocolocyntosis of Seneca and the Satyricon of Petronius.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 2720 or LATN 2740] or written consent of department head.

**Attributes:** Humanities

**LATN 3800 Lyric and Elegiac Poetry of the Augustan Age 3 cr**

Selected Odes and Epodes of Horace and amatory elegies of Propertius, Ovid and Tibullus.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 2720 or LATN 2740] or written consent of department head.

**Attributes:** Humanities

**LATN 3820 Vergil's Aeneid 3 cr**

Reading of at least three books of the Aeneid.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 2720 or LATN 2740] or written consent of department head.

**Attributes:** Humanities

**LATN 3840 Vergil's Eclogues and Georgics 3 cr**

Reading of the Eclogues in their entirety and at least two books of the Georgics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 2720 or LATN 2740] or written consent of department head.

**Attributes:** Humanities

**LATN 3860 The Roman Historians 3 cr**

Reading of selected passages from the works of Livy, Caesar, Sallust and Tacitus.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 2720 or LATN 2740] or written consent of department head.

**Attributes:** Humanities

**LATN 3880 Poetry of the Silver Age 3 cr**

Reading of one or two tragedies of Seneca with selections from the works of Martial, Statius or Lucan.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LATN 2720 or LATN 2740] or written consent of department head.

**Attributes:** Humanities

**LATN 3932 Advanced Studies in Latin Prose Literature 3 cr**

Readings in a particular genre such as philosophy, history, or rhetoric with substantial reading in secondary critical or interpretive literature.

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LATN 2720 or LATN 2740 or LATN 2800 or written consent of department head.

**Attributes:** Humanities

**LATN 3942 Advanced Studies in Latin Poetry 3 cr**

Readings in a particular genre such as epic, lyric, comedy or elegy with substantial reading in secondary critical or interpretive literature. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LATN 2720 or LATN 2740 or LATN 2800 or written consent of department head.

**Attributes:** Humanities

## Law (LAW)

**LAW 1102 Contracts 5 cr**

This course covers the basic principles of contract law, including how a contract is formed; what is an offer; what constitutes acceptance; whether all promises are enforceable as a contract; when parties should be allowed to avoid obligations; what happens if one party misrepresents the quality of subject matter of the contract; what happens when a party makes a mistake about what they buy or sell; what should happen if one party takes advantage of another for a better deal for themselves. May not be held with LAW 1100.

**Mutually Exclusive:** LAW 1100

**LAW 1140 Criminal Law and Procedure 5 cr**

A general introduction to criminal law and procedure dealing with principles of criminal liability, common defenses to criminal charges, selected specific offences, and the basic procedures to be followed in the administration of criminal justice in Canada.

**LAW 1378 Passeport du droit en Français 1 1 cr**

Language of instruction: French. Le Passeport du droit en français 1 donne aux étudiants de première année du programme J.D. qui participent à la Concentration d'accès à la justice en français l'occasion d'améliorer leur compétence langagière en français, passant d'un bilinguisme réceptif (compréhension orale et écrite) à un bilinguisme actif (expression orale et écrite). Le cours est organisé en une série de colloques informels menés en français par le chargé d'enseignement, des invités et des étudiants de deuxième ou troisième année à propos de thèmes reliés à la pratique bilingue du droit dans l'Ouest canadien, l'accès à la justice en français, l'acquisition de compétences culturelles et divers domaines du droit. Les étudiants prennent part aux discussions en classe et rédigent des textes de réflexion. Le Passeport devrait permettre aux étudiants bilingues de tisser des liens favorisant la prestation de services juridiques aux communautés francophones en situation minoritaire. Ce cours est noté sur une formule réussite/échec. This course is graded on a pass/fail basis.

**LAW 1460 Constitutional Law 5 cr**

An examination of the legal problems arising from the nature of the Canadian political structure and, in particular, the distribution of legislative powers between the federal parliament and the provincial legislatures and an introduction to the impact of the Canadian Charter of Rights and Freedoms.

**LAW 1480 Torts and Compensation Systems 5 cr**

A general introduction to the law of torts and other compensation systems such as the Workers' Compensation and Criminal Injuries Compensation schemes.

**LAW 1500 Property 5 cr**

A general introduction to the principles of property with special emphasis on the principles of real property, their historical development and modern application.

**LAW 1530 Legal System 2 cr**

An introduction to the study of law including initial analysis of various aspects of legal history, the structure of the legal system, legal reasoning, statutory interpretation, dispute resolution and the role of the judiciary.

**LAW 1540 Legal Methods 5 cr**

An introduction to legal research and writing skills and oral advocacy. Students participating in the Access to Justice in French Concentration must instead take LAW 1542 Méthodes juridiques, a bilingual course substantively equivalent to LAW 1540. Students who do not complete this course will not be eligible for the Concentration. May not be held with LAW 1542. This course is graded on a pass/fail basis.

**Equiv To:** LAW 1542

**LAW 1542 Méthodes juridiques 1-5 cr**

Language of instruction: French. Une introduction aux compétences juridiques fondamentales dans les domaines de la recherche et de la rédaction juridique et de la plaidoirie orale. Ce cours est noté sur une formule réussite/échec. May not be held with LAW 1540. This course is graded on a pass/fail basis.

**Equiv To:** LAW 1540

**LAW 2378 Passeport du droit en Français 2 1 cr**

Language of instruction: French. Le Passeport du droit en français 2 donne aux étudiants de deuxième année du programme JD qui participent à la Concentration d'accès à la justice en français l'occasion d'améliorer leur compétence langagière en français, passant d'un bilinguisme réceptif (compréhension orale et écrite) à un bilinguisme actif (expression orale et écrite). Le cours est organisé en une série de colloques informels menés en français par le chargé d'enseignement, des invités et des étudiants de deuxième ou troisième année à propos de thèmes reliés à la pratique bilingue du droit dans l'Ouest canadien, l'accès à la justice en français, l'acquisition de compétences culturelles et divers domaines du droit. Les étudiants prennent part aux discussions en classe et rédigent des textes de réflexion. Les étudiants de deuxième année lisent un article ou un jugement publié en français et rédigent et présentent un exposé qui commente ce texte. Le Passeport devrait permettre aux étudiants bilingues de tisser des liens favorisant la prestation de services juridiques aux communautés francophones en situation minoritaire. Ce cours est noté sur une formule réussite/échec. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

**Prerequisite:** LAW 1378.

**LAW 2400 Wills and Succession 3 cr**

The law of testate and intestate succession, Part IV of The Marital Property Act, and The Dependents' Relief Act.

**LAW 2490 Trusts 3 cr**

The nature and functions of modern inter vivos and testamentary trusts. The creation of express, private trusts, charitable trusts, resulting trusts, and constructive trusts. The administration of trusts, and real and personal remedies of beneficiaries under trusts.

**LAW 2602 Evidence 3 cr**

A study of the rules relating to the admissibility and weight of evidence in judicial proceedings. May not be held with LAW 2600.

**Mutually Exclusive:** LAW 2600

**LAW 2640 Family Law 3 cr**

An overview of key legal issues regarding familial relationships and family breakdown in Canadian society. Topics include cohabitation, marriage, separation, divorce, child custody and access, spousal and child support and property division. May not be held with LAW 2642.

**Equiv To:** LAW 2642

**LAW 2642 Droit de la famille 3 cr**

Language of instruction: French. Un aperçu des questions juridiques principales concernant les relations familiales et l'éclatement de la famille dans la société canadienne. Les sujets abordés comprennent la cohabitation, le mariage, la séparation, le divorce, la garde et le droit de visite des enfants, la pension alimentaire pour époux et enfants et la division des biens. May not be held with LAW 2640. This course is restricted to 2nd and 3rd year J.D. students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

**Prerequisite:** LAW 1542 or written consent of the Associate Dean (J.D.).

**Equiv To:** LAW 2640

**LAW 2650 Introduction to Advocacy 3 cr**

A detailed study of the conduct of a case from its inception through to trial. The course requires that students prepare and conduct a trial. May not be held with LAW 2652. This course is graded on a pass/fail basis.

**Equiv To:** LAW 2652

**LAW 2652 Introduction à la plaidoirie 3 cr**

Language of instruction: French. Une étude détaillée de la conduite d'une affaire dès son début jusqu'au procès. Le cours exige que les étudiants préparent et mènent un procès. Ce cours est noté sur une formule réussite/échec. May not be held with LAW 2650. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LAW 1542 or written consent of the Associate Dean (J.D.).

**Equiv To:** LAW 2650

**LAW 2672 Civil Procedure 3 cr**

An introduction to the rules of civil procedure. May not be held with LAW 2670

**Mutually Exclusive:** LAW 2670

**LAW 2680 Legal Negotiation 3 cr**

Most legal disputes settle before trial. This course examines how lawyers assist their clients through effective interviewing, counseling, strategic planning and negotiation as well as some of the mechanisms, both judicial and non-judicial, that facilitate pre-trial dispute settlement. May not be held with LAW 2682.

**Equiv To:** LAW 2682

**LAW 2682 Négociation juridique 3 cr**

Language of instruction: French. La plupart des litiges se règlent avant le procès. Ce cours examine comment les avocats aident leurs clients par le biais d'entretiens, de conseils, de planification stratégique et de négociations efficaces, ainsi que certains des mécanismes, judiciaires et non judiciaires, qui facilitent le règlement des litiges avant le procès. Ce cours est noté sur un formule réussite/échec. May not be held with LAW 2680. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LAW 1542 or written consent of the Associate Dean (J.D.).

**Equiv To:** LAW 2680

**LAW 2690 Corporations I 3 cr**

A study of the major legal, practical and policy issues arising out of the formation and operation of business organizations in Canada, with a particular focus on business corporations. Students will examine major principles of Canadian corporate law, including corporate personality, management power, majority rule and minority protection.

**LAW 2700 Income Tax Law and Policy 3 cr**

The object of this course is to develop a working knowledge of the basic principles and rules of the income tax system as these apply to individuals. A parallel objective is the discovery of the major policy positions that inform the personal income tax system and the development of the ability to use tax policy analysis to evaluate advantages of, and problems with, the current system.

**LAW 3012 International Business Law 3 cr**

Explores the legal, practical and social realities of international business transactions.

**LAW 3014 International Trade Law 3 cr**

The course will deal with the doctrine, practice and policy issues in international trade and business.

**LAW 3016 Corporations II 3 cr**

An advanced study of corporations law from various theoretical and practical perspectives.

**LAW 3018 Human Rights Law 3 cr**

Critical and constructive study, at an advanced level, of a significant major subject or set of topics in Human Rights Law.

**LAW 3020 Clinical Administrative Law 3 cr**

The primary purpose of this course is to train students in lawyering skills. Students will be required to engage in classroom work and participate in simulated exercises. Emphasis will be given to the difference between board and court advocacy.

**LAW 3022 Insurance Law 3 cr**

Introduction to the basic principles of insurance law. The fundamental elements to most types of policies will be examined with particular emphasis on property and liability insurance. The terms and provisions specific insurance policies and coverages such as automobile, property, liability policies will also be covered.

**LAW 3024 The Legal Profession and Professional Responsibility 3 cr**

A general introduction to the problems of professional responsibility and the ethics of lawyers individually, as well as the legal profession collectively. Topics dealt with will include ethical problems of the lawyer in the role of the advocate and in the role of counsellor (confidentiality, conflict of interest, etc.); professional responsibility in the delivery of legal service (competency, fee determination, specialization, regulation etc) and the legal profession and the public interest (governance of profession, discipline, professional liability etc) These problems are to be studied by the critical examination of case law, codes, canons, and other published materials, by classroom discussion and debate on problems; and by workshops and panels which involve practising lawyers.

**LAW 3026 Trademarks and Patents 3 cr**

An in-depth examination of the law of Trade-marks and Patents, including underlying policy objectives.

**LAW 3028 Copyright Law 3 cr**

An in-depth examination of the law of Copyright.

**LAW 3030 Research Paper B 3 cr**

Details in each case to be worked out with the Associate Dean. 10,000 words for 3 credit hours. May not be held with LAW 3490.

**Mutually Exclusive:** LAW 3490

**LAW 3032 Court of King's Bench Clerkship 3 cr**

Students will be expected to provide research assistance to the Justices, and students will be asked to provide written memoranda and other research to help the Justices prepare for trial or application hearings. Discussions of legal issues may follow from the work that students do. May not be held with LAW 3250 when titled " Court of Queen's Bench Clerkship" Grading: Pass/Fail.

**Mutually Exclusive:** LAW 3250

**LAW 3034 Court of Appeal Clerkship 3 cr**

Students will be expected to provide research assistance to the Justices, and students will be asked to provide written memoranda to help the Justices prepare for hearings. Discussions of legal issues may follow from the other work that students do. Grading is on a Pass/Fail basis.

**LAW 3050 Commercial Law 3 cr**

A study of secured transactions and negotiable instruments.

**LAW 3070 Gender and the Law 3 cr**

An exploration of ideas about gender differentiation in law, the legal system, legal education and the legal profession. It will offer an introduction to the feminist critique of law and feminist theories about sexual equality and discrimination.



**LAW 3090 Children, Youth and the Law 3 cr**

Relationships between child, family, state and law are examined within an interdisciplinary context, focusing on such issues as rights theories and the public/private distinction; regulation of young offenders, child protection and state intervention; children in the courts; and the particular challenges of older children/ young adults at the boundary between childhood and adulthood.

**LAW 3120 Philanthropy and the Law 3 cr**

This course investigates the origins of, and regulation of, charities and charity law as well as regulation of other non-profit entities. Typical topics considered in this course include the social, economic and cultural importance of an ethic of giving, the tax benefits attendant upon charitable status, dimensions of fund-raising, public and private foundations and terrorism and international charities.

**LAW 3132 Clinical Family 3 cr**

This course will serve as a bridge between the introductory family law course and the Advanced Family Law course, enabling students to develop a deeper understanding of the issues in this area of the law and to be better prepared to assimilate the necessary skills to be successful in this high demand area of practice. Registration restricted to students in Year 3. This course is evaluated on a pass/fail basis. May not be held with LAW 3250 when titled Clinical Family.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LAW 2640.

**LAW 3170 Dispute Resolution 3 cr**

This course offers a detailed exploration of the theory and practice of dispute resolution focusing on the various approaches, private and court-connected, currently used to resolve conflict. In critically examining selected alternative dispute resolution mechanisms, the course exposes students to issues such as rights-based and interest-based dispute resolution, power, gender and culture in ADR processes and the functions, and skills required of, third party interveners. May not be held with the former LAW 3160 or LAW 3162.

**Mutually Exclusive:** LAW 3160, LAW 3162

**LAW 3212 Immigration Law 3 cr**

The refugee definition; the need for refugee protection; procedural protection for refugee claimants; a comparative study of refugee determination systems; the legality of a refugee sanctuary movement; the legal status of refugee claimants in Canada; refugee and immigrant detention; the relevance of Charter guarantees to refugees and immigrants; visa requirements and airline fines; the international system of refugee protection; racist intention and effect in immigration and refugee law; material misrepresentation as a ground of exclusion; medical inadmissibility; equivalence of Canadian and foreign criminal offenses for purposes of exclusion; the relevance of foreign laws in determining family composition of sponsored immigrants. May not be held with LAW 3200.

**Mutually Exclusive:** LAW 3200

**LAW 3220 Competitions B 3 cr**

Credit for selected students who satisfactorily participate in those academic competitions approved by Faculty Council. This course is graded on a pass/fail basis.

**LAW 3230 Aboriginal Peoples and Land Claims 3 cr**

The course shall provide an overview of land claims and treaty land entitlement policies in Canada and their impact upon land claims by Aboriginal communities.

**LAW 3250 Current Legal Problems D 3 cr**

Critical and constructive study, at an advanced level, of a significant major subject or set of topics. This course is graded on a pass/fail basis.

**Mutually Exclusive:** LAW 3032

**LAW 3302 Clinical Criminal Law 6 cr**

The primary purpose of this offering is to train students in lawyering skills in the criminal law area. To this end, instruction is given on an intensive basis in small groups. Students may be required to engage in classroom work; to participate in various forms of simulation exercises and to conduct actual client based cases under the supervision of the instructor. Particular emphasis will be given to questions of professional responsibility and ethics. Registration restricted to students in Year 3. This course is evaluated on a pass/fail basis. May not be held with LAW 3300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (LAW 2602 or LAW 2600) and LAW 3590. Co-requisite: LAW 3532 or LAW 3340.

**Mutually Exclusive:** LAW 3300

**LAW 3310 Aboriginal Peoples and the Law 3 cr**

A study of the laws relating to Aboriginal Peoples in North America from the colonial period to the present. Special emphasis will be given to aboriginal rights, hunting and fishing rights, the legal aspects of Indian Treaties and the Indian Act. A more general treatment will be given to a study of Aboriginal Peoples' relationship to civil and criminal law in modern Canadian society.

**LAW 3330 Employment Law 3 cr**

A detailed study of employment law including employment principles, constructive and wrongful dismissal, just cause, human rights and remedies.

**LAW 3334 Global and Domestic Governance of Tainted Finance 3 cr**

The object of this course is to explore the law and policy related to the regulation of tainted finance. It aims to critique and appraise the merits of governance, both international and domestic. It begins with a broad overview of the relationship between tainted finance and global problems and then moves to consideration of discrete aspects. May not be held with LAW 3980 when titled "Global and Domestic Governance -Tainted Finance".

**LAW 3336 Law and Popular Culture 3 cr**

This course will study legal popular culture. This course will critically examine television programs and films that are concerned with law, lawyers and justice. This course will study them with a view to discovering how popular culture constitutes law (the influence of popular culture on law) and how law helps create popular cultural understandings of justice, including popular perceptions of lawyers and legal institutions (the influence of law on popular culture). This course will theorize about the capacity of law and popular culture to generate social meaning. This course will use a number of theoretical approaches including: critical legal studies, feminist legal theory, film studies, conflict resolution theory, and cultural studies theory. These theories will inform readings of the TV shows and movies, and will help students critically question the visions of justice advanced by both the theories and the popular culture. In doing so, the course also critiques the jurisprudence (or legal philosophy) offered in popular culture films and television shows and examines key concepts such as justice and equality. May not be held with LAW 3980 when titled "Law and Popular Culture."

**LAW 3338 Sentencing 3 cr**

The vast majority of criminal charges result in a conviction, whether by guilty plea or conviction at trial. This seminar focuses on the principles and practice of sentencing, while also looking in some detail at the sanction of imprisonment, penal policy and prisoner's rights. This course will be run as an advanced seminar class. May not be held with LAW 3980 when titled "Sentencing".

**LAW 3340 Advanced Advocacy 3 cr**

Advanced topics in trial presentation, procedure and evidence with concentration on jury trials.

**LAW 3342 Agency and Partnership 3 cr**

This course deals comprehensively with the law of agency, including the various ways in which and authorities with which an agent can be empowered, the contractual and tort liabilities of Principals, Agents and Third Party's arising from an exercise of authority by Agents, and the duties and rights of Agents. The pairing of the law of agency and partnership is natural because the law of agency is a foundational pillar of the partnership business form. Next to the corporation, partnership is the most common form in which entrepreneurs carry on business. The course will provide an introduction to the law governing partnerships. May not be held with LAW 3980 when titled "Agency and Partnership".

**LAW 3344 Internships 3 cr**

This course will serve as a bridge between the academic study of law and the practice of law. Connecting academic study with community service through structured reflection contributes to learning that is deeper, longer lasting and more generalizable to new situations and contexts. An Internship will provide opportunities for cooperative experiences and addressing legal problems, this will require students to engage in problem solving by drawing on the substantive knowledge they have acquired over the course of their law studies. May not be held with LAW 3250 when titled "Current Legal Problems - Internship". This course is graded on a pass/fail basis.

**LAW 3346 Access to Justice 3 cr**

This course explores how individuals seek to manage their legal problems by engaging with and navigating the civil justice system in Manitoba. Topics which may be covered in the course include: public legal services; the proliferation of self-represented litigants; the role of pro bono services; rural and remote Access to Justice (A2J); the costs of justice; the state of A2J research; the provision of legal services by non-lawyers; on line dispute resolution; and, technology, innovation and the legal practice of the future. May not be held with LAW 3980 when titled "Access to Justice".

**LAW 3348 Bankruptcy and Insolvency 3 cr**

This course provides students with an introduction to Canadian bankruptcy insolvency law under the Bankruptcy and Insolvency Act. By the end of the course students will understand the main components of Canadian bankruptcy and insolvency law as well as the key policy issues. May not be held with LAW 3980 when titled "Bankruptcy and Insolvency".

**LAW 3352 Sexual Expression, Conduct and Work in Canada 3 cr**

This course surveys selected issues involving sexual work, performances, expression and the criminal law. The main focus of the course is on the development of obscenity and indecency laws, prostitution-related laws, voyeurism laws, artistic expression, revenge pornography, cyber sexual crimes, bestiality laws, campus sexual regulation and hateful sexual speech. Study of these topic areas is based on a doctrinal, socio-legal and anthropological history of sexual regulation beginning in ancient Pompeii and leads to an assessment of law in modern day Canada. The course thus explores theories underpinning freedom of expression, equality and liberty. The course engages doctrinal issues in criminal law, constitutional law, tort law and to a certain extent, jurisprudence and the philosophies inherent in law and society approaches. WARNING: This course contains graphic (though legal) sexual content. May not be held with LAW 3980 when titled "Sexual Expression, Conduct and Work in Canada".

**LAW 3354 Moot Researcher 3 cr**

The Moot Researcher will be expected to conduct the research necessary for a University of Manitoba team for a specific national moot competition. The Moot Researcher must actively participate in the writing and editing of a factum and attend all meetings of the moot team as a group, including oral advocacy practices. The workload of the researcher is expected to be closely monitored by the faculty supervisor. Activities assigned by the supervisor might include the following: attending the competition with the moot team, to conduct exigent research arising at the competition; writing memorandums of law or bench memos to assist with the factum preparation or questions arising out of practices; and writing a reflective paper. The researcher will be required to docket her/his time. Although considerable time and effort is involved, the exercise provides a unique and rewarding development of the skills necessary for appellate research. May not be held with LAW 3250 when titled "Moot Researcher." This course is graded on a pass/fail basis.

**LAW 3360 Advanced Legal Research 3 cr**

This course will provide students with the wherewithal to conduct legal research across a number of jurisdictions using both print and digital formats. Students are evaluated on a number of research exercises, a midterm examination, a major research pathfinder and a presentation of research results.

**LAW 3362 Animals and the Law 3 cr**

From a law perspective, the study of animals thus provides opportunity to think critically about: Crown ownership versus private property ownership; regulatory takings; natural resources and environmental legal frameworks; tort law; trade law; property law; intellectual property and regulation of biotechnology; regulation of food and agriculture; migrant workers and employment and immigration law and policy; animal health and welfare; animal rights and standing; and ultimately, the role of law. May not be held with LAW 3980 when titled "Animals and the Law".

**LAW 3364 Law and Resistance 3 cr**

This course examines the intersections between law and resistance, including the ways in which individuals, groups and/or communities may challenge the dominant power of various entities (governments, institutions, corporations or other organizations, Indigenous communities) or individuals and the decisions they make and the actions they take. The course shall also explore the spectrum of responses that legal systems employ to legitimize or punish the conduct of such resisters. Acts of resistance may have an impact (directly or indirectly) in shaping the law-its creation, interpretation or enforcement. May not be held with LAW 3980 when titled "Law and Resistance".

**LAW 3370 The Legislative Process 3 cr**

A study of how statutes and regulations are made in the Province of Manitoba, and how lawyers can effectively represent their clients in the context of lawmaking by politicians, civil servants and regulators.

**LAW 3372 Français juridique - droit public 3 cr**

Language of instruction: French. Par le biais d'exposés magistraux, d'exercices et de simulations axés sur la pratique, ce cours initie les étudiants bilingues à certains sujets de droit public essentiels à l'amélioration de l'accès à la justice en français des justiciables francophones au Manitoba et ailleurs au Canada. Des praticiens experts donnent, en français, des conférences sur les principaux aspects de fond et de procédure de sujets liés au droit des réfugiés, au droit administratif, au droit de la famille, au droit pénal (détermination de la peine), au droit de la location résidentielle et aux droits de la personne, tout en mettant en évidence la terminologie juridique en français pertinente. La maîtrise et l'utilisation efficace de cette terminologie sont évaluées par des travaux écrits et par la participation des étudiants à des simulations et exercices oraux. Les étudiants reçoivent également un aperçu du cadre juridique régissant les droits linguistiques et les services juridiques en français. May not be held with LAW 3980 when titled "Français juridique - droit public". This course is restricted to 2nd and 3rd year J.D. students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: LAW 1542 or written consent of the Associate Dean (J.D.).

**LAW 3374 Français juridique - droit privé 3 cr**

Language of instruction: French. Par le biais d'exposés magistraux, d'exercices et de simulations axés sur la pratique, ce cours initie les étudiants bilingues à certains sujets de droit privé essentiels à l'amélioration de l'accès à la justice en français des justiciables francophones au Manitoba et ailleurs au Canada. Des praticiens experts donnent, en français, des conférences sur les principaux aspects de fond et de procédure de sujets liés au droit des affaires, au droit du travail, au droit immobilier, aux testaments et successions, aux litiges civils et au droit fiscal, tout en mettant en évidence la terminologie juridique en français pertinente. La maîtrise et l'utilisation efficace de cette terminologie sont évaluées par des travaux écrits et par la participation des étudiants à des simulations et exercices oraux. Les étudiants reçoivent également un aperçu des différences de terminologie juridique en français entre les deux principaux régimes de droit privé au Canada : la common law et le droit civil du Québec. May not be held with LAW 3980 when titled "Français juridique - droit privé". This course is restricted to 2nd and 3rd year J.D. students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: LAW 1542 or written consent of the Associate Dean (J.D.).

**LAW 3376 Droits linguistiques 3 cr**

Language of instruction: French. Le cours aborde les différents aspects juridiques et politiques de la protection par l'État de sa diversité linguistique. Après une introduction mettant l'accent sur le contexte social, politique et culturel des droits linguistiques au Canada et au Manitoba, le cours examinera le droit constitutionnel et législatif applicable au niveau fédéral et dans les provinces canadiennes, les droits linguistiques autochtones, et la protection des droits linguistiques en droit international et ailleurs au monde. Le cours se conclura par un examen des visions des communautés de langues officielles en situation minoritaire (et tout particulièrement, la communauté franco-manitobaine) face à leur avenir. May not be held with the former LAW 3366 or LAW 3980 when titled "Droits linguistiques".

**LAW 3378 Passeport du droit en Français 3 1 cr**

Language of instruction: French. Le Passeport du droit en français 3 donne aux étudiants de troisième année du programme JD qui participent à la Concentration d'accès à la justice en français l'occasion d'améliorer leur compétence langagière en français, passant d'un bilinguisme réceptif (compréhension orale et écrite) à un bilinguisme actif (expression orale et écrite). Le cours est organisé en une série de colloques informels menés en français par le chargé d'enseignement, des invités et des étudiants de deuxième ou troisième année à propos de thèmes reliés à la pratique bilingue du droit dans l'Ouest canadien, l'accès à la justice en français, l'acquisition de compétences culturelles et divers domaines du droit. Les étudiants prennent part aux discussions en classe et rédigent des textes de réflexion. Les étudiants de troisième année rédigent un éditorial, blogue ou brochure présentant des renseignements juridiques et le présentent dans le cadre d'un atelier. Le Passeport devrait permettre aux étudiants bilingues de tisser des liens favorisant la prestation de services juridiques aux communautés francophones en situation minoritaire. Ce cours est noté sur une formule réussite/échec. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: LAW 2378.

**LAW 3380 Issues in Law and Bio Ethics 3 cr**

The course deals with the legal aspects of prevention, creation, alteration, maintenance and termination of life through medical and other scientific means.

**LAW 3392 Securities Law 3 cr**

A study of the basic concepts and application of the securities regulatory system in Canada. May not be held with LAW 3390.

**Mutually Exclusive:** LAW 3390

**LAW 3394 Internet and E-Commerce Law 3 cr**

This is a perspectives course. It will cover legislation, case law and practical drafting techniques in many areas in order to better equip students in the practice of law, and at the same time invite students to reflect upon the political and social issues that arise as "cyberlaw" develops. Subject matter of the course: The legislation, court decisions, policy debates and practical drafting and litigation techniques connected with the internet and e-commerce. A variety of issues will be covered, including: freedom of expression issues, jurisdiction, internet speech regulation; online privacy issues; intellectual property issues, including domain names and downloading of copyright material; internet commerce issues, such as the law of contracts pertaining to online contracting. May not be held with LAW 3980 when titled "Internet and Ecommerce Law".

**LAW 3410 Canadian Legal History 3 cr**

The historical background of the Canadian legal system.

**LAW 3450 Remedies 3 cr**

A study of the law relating to damages, specific performance, injunctions, and other equitable remedies.

**LAW 3510 Corporate Taxation 3 cr**

A study of federal tax laws as they affect corporation income, as well as a discussion of the effects of income tax laws on corporate and other commercial planning.

**LAW 3520 Taxation of Trusts and Estates 3 cr**

A study of taxation principles as they relate to partnership and trust income and estate planning.

**LAW 3530 Administrative Law 3 cr**

An introduction to administrative law generally, with concentration on the judicial review of the exercise of statutory authority by administrative entities.

**LAW 3532 Intensive Criminal Law 3 cr**

This course follows the general introduction to the complexities and principles of criminal law presented in earlier courses on criminal law and evidence. It emphasizes the ways in which these complexities and principles play out in practice and has a strong practical component. It is well-suited for students considering working in the field of criminal law. The first half of the course will address the demands placed on prosecutors and defence counsel at various points of a prosecution, including, inter alia, application for judicial interim release, the preparation of pre-trial motions, direct and cross-examination, and sentencing. These demands are not only statutory, but also logistical, tactical and ethical. The second half of the course will look at these demands in the context of certain "special" criminal law contexts, including, inter alia, impaired driving, young offenders, domestic violence, and drug prosecutions. Registration restricted to students in Year 3. May not be held with LAW 3250 when titled "Intensive Criminal Law". Grading: Pass/Fail.

**LAW 3590 Charter Issues in Criminal Law 3 cr**

The rules of Criminal Procedure and principles underlying and unifying such rules with a particular emphasis on the effect of the Charter of Rights and Freedoms on those rules.

**LAW 3600 Environmental Law 3 cr**

The balance between technical development and the life-support capacity of the environment. The acquisition and nature of private rights in natural resources and their control by legislation and common law. Remedies for environmental degradation. Constitutional and international legal issues.

**LAW 3620 Comparative Law 3 cr**

An introduction to civil law; a brief historical survey, codification, judicial philosophy, detailed study of selected comparative law topics in tort and contract with special reference to the Civil Code of the Province of Quebec. An introduction to Soviet law, detailed study of selected topics in Soviet law.

**LAW 3674 Advanced Public Law 3 cr**

This course provides students with a fuller appreciation and knowledge of several topics of interest and importance for Canadian public law, including the changing boundaries of public law in our "shrinking" state, the scope and meaning of judicial, administrative and bureaucratic independence, the role of international human rights norms in Canadian constitutional and administrative law, the intersection between the Canadian Charter of Rights and Freedoms and administrative law and the role of guidelines, policies and other "soft law" in public administration. Although focused on Canadian public law, the course may include a comparative component and draw from the public law experience of other jurisdictions. May not be held with LAW 3980 when titled "Advanced Public Law".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: LAW 3530.

**LAW 3690 Real Estate Transactions 3 cr**

The law relating to vendors and purchasers of land and to mortgages and other security on land.

**LAW 3740 Public International Law 3 cr**

Public international law has a complex history, one that lends itself to conflicting interpretations. It has also been the object of a variety of competing theoretical projects, most of which diverge radically on questions of form and substance. This course provides an historically and theoretically reinforced introduction to the basic rules, principles, and institutions of public international law.

**LAW 3770 Labour-Management Relations 3 cr**

A survey of the development of trade unions; their present status under both federal and provincial legislation regarding the right of association, collective bargaining, and the settlement of disputes.

**LAW 3824 Scholarly Publications 3 cr**

The course will provide students with hands-on experience in working with scholarly writing. Students will develop their evaluation and critical analysis skills through the process of editing for publication all submissions to the Journal. May not be held with the former LAW 3820 or the former LAW 3822. Grading: Pass/Fail.

**Mutually Exclusive:** LAW 3822

**LAW 3826 Advanced Scholarly Publications 3 cr**

The course will provide students with hands-on experience in working with scholarly writing. Students will develop their evaluation and critical analysis skills through the process of completing full substantive and copy edits on two or three articles during the course of the year. Working as Senior Editors students will develop their interpersonal skills by communicating with authors and by supervising and managing the work of Junior Editors. May not be held with LAW 3250 when titled "Advanced Scholarly Publications". Grading: Pass/Fail.

**LAW 3828 Preventing Wrongful Convictions 3 cr**

This course examines the causes of wrongful convictions, how to avoid them, detection mechanisms and remedies that should be provided under international instruments when a miscarriage of justice has occurred. The course starts by examining the environmental factors that nurture a miscarriage of justice, including the adversarial system of criminal justice. It then examines the role of the various players in the criminal justice system, and how each can inadvertently feed into a wrongful conviction - individually, or in combination with other factors. May not be held with LAW 3980 when titled "Preventing Wrongful Convictions".

**LAW 3832 Legal Aid Clinic 3 cr**

Students who are selected to act as student supervisors at the University Law Centre during the summer and who continue to actively serve the University Law Centre during their third year may, by successfully completing a written assignment approved by a faculty supervisor, opt for the Legal Aid Clinic. May not be held with LAW 3830. Grading: Pass/Fail.

**Mutually Exclusive:** LAW 3830

**LAW 3852 Private International Law 3 cr**

It has to do with choosing what place to sue, what law applies when the law of more than one place might apply, and with the enforceability of judgments through foreign courts. May not be held with LAW 3850.

**Equiv To:** LAW 3850

**LAW 3862 Business Transactions: The Art of the Deal 6 cr**

A study, involving practical exercises of certain aspects of solicitors' work, including interviewing, negotiating, counseling and memo writing.

**LAW 3880 Municipal and Planning Law 3 cr**

A general course in municipal law, including important aspects of land-use control and planning law. Although the course deals generally with the nature, structure, functions, and powers of the various units comprising the local level of government, the focus is primarily on municipal corporations. Topics covered include assessment and taxation, land-use planning and control, tort liability, judicial review of bylaws, qualification and accountability of councillors, and the law relating to expropriation, as well as some discussion of contemporary urban problems.

**LAW 3940 Canadian Charter of Rights and Freedoms 3 cr**

An in-depth study of the legal, philosophical and historical foundations of the Canadian Charter of Rights and Freedoms. Included is a study of both the American and European experience with Charters of Rights as well as Canadian case law.

**LAW 3980 Current Legal Problems B 3 cr**

Critical and constructive study, at an advanced level, of a significant major subject or set of topics.

**LAW 3990 Externship 12 cr**

The primary purpose of the Externship is to allow students an opportunity to work in a legal context where they gain professional knowledge and skills related to law, the legal profession and legal practice. Particular emphasis will be given to questions of professional responsibility and ethics. Within the workplace, students will be required to participate in various forms of exercises and to conduct work within an actual work setting where they face real day-to-day work situations under the supervision of practicing lawyers. Depending on the nature of the placement, they may be required to engage in classroom work. Registration restricted to students in Year 3. Grading: Pass/Fail.

## Leadership (LEAD)

**LEAD 2010 Learning to Lead 3 cr**

This seminar provides students with an introduction to and understanding of effective leadership and its application to a variety of group and organizational contexts. The classes encourage interdisciplinary discussions of theoretical, philosophical, historical, and technical elements of effective leadership. The course allows students to reflect on and develop their own leadership style through interactive lectures, experiential activities, and action learning in groups and organizations in which students want to lead and be led. This seminar is intended for all students that have an interest in leadership theory and effective leadership practices. Students may not hold credit for both LEAD 2010 and ARTS 1160.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students must have completed 15 credit hours of passed courses to register in LEAD 2010.

**Mutually Exclusive:** ARTS 1160

**LEAD 3010 Negotiation and Conflict Management 3 cr**

Leaders are regularly called upon to manage conflict, promote cooperation, and resolve competing interests. With a focus on negotiation as a means of conflict resolution, this course blends contemporary research and theory with practical, first-hand experience. Students' effectiveness as negotiators will be developed with readings and class discussions focused on the social and psychological underpinnings of negotiation, and applied with weekly hands-on experiences, ranging from bilateral bargaining games to complex, multi-issue, multilateral negotiation scenarios.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Year three standing (or by permission of instructor).

**LEAD 3020 Team Building and Diversity 3 cr**

The ability to work effectively with team members is crucial to individual functioning and promotion within organizations. This course examines the structure and dynamics of teams with an aim to understanding team-building, team dynamics, diversity, and managing team conflict. Part of working effectively in teams is understanding diversity and how to encourage collaboration in diverse teams. This course will therefore cover topics related to diversity and cross-cultural awareness. Equivalent to but students may not hold credit for LEAD 3020 and GMGT 3020 with topics Diversity Management and Team Building or Diversity Management or Team Building.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GMGT 2060 (D) [or GMGT 2080 (D)] and GMGT 2070 (D).

**Mutually Exclusive:** GMGT 3020

**LEAD 3030 Corporate, Social, and Environmental Responsibility 3 cr**

This course examines the responsibilities of business that accompany maximizing shareholder wealth. This includes balancing the needs of a variety of stakeholders (including owners, employees, customers, suppliers, competitors, neighbours, future generations) among a variety of forms of well-being (e.g. financial, ecological, environmental, social, spiritual, physical). Students will learn theory and best practices. Students are encouraged to take this course in the final two years of their program of studies at the I.H. Asper School of Business.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GMGT 1010 (D) and GMGT 2060 (D) [or GMGT 2080] (D).

**LEAD 3040 Special Topics in Leadership and Organization 3 cr**

The content of this course will change from year to year based on: cutting edge topics, research innovations, and trends in leadership. Example topics might include: Organizational Health and Safety; Organizational Justice; Women and Leadership; Advanced Organizational Behaviour; Advanced Organizational Theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GMGT 2060 (D) [or GMGT 2080 (D)] and GMGT 2070 (D), or by permission of instructor.

**LEAD 4010 Leading Change 3 cr**

Organizations regularly face change due to market demands, competition, and economic pressures. The ability to lead change effectively is crucial to organizational success. This course will focus on how to: understand resistance to change, manage change processes, and support employees in times of uncertainty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: GMGT 2060 (D) [or GMGT 2080] (D) and GMGT 2070 (D).

**LEAD 4020 Leadership, Power and Politics in Organizations 3 cr**

This course provides students with an introduction to and understanding of effective leadership and its application to a variety of group and organizational contexts. The course will also describe and enable students to make sense of organizations as political entities and understanding the use of power and social influence. The classes encourage interdisciplinary discussions of theoretical, historical, and practical elements of effective leadership and power. Through interactive lectures and experiential activities, students will have the opportunity to reflect on and develop their own leadership style, to understand how to use and manage power, and to recognize and apply social influence tactics. Students entering second year are strongly recommended to take LEAD 2010 prior to taking LEAD 4020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GMGT 2070 (D).

# Linguistics (LING)

## LING 1000 Introduction to Linguistics 3 cr

Introduction to the scientific study of human language. Basic principles of sound systems, word structure, sentence structure, and meaning across the languages of the world. May not be held with the former LING 1200.

**Mutually Exclusive:** LING 1200

**Attributes:** Social Science, Recommended Intro Courses

## LING 1010 Introduction to Linguistics 2: Language in Context 3 cr

Language as a communication system embedded in a particular geographical, historical, and social context. Psychological and neurological aspects of language. Acquisition of first and second languages. May not be held with the former LING 1200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000] or written consent of instructor.

**Mutually Exclusive:** LING 1200

**Attributes:** Social Science, Recommended Intro Courses

## LING 1310 Indigenous Languages of Manitoba 3 cr

A survey of the linguistic structure, history, and current status of the languages and language families that are indigenous to Manitoba.

**Attributes:** Social Science, Recommended Intro Courses

## LING 1360 Languages of Canada 3 cr

A survey of languages and linguistic problems encountered in North America, with particular attention to questions of relationship and classification. Examples will be drawn from both indigenous and immigrant languages.

**Attributes:** Social Science

## LING 1440 Descriptive Grammar of Modern English 3 cr

What are the criteria that are used to distinguish "good" from "bad" grammar? What are the rules we need to know in order to speak and write "properly"? In focusing on basic concepts in traditional grammar, this course reviews parts of speech, the English tense system, sentence types (e.g., active vs. passive), question formation and types of embedded clauses. It examines the rules of traditional grammar and explores the linguistic structures that lie behind the rules. This course is not intended for students learning English; it presupposes native or near-native competence in English. Not open to students who are currently enrolled in, or have previously obtained credit in LING 2400 or the former LING 2200.

**Mutually Exclusive:** LING 2200, LING 2400

**Attributes:** Social Science

## LING 1460 Words 3 cr

What is a word? How do the meanings and forms of words change over time? This course provides an introduction to the structure and history of words, with special attention to the origins of English vocabulary.

**Attributes:** Social Science, Recommended Intro Courses

## LING 1620 Language and the Media 3 cr

The study of how language interacts with media. Investigation of the forms of language found in media discourse; how patterns in such language use contribute to recognizable media genres and styles; social themes and consequences that arise from media language.

**Attributes:** Social Science, Recommended Intro Courses

## LING 2100 Phonetics and Phonology 3 cr

Fundamentals of the linguistic study of speech sounds. Exercises in phonetic transcription and phonological analysis in a variety of languages. May not be held with the former LING 1380 or the former LING 2420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000 or the former LING 1200] or written consent of instructor.

**Mutually Exclusive:** LING 1380, LING 2420

**Attributes:** Social Science

## LING 2202 Multilingualism 3 cr

Study of various aspects of multilingualism from a sociolinguistic perspective. The course will introduce concepts such as bilingualism, diglossia, pidgins and creoles, code-switching, language maintenance, language loss and language shift, language policy and planning, language revitalization, and linguistic landscape.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1010 or the former LING 1200] or written consent of instructor.

**Attributes:** Social Science

## LING 2210 Language and Gender 3 cr

An exploration of the multiple relationships between language and gender. How are gender differences manifested and perpetuated through language use? How are these differences acquired, and what do they reflect? How does gender interact with other factors such as class, sexual orientation, and ethnicity in language? May not be held with the former LING 1420.

**Mutually Exclusive:** LING 1420

**Attributes:** Social Science

## LING 2330 Historical Linguistics 3 cr

How languages change over time at all levels of linguistic structure. Methods for reconstructing earlier linguistic stages. Language families and linguistic prehistory. May not be held with the former LING 2640.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1010 or the former LING 1200] or written consent of instructor.

**Equiv To:** LING 2640

**Attributes:** Social Science

## LING 2340 Language Endangerment 3 cr

A survey of the causes and effects of language shift and language loss, as well as techniques for the documentation and revitalization of endangered languages. Students may not hold credit for both LING 2340 and the former LING 3820 when titled "Language Endangerment and Language Revitalization."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000 or the former LING 1200] or written consent of instructor.

**Mutually Exclusive:** LING 3820

**Attributes:** Social Science

## LING 2400 Morphology and Syntax 3 cr

Fundamentals of the linguistic study of the structure of words and sentences. Exercises in morphological and syntactic analysis in a variety of languages. May not be held with the former LING 2200 or the former LING 2460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000 or the former LING 1200] or written consent of instructor.

**Mutually Exclusive:** LING 1440, LING 2200, LING 2460

**Attributes:** Social Science

**LING 2500 Semantics and Pragmatics 3 cr**

This course introduces students to basic theories of semantics and pragmatics, with application to the analysis of linguistic data. Topics covered include sense vs. reference, lexical relations, presupposition and topicality, participant roles, information structure, speech acts, metaphor, and metonymy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000 or the former LING 1200] or written consent of instructor.

**Attributes:** Social Science

**LING 2600 Verbal Art 3 cr**

Puns, punchlines, slogans and the chant of the auctioneer are as much instances of verbal art as are rhetorical flourishes and formal literary structures. With spoken language as its major focus, this course draws on a variety of languages, sources and genres to study artistic and playful uses of language.

**Attributes:** Social Science

**LING 2740 Interpretation Theory 3 cr**

A survey of interpretation theory, including specifics of language use and problems in the transfer of linguistic, cultural, and pragmatic information in interpretation, the interpreter's access to meaning, and the development of theories of interpretation. This course draws heavily on the field of ASL/English interpretation for illustration, but knowledge of ASL is not a requirement.

**Attributes:** Social Science, Written English Requirement

**LING 2800 Communication Disorders 3 cr**

A general introduction to the major pathologies of speech, language and hearing as viewed against the background of normal linguistic structures and functions. The distinction between mechanically- and neurologically-based disorders is illustrated in terms of aetiology, diagnosis and approaches to treatment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000 or the former LING 1200] or written consent of instructor.

**Attributes:** Social Science

**LING 2840 Anatomy of Speech Production 3 cr**

An intensive survey of the principal organs of speech and hearing, their embryology, and the general features of their evolutionary history. Some consideration will also be given to their pathological impairment. May not be held with the former LING 2830.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000 or the former LING 1200] or written consent of instructor.

**Equip To:** LING 2830

**Attributes:** Social Science

**LING 2870 Neuroanatomy of Hearing and Speech 3 cr**

A survey of the structures of the central and peripheral nervous systems as they relate to the production and perception of speech and the processing of language. Includes a survey of linguistic aphasiology and a review of neurological deficits associated with abnormal language behaviour. May not be held with the former LING 2850.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000 or the former LING 1200] or written consent of instructor.

**Equip To:** LING 2850

**Attributes:** Social Science

**LING 3110 Phonological Analysis 3 cr**

Key concepts in segmental and suprasegmental phonology. Emphasis on the development of skills in analysis and argumentation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 2100 or the former LING 2420] or written consent of instructor.

**Attributes:** Social Science

**LING 3130 Acoustic Phonetics 3 cr**

The physical principles involved in the production, propagation and reception of sound. The subjective characteristics of sounds (loudness, pitch and quality) are related to their objective parameters (intensity, frequency and spectrum). The physical methods and the types of equipment used to analyze the basic physical properties of sounds will be demonstrated. May not be held with the former LING 2880.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 2100 or the former LING 1380] or written consent of instructor.

**Mutually Exclusive:** LING 2880

**Attributes:** Social Science

**LING 3210 Sociolinguistics 3 cr**

Study of the relationship between language and its social context. This course explores aspects of linguistic variation within and across speech communities, and considers language variation according to the socio-economic status, ethnicity, age, gender, and geographical distribution of its speakers. It will also cover other topics such as identity and ideology. May not be held with the former LING 2620.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [LING 1010 (or the former LING 1200) and LING 2210 (or the former LING 1420)] or written consent of instructor.

**Mutually Exclusive:** LING 2620

**Attributes:** Social Science

**LING 3310 Structure of a Specific Language 3 cr**

Every language has unique properties that deepen our overall understanding of linguistic structure. In this course, the phonology, morphology, and syntax of a specific language are systematically explored on the basis of field records and descriptions which have become classics. The language of study will vary from year to year. May not be held with the former LING 3200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [a grade of "C" or better in each of LING 2100 (or the former LING 2420) and LING 2400 (or the former LING 2200)] or written consent of instructor.

**Mutually Exclusive:** LING 3200

**Attributes:** Social Science

**LING 3320 Structure of an Algonquian Language 3 cr**

Introduction to the linguistic analysis of the languages of the Algonquian family through the in-depth study of the structure of a particular Algonquian language. The language of study will vary from year to year. Students may not hold credit for LING 3320 and any of: NATV 3222 or NATV 3224 or the former NATV 2320 or the former LING 3200 or the former LING 3820 when titled "Structure of the Cree Language" or "Structure of the Ojibway Language."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [LING 2100 (or the former LING 2420) and LING 2400 (or the former LING 2200)] or written consent of instructor.

**Equip To:** NATV 3222, NATV 3224

**Mutually Exclusive:** LING 3200, LING 3820, NATV 2320

**Attributes:** Social Science

**LING 3330 Structure of ASL 3 cr**

An examination of ASL as a signed, as opposed to spoken, language. Topics include phonetic, phonological, morphological and syntactic structures. May not be held with the former LING 3300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 2400 or the former LING 2200] or written consent of instructor.

**Mutually Exclusive:** LING 3300

**Attributes:** Social Science

**LING 3340 ASL in Context 3 cr**

This course situates the structure and use of ASL in a broader context, drawing on perspectives from fields such as discourse analysis, cognitive linguistics, sociolinguistics, and language acquisition. May not be held with the former LING 3300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1000 or the former LING 1200] or written consent of instructor.

**Mutually Exclusive:** LING 3300

**Attributes:** Social Science

**LING 3350 Language and Gesture 3 cr**

While it was once thought that gestures were more or less peripheral to language and were used in largely non-principled ways, current studies continue to build evidence that gesture is central to meaning construction. This course looks at current thought and theory regarding the role of gesture from an evolutionary perspective, as semantic and grammatical units, as co-speech elements, and in signed language. Students may not hold credit for both LING 3350 and LING 3840 when titled "Language and Gesture."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [9 credit hours of Linguistics courses] or written consent of instructor.

**Mutually Exclusive:** LING 3840

**Attributes:** Social Science

**LING 3410 Syntactic Analysis 3 cr**

An exploration of problems in the structure of phrases and clauses, including typological variation and connections with morphology and semantics. Emphasis on the development of skills in analysis and argumentation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 2400 or the former LING 2200 or the former LING 2460] or written consent of instructor.

**Attributes:** Social Science

**LING 3510 Cognitive Semantics 3 cr**

This course examines meaning from a cognitive linguistics viewpoint, including embodied meaning and embodied language, the 'viewer' and the thing being viewed, construal and image schemas, mental network and mental spaces theories, subjective and intersubjective meaning, metaphor and metonymy theory, and the role of language usage in building semantic knowledge.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 2500 (C+) Semantics and Pragmatics] or written consent of instructor.

**Attributes:** Social Science

**LING 3860 Child Language Development 3 cr**

The study of first language acquisition from infancy through childhood. Aspects of phonology, morphology, pragmatics and syntax acquisition are discussed, as well as formal theories of acquisition, second language and bilingual acquisition, atypical development and the relationship of language acquisition with literacy. Also offered as PSYC 3860. Students may not hold credit for LING 3860 and any of: PSYC 3860 or the former LING 2860 or the former PSYC 2860.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [9 credit hours of Linguistics courses] or [PSYC 2290 or PSYC 2291] or written consent of department head.

**Equiv To:** LING 2860, PSYC 2860, PSYC 3860

**Attributes:** Social Science

**LING 3880 Second Language Acquisition 3 cr**

Theories, methods, and findings concerning the various aspects of learning a second language. Examination of variables that impact second language acquisition and development. May not be held with the former LING 2720.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 1010 or the former LING 1200] or written consent of instructor.

**Mutually Exclusive:** LING 2720

**Attributes:** Social Science

**LING 4110 Phonological Theory 3 cr**

Contemporary approaches to the study of sound systems are introduced through the examination of selected phonological issues drawn from the primary research literature. May not be held with the former LING 3140.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 3110 (C+) or the former LING 2420] or written consent of instructor.

**Mutually Exclusive:** LING 3140

**Attributes:** Social Science

**LING 4210 Language Variation and Change 3 cr**

The field of variationist sociolinguistics is introduced through a survey of the primary research literature and practical experience in methods of data collection and analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 3210 (C+) or the former LING 2620] or written consent of instructor.

**Attributes:** Social Science

**LING 4300 Field Methods 3 cr**

Working with a speaker of an unfamiliar (and, usually, unrecorded) language, students are apprenticed in the collection, analysis, and interpretation of raw data. May not be held with the former LING 3400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 3110 (C+) (or the former LING 2420) and LING 3410 (C+) (or the former LING 2200)] or written consent of instructor.

**Mutually Exclusive:** LING 3400

**Attributes:** Social Science

**LING 4410 Syntactic Theory 3 cr**

The goals and tenets of contemporary syntactic theory are introduced through the examination of selected syntactic issues drawn from the primary research literature. May not be held with the former LING 3120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [LING 3410 (C+) or the former LING 2200] or written consent of instructor.

**Mutually Exclusive:** LING 3120

**Attributes:** Social Science



**LING 4920 Topics in Linguistics 3 cr**

Topics of current interest in linguistics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Social Science

**LING 4930 Topics in ASL 3 cr**

Topics of current interest in ASL linguistics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Social Science

**LING 4940 Special Studies 3 cr**

Supervised study on a topic in linguistics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Social Science

## Management Info. Systems (MIS)

**MIS 2000 Information Systems for Management 3 cr**

(Lab required) Introduction to information systems in organizations, systems development/acquisition, and management issues concerning information technology in organizations.

**Equiv To:** MIS 2001

**MIS 3500 Database Management Systems 3 cr**

Designing, developing and managing database systems, by using mainstream design methodologies and popular development tools.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MIS 3510 (D)] and [COMP 1010].

**MIS 3510 Systems Analysis and Design 3 cr**

Analyzing business tasks, processes, information and information technology, and designing information systems by employing methodologies, techniques and popular software used by information systems professionals.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MIS 2000 (C+).

**MIS 3520 Data Communications and Networking 3 cr**

A study of basic data communications topics, including communication media, protocols, network security, network topologies (local and wide area networks), Web development and network management issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MIS 2000 (C+).

**MIS 4250 Advanced Topics in Management Information Systems 3 cr**

A study of current issues in MIS. The topics for this course will vary over time, depending on student interests, faculty interests, and student demand. Not offered every year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**Mutually Exclusive:** MIS 3010

**MIS 4500 Management Information Systems Strategy 3 cr**

A survey of the various issues associated with managing information as a resource. Explores MIS planning frameworks and tools, and the linkages between information systems, organizational structure and organizational strategy. A survey of the various issues associated with managing information as a resource. Explores MIS planning frameworks and tools, and the linkages between information systems, organizational structure and organizational strategy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: at least two of the following: ACC 3530 (D), MIS 3500 (D), MIS 3510 (D), MIS 3520 (D), MIS 4250 (D).

## Management Science (MSCI)

**MSCI 2150 Introduction to Management Sciences 3 cr**

An introduction to management science techniques and models. Topics include linear programming, distribution problems, decision theory and queuing models. May not be held with ABIZ 2520 or MSCI 2151.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 1230 or MATH 1520 or MATH 1500 (or MATH 1501)] and [STAT 1000 (or STAT 1001) or STAT 1150].

**Equiv To:** ABIZ 2520, MSCI 2151

**MSCI 3400 Intermediate Management Science 3 cr**

Operations research models used in the analysis of management problems. Topics include network analysis, deterministic inventory models, dynamic programming and game theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MSCI 2150 (D) or consent of instructor.

**Equiv To:** MSCI 3401

**MSCI 4200 Topics in Management Science 3 cr**

Topics of current interest in management science. Not taught every year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MSCI 2150 (D).

**MSCI 4220 Management Science Models in Business and Industry 3 cr**

An applied course providing practical experience in modeling and solving business and industrial problems. Emphasis to be placed upon analysis, formulation, solution and implementation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MSCI 3400 (D) or MSCI 4200 (D) or MSCI 4230 (D) or MSCI 4200 (D).

## Marketing (MKT)

**MKT 2210 Fundamentals of Marketing 3 cr**

Analysis of marketing problems, emphasizing various alternatives available for achieving economic efficiency in the distribution process; public policy with respect to marketing.

**Equiv To:** MKT 2211

**Attributes:** Recommended Intro Courses

**MKT 3220 Marketing Research 3 cr**

Study of the planning and implementation of research required to make informed marketing decisions. May not be held with MKT 3221.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MKT 2210 (D) or MKT 2211 (D) or consent of instructor.

**Equiv To:** MKT 3221

**MKT 3230 Consumer Behaviour 3 cr**

Study of buying behaviour of individuals and organizations as affected by psychological and sociological forces within society.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D).

**Equiv To:** MKT 3231

**MKT 3240 Selected Topics in Marketing 3 cr**

Analysis of marketing as it relates to specialized fields.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D).

**Mutually Exclusive:** MKT 3242, MKT 3246, MKT 3248

**MKT 3242 Brand Management 3 cr**

Examination of the holistic and integrative considerations that affect brand management. May not be held with MKT 3240 when titled "Branding".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MKT 2210 (D) or MKT 2211 (D).

**Mutually Exclusive:** MKT 3240

**MKT 3246 Sustainability Marketing 3 cr**

This course will examine strategies that organizations can adopt to be successful in meeting the triple bottom line (people, planet, profit) within the broader framework of sustainability. May not be held with MKT 3240 when titled "Sustainability Marketing". Prerequisites: MKT 2210 (D) or MKT 2211 (D).

**Mutually Exclusive:** MKT 3240

**MKT 3248 Digital Marketing 3 cr**

This course will explore various digital marketing channels, best practices, tools and techniques to analyze how marketing strategies and tactics are used to capture opportunities and create value for consumers in the digital age. May not be held with MKT 3240 when titled Digital Marketing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D) or MKT 2211 (D).

**Mutually Exclusive:** MKT 3240

**MKT 3300 International Marketing 3 cr**

A study of international similarities and differences in marketing structures, functions and processes as related to the socio-economic and cultural environment and a consideration of the opportunities and problems of international marketing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D).

**MKT 3310 Retail and Channel Management 3 cr**

The study of the functions performed by traditional and e-commerce distributors. Topics include location and competitive analysis, promotion, merchandising, buying, design, selection and historical development. Topics include location and competitive analysis, promotion, merchandising, buying, design, selection and historical development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D).

**MKT 3340 Services Marketing 3 cr**

An examination of the differences in the marketing of goods versus services. Topics covered include service process design and management, problem identification and resolution, positioning issues, the importance of human resources, and promotional issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D).

**MKT 3390 Integrated Marketing Communications 3 cr**

The process of using promotional tools in a unified way so that a synergistic communications is created. The course examines the roles of advertising, sales promotion, direct marketing, and the internet within this broader framework.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D).

**MKT 4010 Marketing Analytics 3 cr**

The overarching purpose of this course is to convey the ample benefits of an analytical approach to marketing related decision-making, and to build skills/knowledge in undertaking such analyses on your own. Students will gain hands-on, computer-based experience with basic and advanced analytical tools to analyze marketing data for addressing business decisions that create value and build competitive advantage.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MKT 2210 (D) or MKT 2211 (D)) and (STAT 1000 (D) or STAT 1001 (D) or STAT 1150 (D)).

**MKT 4210 Marketing Management 3 cr**

An examination of strategies and tactics marketing managers use for products and services at various stages in the product life cycle. Uses qualitative and quantitative analyses to develop critical thinking essential for making marketing decisions. Can only be taken in final year of program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MKT 3220 (D) or MKT 3230 (D)], and [one other 3000 or 4000 level Marketing course (D)], and [ACC 1110 (D)]. Pre- or co-requisite: either MKT 3220 (D) or MKT 3230 (D), but not both.

**Equiv To:** MKT 4211

**MKT 4270 Sales Management 3 cr**

The study of the management of the personal selling area including an examination of the selling function, the sales manager, and sales management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D).

**Equiv To:** MKT 4271

## Mathematics (MATH)

**MATH 0500 Preparing for University Mathematics 0 cr**

A voluntary non-credit mathematics course for students, holding credit in Pre-Calculus 40S or Applied Mathematics 40S or equivalent, who would benefit from improving their knowledge and skills concerning topics included in the Manitoba secondary school mathematics curriculum. (NOTE: The fee for this course is non-refundable upon withdrawal). This course may be taken prior to or concurrently with MATH 1200, 1210, 1300, 1310, 1500, 1510, 1520, 1700, 1710 or 1690. Students participating in this course should purchase the set of notes "Preparing for University Mathematics" from the University of Manitoba Bookstore.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of 60% in Pre-Calculus 40S, 70% in Applied Mathematics 40S or a grade of 60% or better in the Math Skills course offered by Extended Education.

**Attributes:** Science

**MATH 1010 Applied Finite Mathematics 3 cr**

(Lab Required) For students needing to fill the requirement of a university level mathematics course. Introduces students to modern applications of discrete mathematics. Topics include: mathematics of finance, linear programming, graph theory, and game theory. This is a terminal course and may not be used as a prerequisite for other Mathematics courses. This course cannot be used as part of an Honours, Major, General or Minor program in the mathematical sciences. Not available to any student already holding a grade of "C" or better in any Mathematics course with the exception of MATH 1020, FA 1020, the former MATH 1190 or MATH 1191. Not to be taken concurrently with any other Mathematics course with the exception of MATH 1020, FA 1020 or MATH 1191. No prerequisite.

**Mutually Exclusive:** MATH 1200, MATH 1201, MATH 1210, MATH 1211, MATH 1220, MATH 1230, MATH 1232, MATH 1240, MATH 1241, MATH 1300, MATH 1301, MATH 1310, MATH 1500, MATH 1501, MATH 1510, MATH 1520, MATH 1690, MATH 1700, MATH 1701, MATH 1710

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1018 Pre-Calculus in Practice 3 cr**

(Lab required) Essential topics in pre-calculus, with an emphasis on applications and elementary mathematical modelling in the sciences. This course is intended primarily for students who do not have credit for Pre-calculus Mathematics 40S (60%) and wish to continue in a subsequent course in Mathematics. May not be used for credit in a Mathematics Honours, Joint Honours, or Major program. Not available to students who have previously obtained credit (grade of C or better) in MATH 1200, MATH 1201, MATH 1210, MATH 1211, MATH 1220, MATH 1230, MATH 1240, MATH 1241, MATH 1300, MATH 1301, MATH 1310, MATH 1500, MATH 1501, MATH 1510, MATH 1520, or MATH 1690.

**Mutually Exclusive:** MATH 1200, MATH 1201, MATH 1210, MATH 1211, MATH 1220, MATH 1232, MATH 1240, MATH 1241, MATH 1300, MATH 1301, MATH 1310, MATH 1500, MATH 1501, MATH 1510, MATH 1520, MATH 1690, MATH 1700, MATH 1701, MATH 1710

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1020 Mathematics in Art 3 cr**

Specific theory, structuring systems, and mathematical methods and principles used in works of art from various historical periods and contexts will be explored in relation to Euclidean and non-Euclidean geometries. Topics include: linear perspective; shapes, patterns, balance and symmetry; ratio, proportion and harmony; and order, dynamics, and chaos. The course will be one half art and one half mathematics, team-taught by faculty from the School of Art and the Department of Mathematics. This course is also given in the School of Art as FA 1020. This is a terminal course and may not be used as a prerequisite for other Mathematics courses. This course cannot be used as part of an Honours, Major, General or Minor program in the mathematical sciences. Not available to any student already holding a grade of "C" or better in any Mathematics course with the exception of MATH 1010, the former MATH 1190, or MATH 1191. Not to be taken concurrently with any other Mathematics course with the exception of MATH 1010 or MATH 1191. No prerequisite.

**Equiv To:** FA 1020

**Mutually Exclusive:** MATH 1200, MATH 1201, MATH 1210, MATH 1211, MATH 1220, MATH 1230, MATH 1232, MATH 1240, MATH 1241, MATH 1300, MATH 1301, MATH 1310, MATH 1500, MATH 1501, MATH 1510, MATH 1520, MATH 1690, MATH 1700, MATH 1701, MATH 1710

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1080 Fundamentals of Mathematical Reasoning 3 cr**

(Lab required) Logic, reasoning, problem solving, introduction to set theory, mathematical induction, introduction to number theory, bases of arithmetic and the standard algorithms, working with fractions and functions. The course is recommended for students intending to become early or middle years school teachers. This course cannot be used as part of an Honours, Major, General or Minor program in the mathematical sciences.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Pre-Calculus Mathematics 40S (50%), the former Mathematics 40S (300) (50%), Applied Mathematics 40S (65%), MATH 1018 (C+), or MSKL 0100.

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1090 Mathematical Reasoning in Euclidean Geometry 3 cr**

(Lab required) Introduction to Euclidean geometry with emphasis on mathematical reasoning. Perimeter, area, volume, triangle congruence, parallel lines and quadrilaterals, similarity, circles, coordinate geometry or transformation geometry. The course is recommended for students intending to become early or middle years school teachers. This course cannot be used as part of an Honours, Major, General or Minor program in the mathematical sciences.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 1080.

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1200 Elements of Discrete Mathematics 3 cr**

(Lab Required) Sequences and series, trigonometry, complex numbers, algebra of polynomials, approximation of zeros of functions, linear difference equations. Not to be held with MATH 1210, MATH 1211 or MATH 1201. Not available to any student holding credit in any Mathematics course numbered 2000 or higher, unless MATH 1200 is a required course in a student's program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum grade of 60% in Pre-calculus 40S or the former Mathematics 40S (300), or a grade of 60% or better in the MSKL 0100 offered by Extended Education.

**Equiv To:** MATH 1201

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1210, MATH 1211

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1210 Techniques of Classical and Linear Algebra 3 cr**

(Lab required) To introduce a variety of practical algebraic concepts and skills necessary for the study of calculus and advanced engineering mathematics. The emphasis of this course is in the development of methodology and algebraic skill necessary for successful completion of subsequent engineering mathematics courses. This course is intended for Engineering and Geophysics students. May not be held with MATH 1200, MATH 1201, MATH 1211, MATH 1220, MATH 1300, MATH 1301, or MATH 1310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: One of Pre-calculus Mathematics 40S (60%), the former Mathematics 40S (300) (60%), MATH 1018 (C+), or MSKL 0100.

**Equiv To:** MATH 1211

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1200, MATH 1201, MATH 1220, MATH 1300, MATH 1301, MATH 1310

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1220 Linear Algebra 1 3 cr**

(Lab required) This course is intended for students in mathematically rich disciplines including those planning to enter an Honours or Major program in Mathematics or Statistics. An introduction to vectors, matrices, systems of linear equations and three-dimensional geometry. May not be held with MATH 1210, MATH 1211, MATH 1300, MATH 1301, MATH 1310, or the former MATH 1680.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Pre-calculus Mathematics 40S (70%), the former Mathematics 40S (300) (70%), MATH 1018 (B), or MSKL 0100 (B).

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1210, MATH 1211, MATH 1300, MATH 1301, MATH 1310, MATH 1680

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1230 Differential Calculus 3 cr**

(Lab required) The course is intended for students in mathematically rich disciplines including those planning to enter an Honours or Major program in Mathematics or Statistics. Rigorous treatment of limits, continuity, and differentiation (with epsilon-delta proofs), applications in optimization problems, related rates, l'Hopital's rule, curve sketching, Taylor polynomials. Not to be held with MATH 1500, MATH 1501, MATH 1510, MATH 1520, the former MATH 1680, or MATH 1690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Pre-calculus Mathematics 40S (70%), the former Mathematics 40S (300) (70%), MATH 1018 (B), or MSKL 0100 (B).

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1500, MATH 1510, MATH 1520, MATH 1680, MATH 1690

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1232 Integral Calculus 3 cr**

(Lab required) This course is intended for students in mathematically rich disciplines including those planning to enter an Honours or Major program in Mathematics or Statistics. Integral calculus: theory and techniques of integration, curve sketching (parametric and polar), volume, arc length, surface area and partial derivatives. Sequences and series. Not to be held with MATH 1690, MATH 1700, MATH 1701, MATH 1710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 1230 or MATH 1500 (B) or MATH 1501 (B) or MATH 1510 (B).

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1690, MATH 1700, MATH 1710

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1240 Elementary Discrete Mathematics 3 cr**

(Lab required) The course is intended for students in mathematically rich disciplines including those planning to enter an Honours or Major program in Mathematics or Statistics. An introduction to mathematical ideas, proof, techniques, and mathematical writing, explored through topics in discrete mathematics. May not be held with MATH 1241 or MATH 3120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Pre-calculus Mathematics 40S (60%), the former Mathematics 40S (300) (60%), MATH 1018 (B), or MSKL 0100.

**Equiv To:** MATH 1241

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 3120

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1300 Vector Geometry and Linear Algebra 3 cr**

(Lab required) An introduction to vectors, matrices, systems of linear equations and three-dimensional geometry. May not be held for credit with MATH 1210, MATH 1211, MATH 1220, MATH 1310, MATH 1301, or the former MATH 1680.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Pre-calculus Mathematics 40S (60%), Applied Mathematics 40S (70%), the former Mathematics 40S (300) (60%), MATH 1018 (C+), or MSKL 0100.

**Equiv To:** MATH 1301, MATH 1310

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1210, MATH 1211, MATH 1220, MATH 1680

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1310 Matrices for Management and Social Sciences 3 cr**

(Lab Required) Matrix methods with examples relevant to the Management and Social Sciences. Topics include vectors, matrices, systems of linear equations, and determinants; applications include economic models, the simplex method for linear programming, Markov chains, and game theory. May not be held with MATH 1210, MATH 1211, MATH 1220, MATH 1300, MATH 1301, or the former MATH 1680.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or MSKL 0100 offered by Extended Education. NOTE: A minimum grade of 70% in Applied Mathematics 40S may be used as a prerequisite to this course.

**Equiv To:** MATH 1300, MATH 1301

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1210, MATH 1211, MATH 1220, MATH 1680

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1500 Introduction to Calculus 3 cr**

(Lab required) Differentiation and integration of elementary functions, with applications to maxima and minima, rates of change, area, and volume. May not be held with MATH 1230, MATH 1501, MATH 1510, MATH 1520, the former MATH 1680, or MATH 1690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Pre-calculus Mathematics 40S (60%), the former Mathematics 40S (300) (60%), MATH 1018 (C+), or MSKL 0100.

**Equiv To:** MATH 1501, MATH 1510, MATH 1520, MATH 1530

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1230, MATH 1680, MATH 1690

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1510 Applied Calculus 1 3 cr**

(Lab required) Functions and graphs; limits and continuity; differentiation of functions defined explicitly, implicitly and parametrically; applications of derivatives to velocity and acceleration, related rates, maxima and minima; differentials, indefinite and definite integrals, application of integration to area. Physical applications in this course make it especially suitable for students intending to take programs in engineering. May not be held with MATH 1230, MATH 1500, MATH 1501, MATH 1520, the former MATH 1530, the former MATH 1680, or MATH 1690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (One of Pre-calculus Mathematics 40S (60%), the former Mathematics 40S (300) (60%), MATH 1018 (C+), or MSKL 0100) and (one of Physics 40S (300) (50%), PHYS 1018, PHYS 0900 (P), or PSKL 0100 (P)).

**Equiv To:** MATH 1500, MATH 1501, MATH 1520, MATH 1530

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1230, MATH 1680, MATH 1690

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1520 Introductory Calculus for Management and Social Sciences 3 cr**

(Lab required) Differentiation and integration of functions of one variable and partial differentiation of functions of several variables. Emphasizes applications in the areas of management and social science. May not be held with MATH 1230, MATH 1500, MATH 1501, MATH 1510, the former MATH 1680, or MATH 1690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of Pre-calculus Mathematics 40S (60%), the former Mathematics 40S (300) (60%), MATH 1018 (C+), or MSKL 0100.

**Equiv To:** MATH 1500, MATH 1501, MATH 1510, MATH 1530

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1230, MATH 1680, MATH 1690

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1690 Calculus 6 cr**

(Lab Required) An introduction to the calculus of functions of one variable. This course covers the same material as MATH 1500 and MATH 1700 together, but in greater depth. Exposure to high school calculus (45S) is desirable, but not essential. This course is intended for students planning to enter an Honours or 4 year Major program in Mathematics. May not be held with MATH 1230, MATH 1232, MATH 1500, MATH 1501, MATH 1510, MATH 1520, the former MATH 1680, MATH 1700, MATH 1701, MATH 1710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a minimum grade of 80 % in Pre-calculus Mathematics 40S or the former Mathematics 40S (300).

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1230, MATH 1232, MATH 1500, MATH 1501, MATH 1510, MATH 1520, MATH 1680, MATH 1700, MATH 1701, MATH 1710

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1700 Calculus 2 3 cr**

(Lab Required) Theory and techniques of integration, curve sketching, volume, arc length, surface area and partial derivatives. May not be held with MATH 1232, MATH 1690, MATH 1701, MATH 1710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, or the former MATH 1680.

**Equiv To:** MATH 1701, MATH 1710, MATH 1730

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1232, MATH 1690

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1710 Applied Calculus 2 3 cr**

(Lab Required) Applications of integration to volumes, centres of mass, moments of inertia, work and fluid pressure; differentiation of trigonometric, inverse trigonometric, exponential, and logarithmic functions; techniques of integration; polar coordinates. Physical applications in this course make it especially suitable for students intending to take programs in engineering. May not be held with MATH 1232, MATH 1690, MATH 1700, MATH 1701.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, or the former MATH 1680. Prerequisite or concurrent Requirement: PHYS 1050 or PHYS 1051.

**Equiv To:** MATH 1700, MATH 1730

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1232, MATH 1690

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**MATH 2020 Algebra 1 3 cr**

(Lab required) The course is intended for students in mathematically rich disciplines. Groups, rings, fields: elementary concepts and examples. May not be held with MATH 2021 or the former MATH 3350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2090 or MATH 2091 or the former MATH 2352 or the former MATH 2300 (B) or MATH 2301 (B).

**Equiv To:** MATH 2021

**Mutually Exclusive:** MATH 3350

**Attributes:** Mathematics Requirement, Science

**MATH 2030 Combinatorics 1 3 cr**

(Lab required) Introductory combinatorics, including basic counting, permutations and combinations, enumeration, inclusion-exclusion, pigeonhole principle, solving basic recursions, relations, and derangements. May not be held MATH 2031 or the former MATH 3400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MATH 1240 or MATH 1241 or (the former MATH 2202 and one of the former MATH 2350 or the former MATH 2352) or consent of instructor.

**Equiv To:** MATH 2031

**Mutually Exclusive:** MATH 3400

**Attributes:** Mathematics Requirement, Science

**MATH 2040 Curves and Surfaces 3 cr**

(Lab required) Curves and surfaces in the plane and space. Intrinsic geometry of curves and surfaces: Serret Frenet frames, first and second fundamental forms, curvature and the Gauss map. Geodesics and parallel transport. Theorema Egregium and Gauss-Bonnet theorems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of MATH 1232, MATH 1690, MATH 1700 (B), MATH 1701 (B), or MATH 1710 (B)] and [one of MATH 1220, MATH 1210 (B), MATH 1211 (B), MATH 1300 (C+), or MATH 1301 (C+)] or consent of instructor. Pre- or corequisite: one of MATH 2150, MATH 2151, MATH 2720, or MATH 2721.

**Attributes:** Mathematics Requirement, Science

**MATH 2070 Graph Theory 1 3 cr**

(Lab required) Introduction to graphs, digraphs, and multigraphs. Topics include trees, cycles and circuits, planarity, basic graph algorithms, and applications of graph theory to social and physical sciences. May not be held with MATH 2071 or the former MATH 2400 or COMP 4340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 1240 or MATH 1241] and [one of MATH 1220, MATH 1210 (B), MATH 1211 (B), MATH 1300 (C+), or MATH 1301 (C+)].

**Equiv To:** MATH 2071

**Mutually Exclusive:** COMP 4340, MATH 2400

**Attributes:** Mathematics Requirement, Science

**MATH 2080 Introduction to Analysis 3 cr**

(Lab required) The course is intended for students in mathematically rich disciplines. Fundamental properties of the real number system as a complete ordered field, Archimedean property, existence of square roots, density of rational numbers, uncountability of real numbers. Sequences, subsequences, limit theorems, monotonicity, Bolzano-Weierstrass theorem, Cauchy sequences. Rigorous treatment of limits and continuity of functions of one and several variables. Uniform continuity. Applications. May not be held with MATH 2081 or the former MATH 2202.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of MATH 1232, MATH 1690, MATH 1700 (B), MATH 1701 (B), or MATH 1710 (B)] and [one of MATH 1220, MATH 1210 (B), MATH 1211 (B) MATH 1300 (C+), MATH 1301 (C+)] and [MATH 1240 or MATH 1241].

**Equiv To:** MATH 2081

**Mutually Exclusive:** MATH 2202

**Attributes:** Mathematics Requirement, Science

**MATH 2090 Linear Algebra 2 3 cr**

(Lab required) The course is intended for students in mathematically rich disciplines. Abstract vector spaces, linear transformations, bases and coordinatization, matrix representations, orthogonalization, diagonalization, principal axis theorem. May not be held with MATH 2091, the former MATH 2300, the former MATH 2301, the former MATH 2350, or the former MATH 2352.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of MATH 1220, MATH 1210 (B), MATH 1211 (B), MATH 1300 (C+), or MATH 1301 (C+).

**Equiv To:** MATH 2091

**Mutually Exclusive:** MATH 2300, MATH 2301, MATH 2350, MATH 2352

**Attributes:** Mathematics Requirement, Science

**MATH 2120 Introductory Numerical Methods for Engineers 4 cr**

(Lab Required) Numerical methods applied to problems in engineering; roots of nonlinear equations and systems of linear equations, numerical differentiation and integration, initial-value problems. For Engineering and Geophysics students only. May not be held with MATH 2600 or MATH 2601.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of COMP 1010, COMP 1011, COMP 1012, COMP 1013; pre- or corequisite: MATH 2132 or the former MATH 2100.

**Mutually Exclusive:** MATH 2160, MATH 2161, MATH 2600, MATH 2601, MECH 2150

**Attributes:** Mathematics Requirement, Science

**MATH 2130 Engineering Mathematical Analysis 1 3 cr**

(Lab required) Multivariable differential and integral calculus up to and including multiple integrals in cylindrical and spherical coordinates. This course is intended for students in Engineering and Geophysics programs. May not be held for credit with MATH 2150, MATH 2151, MATH 2720, MATH 2721, the former MATH 2110, or the former MATH 2750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 1210 or MATH 1211) and (one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, or MATH 1710).

**Mutually Exclusive:** MATH 2110, MATH 2150, MATH 2151, MATH 2720, MATH 2721, MATH 2750

**Attributes:** Mathematics Requirement, Science

**MATH 2132 Engineering Mathematical Analysis 2 3 cr**

(Lab required) Infinite series, Taylor and Maclaurin Series; ordinary differential equations including Laplace transforms. This course is intended for students in Engineering and Geophysics programs. May not be held for credit with the former MATH 2100, the former MATH 2730, the former MATH 2731, the former MATH 2800, or the former MATH 2801.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 1210 or MATH 1211) and (one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, or MATH 1710).

**Mutually Exclusive:** MATH 2100, MATH 2730, MATH 2731, MATH 2750, MATH 2800, MATH 2801

**Attributes:** Mathematics Requirement, Science

**MATH 2150 Multivariable Calculus 3 cr**

(Lab required) The course is intended for students in mathematically rich disciplines. Parametric curves, arc length and curvature. Functions of several variables. Level curves. Partial derivatives, gradient, divergence and curl. Max/min problems. Double and triple integrals, line and surface integrals of functions and vector fields, and applications. Green's, Stokes, and divergence theorems. May not be held with MATH 2130, MATH 2151, MATH 2720, MATH 2721, or the former MATH 2750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2080 or MATH 2081 or the former MATH 2202.

**Equiv To:** MATH 2151

**Mutually Exclusive:** MATH 2130, MATH 2720, MATH 2721, MATH 2750

**Attributes:** Mathematics Requirement, Science

**MATH 2160 Numerical Analysis 1 3 cr**

(Lab required) Elementary techniques of numerical solution of mathematical problems: solution of equations, linear systems of equations, nonlinear equations; finite and divided differences, interpolation; numerical differentiation and integration. May not be held with MATH 2120, MATH 2161, the former MATH 2600, or the former MATH 2601.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of MATH 1232, MATH 1690, MATH 1700 (B), MATH 1701 (B), or MATH 1710 (B)] and [one of MATH 1220, MATH 1210 (B), MATH 1211 (B), MATH 1300 (C+), or MATH 1301 (C+)].

**Equiv To:** MATH 2161

**Mutually Exclusive:** MATH 2120, MATH 2600, MATH 2601, MECH 2150

**Attributes:** Mathematics Requirement, Science

**MATH 2170 Number Theory 1 3 cr**

(Lab required) Prime numbers, unique factorization, linear congruences, Chinese remainder theorem, multiplicative functions, primitive roots and quadratic reciprocity. May not be held with the former MATH 2500 or the former MATH 2501.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (MATH 2090 or MATH 2091) or (MATH 1240 or MATH 1241) or (the former MATH 2350 or the former MATH 2352) or (a "B" or better in the former MATH 2300 or the former MATH 2301).

**Mutually Exclusive:** MATH 2500

**Attributes:** Mathematics Requirement, Science

**MATH 2180 Real Analysis 1 3 cr**

(Lab required) Introduction to metric spaces including connectedness, compactness and continuity; topics in infinite series of numbers, and sequences and series of functions. May not be held with the former MATH 3230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2080 or MATH 2081 or the former MATH 2202.

**Equiv To:** MATH 2181

**Mutually Exclusive:** MATH 3230

**Attributes:** Mathematics Requirement, Science

**MATH 2720 Multivariable Calculus 3 cr**

(Lab required) Calculus of several variables. This course is intended for students in one of the following programs: Actuarial Mathematics, Data Science, Statistics (Honours or Majors), Physics (Honours or Majors) Geophysics (Honours or Majors), and Physical Geography. May not be held with MATH 2130, MATH 2150, MATH 2151, MATH 2721, the former MATH 2110, or the former MATH 2750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of MATH 1220, MATH 1210 (B), MATH 1211 (B), MATH 1300, MATH 1301, or MATH 1310) and (one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, or MATH 1710).

**Equiv To:** MATH 2721

**Mutually Exclusive:** MATH 2110, MATH 2130, MATH 2150, MATH 2151, MATH 2750

**Attributes:** Mathematics Requirement, Science

**MATH 2740 Mathematics of Data Science 3 cr**

(Lab required) This course introduces some of the mathematical tools used in Data Science. Topics include linear algebra: least squares, singular value decomposition, principal components analysis, and graph theory: centrality, social network theory, clustering. This course can only be used as an elective in an Honours, Major, or Joint Honours program in Mathematics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(a "B" or better in MATH 1210 or MATH 1211) or (one of MATH 1220, MATH 1300, or MATH 1301)] and (one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, or MATH 1710).

**Attributes:** Mathematics Requirement, Science

**MATH 3120 Applied Discrete Mathematics 3 cr**

(Lab Required) Sets, groups, graphs, and Boolean algebra. For Engineering students only. May not be held with COMP 2130.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 2220 and MATH 2130.

**Mutually Exclusive:** COMP 2130, MATH 1240, MATH 1241

**Attributes:** Mathematics Requirement, Science

**MATH 3132 Engineering Mathematical Analysis 3 3 cr**

(Lab required) Vector integral calculus; series of Ordinary differential equations; Fourier series and Partial differential equations. This course is intended for students in Engineering and Geophysics programs. May not be held with former MATH 3100, the former MATH 3740, or the former MATH 3800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MATH 2130 and MATH 2132.

**Mutually Exclusive:** MATH 3100, MATH 3740, MATH 3800

**Attributes:** Mathematics Requirement, Science

**MATH 3142 Engineering Mathematical Analysis 4 3 cr**

Introduction to discrete mathematics; systems of linear differential equations; complex function theory and applications. For Engineering and Geophysics students only. May not be held with MATH 3110, MATH 3700, MATH 3710, or MATH 3800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MATH 2130; and MATH 2132 or the former MATH 2110.

NOTE: MATH 3132 is highly recommended.

**Mutually Exclusive:** MATH 3110, MATH 3700, MATH 3710, MATH 3800

**Attributes:** Mathematics Requirement, Science

**MATH 3320 Algebra 2 3 cr**

Basic structure theory of groups, integral domains and field extensions. Not to be held with the former MATH 3350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2020 or MATH 2021 or (the former MATH 3300 and consent of instructor).

**Mutually Exclusive:** MATH 3350

**Attributes:** Mathematics Requirement, Science

**MATH 3322 Algebra 3 3 cr**

A continuation of topics in Algebra 1 and Algebra 2. More structure theory of groups, general ring theory, fields and field extensions, Galois theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3320 or (the former MATH 3350 and consent of instructor).

**Attributes:** Mathematics Requirement, Science

**MATH 3330 Computational Algebra 3 cr**

An introduction to the use of computers for symbolic mathematical computation, involving solving nonlinear systems and differential equations. A suitable software package will be used to explore applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2090 or MATH 2091 or the former MATH 2300 or the former MATH 2301 or the former MATH 2350 or the former MATH 2352 or consent of instructor.

**Attributes:** Mathematics Requirement, Science

**MATH 3340 Complex Analysis 1 3 cr**

Analytic functions, Cauchy's theorem and integral formula, series representation of analytic functions, calculus of residues, Rouche's theorem and the principle of the argument. May not be held with the former MATH 3710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 2180 or the former MATH 3230) and [MATH 2150 or MATH 2151 or MATH 2720 (B) or MATH 2721 (B) or the former MATH 2750].

**Mutually Exclusive:** MATH 3710

**Attributes:** Mathematics Requirement, Science

**MATH 3360 Combinatorics 2 3 cr**

Advanced topics in combinatorics, including generating functions, elementary design theory, recurrences, chains and antichains, Polya counting. The course is challenging and is intended for students in mathematically rich disciplines. May not be held with the former MATH 4400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2030 or MATH 2031 or the former MATH 3400.

**Mutually Exclusive:** MATH 4400

**Attributes:** Mathematics Requirement, Science

**MATH 3370 Graph Theory 2 3 cr**

Advanced topics in graph theory, including matchings and coverings, optimization, factors, flows, extremal graph theory, basic Ramsey theory, connectivity, and spectral graph theory. Selected applications in science and operations research are studied. The course is challenging and is intended for students in mathematically rich disciplines. May not be held with COMP 4340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2070 or MATH 2071 or the former MATH 2400 (B) or permission of instructor.

**Mutually Exclusive:** COMP 4340

**Attributes:** Mathematics Requirement, Science

**MATH 3380 Introduction to Projective Planes 3 cr**

Affine planes and projective planes, cross ratio, complex projective plane (the great unifier), Desargues' theorem, projective planes over division rings, Pappus' theorem and commutativity, the fundamental theorem for projectivities on a line, introduction of coordinates in a projective plane. May not be held with the former MATH 2552 or the former MATH 3430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2020 or MATH 2021 or the former MATH 3300 or the former MATH 3350 or consent of instructor.

**Mutually Exclusive:** MATH 2550, MATH 2551, MATH 2552, MATH 3430

**Attributes:** Mathematics Requirement, Science

**MATH 3390 Introduction to Topology 3 cr**

Topological spaces, continuity, connectedness, compactness, separation properties. May not be held with the former MATH 3240.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2180 or the former MATH 3230 or consent of instructor.

**Mutually Exclusive:** MATH 3240

**Attributes:** Mathematics Requirement, Science

**MATH 3410 Introduction to Mathematical Logic 3 cr**

Propositional and first-order logic. Recursion theory. May not be held with the former MATH 4250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2020 or MATH 2021 or the former MATH 2202 or the former MATH 2352 or consent of instructor.

**Mutually Exclusive:** MATH 4250

**Attributes:** Mathematics Requirement, Science



**MATH 3420 Numerical Analysis 2 3 cr**

Numerical methods for eigenvalue problems, nonlinear systems, initial-value problems, boundary-value problems; finite difference methods for ordinary and partial differential equations; error analysis. Not to be held with the former MATH 3600 or the former MATH 3601.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 2090 or MATH 2091 or the former MATH 2300 (B) or the former MATH 2301 (B) or the former MATH 2352] and [MATH 2150 or MATH 2151 or MATH 2720 (B) or MATH 2721 (B) or the former MATH 2750] and (MATH 2160 or MATH 2161 or the former MATH 2600 or the former MATH 2601). Pre- or corequisite: MATH 3440 or the former MATH 2800 or the former MATH 2801.

**Mutually Exclusive:** MATH 3600

**Attributes:** Mathematics Requirement, Science

**MATH 3440 Ordinary Differential Equations 3 cr**

Theory and applications of ordinary differential equations; existence and uniqueness of solutions, linear systems, simple nonlinear systems. This course is theory-based and is intended for students in mathematically rich disciplines. Not to be held with the former MATH 3800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2180 or [(MATH 1300 (B) or MATH 1301 (B)) and (the former MATH 2730 (B) or the former MATH 2731 (B) or the former MATH 2750)].

**Mutually Exclusive:** MATH 3800

**Attributes:** Mathematics Requirement, Science

**MATH 3460 Partial Differential Equations 3 cr**

Method of characteristics for first order PDEs, wave, beam, heat and Laplace equations, derivation of PDEs, existence and uniqueness, energy estimates, well-posedness, maximum principles, separation of variables. Not to be held with the former MATH 3810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(MATH 2150 or MATH 2151 or the former MATH 2750) or ((MATH 2720 (B) or MATH 2721 (B)) and (the former MATH 2730 (B) or the former MATH 2731 (B)))] and [MATH 3440 or the former MATH 3800].

**Mutually Exclusive:** MATH 3810

**Attributes:** Mathematics Requirement, Science

**MATH 3470 Real Analysis 2 3 cr**

Functions of bounded variation, Riemann-Stieltjes integration and Lebesgue integration. Not to be held with the former MATH 3740 or the former MATH 3760.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 2150 or MATH 2151 or MATH 2720 (B) or MATH 2721 (B) or the former MATH 2750] and (MATH 2180 or the former MATH 3230).

**Mutually Exclusive:** MATH 3740, MATH 3760

**Attributes:** Mathematics Requirement, Science

**MATH 3472 Real Analysis 3 3 cr**

Fourier series and Fourier transforms; orthogonal systems and L2 theory, convergence and approximation. Multivariable calculus of maps from  $R_n$  to  $R_m$ , general chain rule and general notion of derivative, implicit function and inverse function theorems. Not to be held with the former MATH 3740 or the former MATH 3760.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3470.

**Mutually Exclusive:** MATH 3740, MATH 3760

**Attributes:** Mathematics Requirement, Science

**MATH 3480 Set Theory 3 cr**

Axiomatic set theory. Cardinality, well-ordered sets, ordinal numbers, cardinal numbers. Axiom of Choice. Ordinal and cardinal arithmetic. Transfinite induction and recursion. May not be held with the former MATH 3220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2020 or MATH 2021 or the former MATH 2202 or consent of instructor.

**Mutually Exclusive:** MATH 3220

**Attributes:** Mathematics Requirement, Science

**MATH 3490 Optimization 3 cr**

(Lab required) This course introduces the theory and practice of optimization. Both unconstrained and constrained problems are considered, as well as continuous and discrete optimization. Topics include linear programming, unconstrained optimization, constrained nonlinear optimization and integer programming. Applications to Statistics and Data Science will be explored.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of MATH 2090, MATH 2091, MATH 2740, the former MATH 2300, the former MATH 2301, the former MATH 2350, or the former MATH 2352] and [one of MATH 2150, MATH 2151, MATH 2720, MATH 2721, or the former MATH 2750].

**Attributes:** Mathematics Requirement, Science

**MATH 3610 Introduction to Mathematical Modelling 3 cr**

An introduction to the principles and techniques involved in the design, development, solution, testing and revision of mathematical models of real world phenomena illustrated through the discussion of case studies. May not be held with the former MATH 3820 or the former MATH 3821.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2150 or MATH 2151 or MATH 2720 (B) or MATH 2721 (B) or MATH 2130 (B) or consent of Instructor.

**Mutually Exclusive:** MATH 3820, MATH 3821

**Attributes:** Mathematics Requirement, Science

**MATH 4240 Advanced Group Theory 3 cr**

Representation theory of finite groups, presentations of finite and infinite groups, or other topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3322 or the former MATH 3350 or consent of instructor.

**Attributes:** Mathematics Requirement, Science

**MATH 4260 Abstract Measure Theory 3 cr**

Lebesgue and abstract measures, measurable functions, convergence theorems, absolutely continuous functions, measure spaces, the Radon-Nikodym theorem, Fubini's and Tonelli's theorems. Not to be held with the former MATH 4750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3472 or the former MATH 3740 (B+) or the former MATH 3760.

**Mutually Exclusive:** MATH 4750

**Attributes:** Mathematics Requirement, Science

**MATH 4270 Algebraic Topology 3 cr**

This course will serve as an introduction to elements of homotopy or homology theory. Not to be held with the former MATH 4230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 3320 or the former MATH 3300) and (MATH 3390 or the former MATH 3240), or consent of instructor.

**Mutually Exclusive:** MATH 4230

**Attributes:** Mathematics Requirement, Science

**MATH 4280 Basic Functional Analysis 3 cr**

Banach spaces, Hahn-Banach, open mapping and closed graph theorems, principle of uniform boundedness, linear operators and functionals, dual space,  $L_p$  and  $L_q$  spaces, weak and weak\* topologies, Hilbert spaces and compact operators on a Hilbert space. Not to be held with the former MATH 4750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 3472 or the former MATH 3740 (B+) or the former MATH 3760] and (MATH 3390 or the former MATH 3240), or consent of instructor.

**Mutually Exclusive:** MATH 4750

**Attributes:** Mathematics Requirement, Science

**MATH 4290 Complex Analysis 2 3 cr**

Conformal mappings, normal families, harmonic and subharmonic functions, Perron's family, Dirichlet problem and Green's function. Not to be held with the former MATH 4710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 3340 or the former MATH 3700 (B+) or the former MATH 3710] and (MATH 3390 or the former MATH 3240).

**Mutually Exclusive:** MATH 4710

**Attributes:** Mathematics Requirement, Science

**MATH 4300 Combinatorial Geometry 3 cr**

Topics in combinatorial geometry, including arrangements of convex bodies, introduction to polytopes, problems in discrete geometry, repeated distances, and geometric graphs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3360 or the former MATH 3400 or consent of instructor.

**Attributes:** Mathematics Requirement, Science

**MATH 4320 Dynamical Systems 3 cr**

Techniques for the qualitative analysis of nonlinear systems of ordinary differential equations and discrete-time systems. Not to be held with the former MATH 4800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3440 or the former MATH 3800.

**Mutually Exclusive:** MATH 4800

**Attributes:** Mathematics Requirement, Science

**MATH 4330 Fundamentals of Approximation Theory 3 cr**

Theoretical aspects of approximation theory: density, existence, uniqueness; direct and inverse theorems for polynomial approximation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 2080 or MATH 2081 or the former MATH 2202) and (MATH 2160 or MATH 2161 or the former MATH 2600 or the former MATH 2601), or consent of instructor.

**Attributes:** Mathematics Requirement, Science

**MATH 4340 Introduction to Algebraic Geometry 3 cr**

This course will introduce students to the basics of affine and projective varieties through a combination of basic theoretical tools and elementary examples.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3322 or the former MATH 3350 or consent of instructor.

**Attributes:** Mathematics Requirement, Science

**MATH 4360 Introduction to Differential Geometry 3 cr**

Manifolds and submanifolds; vector and tensor fields, Lie brackets and derivatives. Also at least one of the following: exterior differential calculus and Stokes' theorem, introduction to Riemannian geometry, symplectic geometry and hamiltonian mechanics. Not to be held with the former MATH 4730.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 3472 or the former MATH 3740 (B) or the former MATH 3760] and (MATH 3390 or the former MATH 3240).

**Mutually Exclusive:** MATH 4730

**Attributes:** Mathematics Requirement, Science

**MATH 4370 Linear Algebra and Matrix Analysis 3 cr**

Vector and matrix norms, matrix factorizations, eigenvalues and eigenvectors, theory of non-negative matrices. Applications to differential equations, math biology, numerical analysis, digital image processing, data mining, GPS, Markov chains, graph theory, etc. will be given in this course. Not to be held with the former MATH 4310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 2090 or MATH 2091 or the former MATH 2300 (B) or the former MATH 2301 (B) or the former MATH 2350 or the former MATH 2352.

**Mutually Exclusive:** MATH 4310

**Attributes:** Mathematics Requirement, Science

**MATH 4380 Mathematical Biology 3 cr**

Formulation, analysis and simulation of suitable models in mathematical biology. Applications will be chosen from fields such as population dynamics, epidemiology, ecology, immunology and cellular dynamics. Not to be held with the former MATH 3530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 4320 or the former MATH 3800 or consent of instructor.

**Mutually Exclusive:** MATH 3530

**Attributes:** Mathematics Requirement, Science

**MATH 4390 Numerical Approximation Theory 3 cr**

Computational aspects of approximation by interpolatory polynomials, convolutions, artificial neural networks, splines and wavelets.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 2150 or MATH 2151 or MATH 2720 (B) or MATH 2721 (B) or the former MATH 2750] and (MATH 2160 or MATH 2161 or the former MATH 2600 or the former MATH 2601), or consent of instructor.

**Attributes:** Mathematics Requirement, Science

**MATH 4440 Numerical Analysis of Partial Differential Equations 3 cr**

Finite difference method, mathematical theory of Elliptic PDEs, finite element method, iterative solution of linear systems. Emphasis will be on the error analysis (stability, consistency and convergence) of the various methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 3420 or the former MATH 3600 or the former MATH 3601) and (MATH 3460 or the former MATH 3810) and [MATH 3470 or the former MATH 3740 (B) or the former MATH 3760], or consent of instructor. It is recommended that MATH 4370 be taken prior to or at the same time.

**Attributes:** Mathematics Requirement, Science

**MATH 4450 Number Theory 2 3 cr**

Algebraic number theory, arithmetic geometry and analytic number theory, Diophantine equations, examples such as arithmetic of elliptic curves and Dirichlet L-functions. Not to be held with the former MATH 3450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(MATH 2020 or MATH 2021) and MATH 2170] or [(the former MATH 2500 or the former MATH 2501) and the former MATH 2202 and the former MATH 2750], or consent of instructor.

**Mutually Exclusive:** MATH 3450

**Attributes:** Mathematics Requirement, Science

**MATH 4460 Partial Differential Equations 2 3 cr**

Green's function, Poisson, heat, Schrodinger and wave equations in two and three spatial dimensions, variational characterization of eigenvalues, Fourier and Laplace transforms, introduction to functional analytic techniques in PDEs. Not to be held with the former MATH 4810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 3460 or the former MATH 3810) and [MATH 3470 or the former MATH 3740 (B) or the former MATH 3760], or consent of instructor.

**Mutually Exclusive:** MATH 4810

**Attributes:** Mathematics Requirement, Science

**MATH 4470 Rings and Modules 3 cr**

The general theory of (non-commutative) rings, modules and algebras.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 3322 or the former MATH 3350 or consent of instructor.

**Attributes:** Mathematics Requirement, Science

**MATH 4910 Project Course in Mathematics 3 cr**

A research project by the student in consultation with the department head and an appropriate supervising Faculty member. A written report will be required to be submitted by the end of the term. An oral examination may be required. This course is restricted to students in the fourth year of the Honours or Major program in Mathematics and is not available to Graduate Students. This course may not be held for credit with MATH 4900.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of Department.

**Mutually Exclusive:** MATH 4900

**Attributes:** Mathematics Requirement, Science

**MATH 4920 Topics in Mathematics 3 cr**

Topics of current interest in Mathematics or Applied Mathematics upon the interests and requirements of students and faculty, and will include specialized topics not available in regular course offerings.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of department.

**Attributes:** Mathematics Requirement, Science

# Mechanical Engineering (MECH)

**MECH 2112 Fundamentals of Mechanical and Computer Aided Design 5 cr**

(Lab required) Provide instruction on the application of computer aided design software packages. The students will work in groups in the design and development of a product using CAD packages and digital fabrication technologies. May not be held for credit with CIVL 2830, the former ENG 2020, ENG 2022, MECH 2010, or MECH 2012.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENG 1430.

**Mutually Exclusive:** CIVL 2830, ENG 2020, ENG 2022, MECH 2010, MECH 2012

**MECH 2150 Mechanical Engineering Modelling and Numerical Methods 4 cr**

(Lab required) A case-study-based introduction to modelling and numerical methods with mechanical engineering applications. Selected problems, primarily from second and third year mechanical engineering course material, will be used to teach modelling. Derivation and application of appropriate numerical methods will be performed to solve the case study problems using a hands-on approach. A high level computer language and accompanying toolkit/built-in functions will be introduced for solution of the cases. May not be held with MATH 2120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 1012 or COMP 1013. Pre- or corequisites: MATH 2132.

**Equiv To:** CIVL 3590

**Mutually Exclusive:** MATH 2120, MATH 2160, MATH 2161, MATH 2600, MATH 2601

**MECH 2202 Thermodynamics 4 cr**

(Lab required) Cycles, transient flow processes, entropy, gas mixtures, psychrometry combustion. May not be held for credit with MECH 2200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENG 1460, (MATH 1500 or MATH 1510 and MATH 1700 or MATH 1710).

**Equiv To:** MECH 2200

**MECH 2222 Mechanics of Materials 4 cr**

(Lab required) Topics covered in this course include: axial and torsional loading, stress-strain and deformation in statically determinate/indeterminate systems, thermally induced stress, and stresses in beams (including reinforced beams) under pure bending and bending with shear. The mechanical properties of materials under various loading modes will be addressed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [PHYS 1050] and [ENG 1440 or ENG 1441 (ENG 1350)] and COMP 1012 and [MATH 1710 or MATH 1700].

**Equiv To:** MECH 2220, MECH 2270

**MECH 2262 Fundamentals of Fluid Mechanics 4 cr**

(Lab required) Fundamental concepts used in the analysis of fluid behaviour, pressure in stationary fluids, forces on submerged surfaces, buoyancy, integral methods, Bernoulli equation, pipeline analysis. May not be held for credit with the former MECH 2260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 1050 and ENG 1440 and ENG 1460 and MATH 2130 (or the former MATH 2110). Pre or Co requisite: MATH 2132 (or the former MATH 2100).

**Mutually Exclusive:** MECH 2260

**MECH 2272 Engineering Materials 1 4 cr**

(Lab required) Introduction to engineering materials; defects, strengthening mechanisms, and plasticity in engineering metals and alloys; fundamentals and application of heat treatment of metallic materials including topics such as diffusion, phase diagram, phase transformation, and thermal processing; mechanical properties of engineering metallic materials and their relationship to structure, defects, various strengthening mechanisms, and processing; structure of non-metallic polymers and ceramics. May not be held with MECH 2270, MECH 2290 or MECH 3540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [CHEM 2240 or [(CHEM 1110 or CHEM 1111) and CHEM 1126] or the former CHEM 1310 or the former CHEM 1311] and [MECH 2222 or the former MECH 2220].

**Equiv To:** MECH 2270, MECH 3540

**Mutually Exclusive:** MECH 2290

**MECH 3170 Project Management 4 cr**

(Lab required) Topics covered include project planning, scheduling, resource allocation, process analysis, layout and control. The course will make use of industrial projects for developing a strong design and analytical approach pertinent to project management. May not be held for credit with the former MECH 4170.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2112 (or the former MECH 2010 or the former MECH 2012) or CIVL 2830.

**Mutually Exclusive:** MECH 4170

**MECH 3420 Vibrations and Acoustics 4 cr**

(Lab required) Vibrations and computer simulations of single-degree-of-freedom systems, viscous and friction damping, MD of systems and modal analysis, measurement and sources of noise, noise control.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 3482 (formerly MECH 2120 and MECH 3480), and MATH 3132 (formerly MATH 3100).

**MECH 3430 Measurements and Control 4 cr**

(Lab required) Mathematical modelling of mechanical systems. Feedback systems and stability. Digital control; analog to digital and digital to analog control systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MATH 3132 (or MATH 3100) and ENG 1450 (or 130.118).

**MECH 3460 Heat Transfer 4 cr**

(Lab required) This is the first course in heat transfer. Topics covered include fundamental concepts relevant to heat transfer analysis, steady-state and transient conduction, forced and free convection, external and internal flows, heat exchangers and fundamentals of radiation. May not be held for credit with the former MECH 3470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 2150, MATH 3132 (or the former MATH 3100) and ENG 1460. Pre- or corequisite: MECH 3492 (or the former MECH 3490).

**Mutually Exclusive:** MECH 3470

**MECH 3482 Kinematics and Dynamics 4 cr**

(Lab required) Fundamentals of 2D and 3D rigid body motions (kinematics) and the forces/moments (kinetics) needed to produce such motions. Applications will emphasize elements of machine design. May not be held for credit with MECH 2120 or MECH 3480.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 1050 and [ENG 1440 or ENG 1441] and COMP 1012 and [MATH 1710 or MATH 1700].

**Equiv To:** MECH 2120

**Mutually Exclusive:** MECH 3480

**MECH 3492 Fluid Mechanics and Applications 4 cr**

(Lab required) The angular momentum principle, introduction to differential analysis of fluid motion, internal and external incompressible viscous flow, fluid machinery and multiple-path systems, fluid coupling and torque couplings and torque converters. May not be held for credit with the former MECH 3490.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2262 (or the former MECH 2260). Pre- or Corequisite: MECH 2150 or CIVL 3590 or MATH 2120.

**Mutually Exclusive:** MECH 3490

**MECH 3502 Stress Analysis and Design 4 cr**

(Lab required) Strength and stability of columns, torsion of thin-walled members, unsymmetric loading and shear centres, beam deflection and energy methods. May not be held with MECH 2220 or MECH 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 2222 (the former MECH 2220), MATH 2130 (the former MATH 2110) and MECH 2112.

**Mutually Exclusive:** MECH 3500

**MECH 3520 Aerodynamics 4 cr**

(Lab required) Aeronautical definitions, compressible flow, plane normal shock waves, Mach. no. and shock waves in two-dimensional flow, potential flow theory in two-dimensional and axisymmetric flows. Two-dimensional wing theory, finite wing theory panel methods, elements of boundary layer theory. Compressibility and wings, wing design, flow control.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 2150 and MECH 3492 (or the former MECH 3490).

**MECH 3542 Engineering Materials 2 4 cr**

(Lab required) Mechanical properties of engineering non-metallic materials such as polymers, ceramics and composites, and their relationship to structure and processing; introduction to various shaping and joining processes used in manufacturing, their advantages and limitations; selection and application of engineering materials. May not be held for credit with MECH 2270, MECH 2290 or MECH 3540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 2272 (formerly MECH 2270).

**Equiv To:** MECH 2270, MECH 3540

**Mutually Exclusive:** MECH 2290

**MECH 3550 Robotics and Computer Numerical Control 4 cr**

(Lab required) This course builds up a foundation in the area of Computer Aided Manufacturing (CAM) such as computer numerically controlled machine tools and robotics. Intense hands on experience is provided in the laboratory sessions on part programming using Computer Aided Design (CAD) packages and robots to demonstrate application in the area of CAM. Several case studies and manufacturing applications will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2112 (or the former MECH 2010 or the former MECH 2012) or CIVL 2830.

**MECH 3562 Introduction to Optimization 4 cr**

(Lab required) The objective of this course is to develop the ability to formulate and analyze problems that will be encountered in a manufacturing system. The skills acquired will allow the students to approach problems from an optimization perspective. The students will be provided experience in related software packages. May not be held for credit with the former MECH 3560.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MECH 2112 or the former MECH 2010 or the former MECH 2012 or CIVL 2830) and STAT 2220.

**Mutually Exclusive:** MECH 3560

**MECH 3570 Manufacturing Automation 4 cr**

(Lab required) This course builds upon the foundation developed in a previous course: namely Robotics and Computer Numerical Control. The course covers a wide variety of topics in the area of computer controlled automation. The students are provided with hands on experience in design for automation. It will synthesize several aspects associated with integrated operation of computer controlled automated devices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3550.

**MECH 3582 Manufacturing Planning and Quality Control 4 cr**

(Lab required) The course covers topics such as: group technology, just-in-time, computer aided process planning, statistical process control and manufacturing planning and control. Issues related to the integration of several areas that fall within CIM are emphasized. Systems approach is introduced. May not be held with the former MECH 3580.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2112 (or the former MECH 2010 or the former MECH 2012) or CIVL 2830.

**Mutually Exclusive:** MECH 3580

**MECH 3592 Simulation Modeling and Facility Planning 4 cr**

(Lab required) The objective of this course is to introduce simulation for manufacturing operations and the concepts of facilities location and layout. The students will learn how to program WITNESS, a simulation language, and through simulation, explore the effects of facility planning; resource availability e.g. machines and quality related problems on manufacturing productivity and timing. May not be held with MECH 3590.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2112 (or the former MECH 2010 or the former MECH 2012) or CIVL 2830.

**Mutually Exclusive:** MECH 3590

**MECH 3602 Manufacturing Process Fundamentals 4 cr**

(Lab required) This course will give students hands on experience with numerous manufacturing processes, machines and systems. Using CNC mills, lathes, conventional machine shop equipment and hand tools, the students will manufacture mechanical components, assemble them and troubleshoot any problems. The object is to provide students with hands-on exposure to the application of basic manufacturing process tools. May not be held for credit with MECH 3600.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2112 (or the former MECH 2012 or the former MECH 2010) or CIVL 2830.

**Mutually Exclusive:** MECH 3600

**MECH 3652 Machine Design 4 cr**

(Lab required) Stress and failure analysis and the design of machine elements; shafts and couplings, threaded fasteners and power screws, clutches and power transmission components; spur, bevel, worm and helical gears; lubrication, journal and roller bearings. May not be held for credit with MECH 4650.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MECH 3482 or the former MECH 2120) and (MECH 3502 or the former MECH 3500).

**Equiv To:** MECH 4650

**MECH 3982 Mechanical Laboratories in Solid Mechanics 2 cr**

(Lab required) Laboratory course on topics that compliment and reinforce concepts developed in second and third year mechanical engineering courses in mechanics of solids and structures, and vibrations. May not be held for credit with the former MECH 3980, MECH 4980, or MECH 4990.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (ENG 2030 or ENG 2040 or the former ENG 2010) and (MECH 2222 or the former MECH 2220). Pre- or corequisites: MECH 3420 and (MECH 3502 or the former MECH 3500).

**Mutually Exclusive:** MECH 3980, MECH 4980, MECH 4990

**MECH 3992 Mechanical Laboratories in Thermofluids 2 cr**

(Lab required) Laboratory course on topics that compliment and reinforce concepts developed in second and third year mechanical engineering courses in thermofluids. May not be held for credit with the former MECH 3980, MECH 4980, or MECH 4990.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (ENG 2030 or ENG 2040 or the former ENG 2010), (MECH 2202 or the former MECH 2200), and (MECH 2262 or the former MECH 2260). Pre- or corequisites: MECH 3460 or the former MECH 3470.

**Mutually Exclusive:** MECH 3980, MECH 4980, MECH 4990

**MECH 4162 Thesis 6 cr**

This course will give students the opportunity to gain research or design experience in their area of interest. Thesis topics must be approved by the head of the department or designate. Restriction: Only students with a year class distinction of 4 or higher in Mechanical Engineering may register for this course and eligible to graduate. May not be held for credit with MECH 4160.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ENG 2030 or ENG 2040 (or the former ENG 2010).

**Mutually Exclusive:** MECH 4160

**MECH 4182 Aerospace Structures: Analysis and Design 4 cr**

(Lab required) Methodology and techniques for design of aerospace structures and components to preclude failure with minimum weight, cost and resource consumption. Analysis of structural, air, gust and manoeuvre loads. May not be held for credit with MECH 4180.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 3502 (or MECH 3500).

**Mutually Exclusive:** MECH 4180

**MECH 4192 Aerospace Materials and Manufacturing Processes 4 cr**

(Lab required) Properties of aerospace structural materials including glass and graphite fibre composites, light metal alloys and high strength steels. Properties of high temperature materials; superalloys ceramics, intermetallic compounds, metal matrix composites. Specialized methods for manufacture of these materials. May not be held for credit with MECH 4190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 3542 (formerly MECH 3540).

**Mutually Exclusive:** MECH 4190

**MECH 4200 Gas Turbine Propulsion Systems 4 cr**

(Lab required) Gas turbine systems, shaft power cycles, gas turbine propulsion cycles, centrifugal compressors, axial flow compressors, combustion systems, design performance predictions, off-design operations and transient behaviour of gas turbines. Design performance predictions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 2202 (or MECH 2200) and MECH 3520.

**MECH 4292 IC Engines 4 cr**

(Lab required) Thermodynamics of internal combustion engines and engine cycles; fuels and fuel systems; combustion; emission control systems; electronic engine controls and strategies; intake and exhaust systems; camshafts and valvetrain dynamics; balancing; performance and testing. May not be held for credit with MECH 4290.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2202 (or the former MECH 2200).

**Mutually Exclusive:** MECH 4290

**MECH 4310 Contemporary Topics in Mechanical Engineering 1 4 cr**

(Lab required) This course will cover contemporary topics in Mechanical Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the department.

**Mutually Exclusive:** MECH 4542

**MECH 4322 Contemporary Topics in Mechanical Engineering II 4 cr**

(Lab required) This course will cover contemporary topics in Mechanical Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered. May not be held for credit with MECH 4320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Departmental Permission.

**Mutually Exclusive:** MECH 4320, MECH 4482, MECH 4582

**MECH 4330 Contemporary Topics in Manufacturing Engineering 1 4 cr**

(Lab required) This course will cover contemporary topics in Manufacturing Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the department.

**MECH 4342 Contemporary Topics in Manufacturing Engineering II 4 cr**

(Lab required) This course will cover contemporary topics in Manufacturing Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered. May not be held for credit with MECH 4340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Departmental Permission.

**Mutually Exclusive:** ENG 4110, ENG 7510, MECH 4340, MECH 4432

**MECH 4350 Topics in Engineering Material 1 4 cr**

(Lab required) This course will cover contemporary topics in engineering materials. The specific topics and a detailed outline will be available prior to the start of registration period for the session in which the course will be offered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Departmental Permission.

**MECH 4360 Topics in Engineering Materials 2 4 cr**

(Lab required) This course will cover contemporary topics in engineering materials. The specific topics and a detailed outline will be available prior to the start of registration period for the session in which the course will be offered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Departmental Permission.

**MECH 4412 Heating, Ventilation and Air Conditioning 4 cr**

(Lab required) Psychometric processes, equipment selection, and the design of heating and cooling systems for typical buildings. May not be held for credit with MECH 4410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2202 (formerly MECH 2200).

**Mutually Exclusive:** MECH 4410

**MECH 4432 Systems Engineering 4 cr**

(Lab required) The engineering support process as applied to the entire product life cycle from requirements definition to disposal. Focus on the system as a whole; from the outside, its interaction with its environment and other systems; and from the inside, its design requirements and implementation. May not be held with MECH 4342 when titled "Systems Engineering." Restricted to students in third year or above.

**Mutually Exclusive:** MECH 4342

**MECH 4452 Aircraft Performance, Dynamics and Design 4 cr**

(Lab required) A study of the morphology of aerospace vehicles; basic components and their functions, Aircraft performance; drag, thrust, lift, basics of orbital mechanics. May not be held for credit with MECH 4450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 3520.

**Mutually Exclusive:** MECH 4450

**MECH 4472 Mechanical Vibration 4 cr**

(Lab required) Nonlinear Vibrations: mathematical theory for lumped vibratory systems; response of systems to nonharmonic excitation; solutions by Laplace transforms and Fourier analysis; introduction to the matrix formulation of vibration problems and vibration of distributed systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3420.

**MECH 4482 Applied Aerospace Instrumentation 4 cr**

(Lab required) Principles and practices of test and measurement system design and analysis for aerospace applications. Topics include transducers, signal conditioning, data acquisition and analysis, uncertainty analysis, calibration and correlation, system design and maintenance, and piping and instrumentation diagrams, and an introduction to LabVIEW software. This course may include a field trip component. May not be held for credit with MECH 4322 when titled "Applied Instrumentation".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 3430 and [(MECH 3982 and MECH 3992) or the former MECH 3980 or (the former MECH 4980 and the former MECH 4990)].

**Mutually Exclusive:** MECH 4322

**MECH 4510 Fundamentals of Finite Element Analysis 4 cr**

(Lab required) Fundamentals of the Finite Element Method, basic components in a Finite Element procedure, application of FEM to solve engineering problems and use of commercial software.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MECH 2150 or MATH 2120) and (MATH 3132 or MATH 3100) and MECH 2222 (or the former MECH 2220).

**MECH 4532 Advanced Strength of Materials 4 cr**

(Lab required) Stress and strain in three dimensions; thick walled cylinders, beams of elastic foundations, unsymmetrical bending and sheet-stringer construction, curved beams. Additional topics such as the analysis of fibre-composite material, techniques in experimental stress analysis and studies in metallics fatigue may be presented. May not be held for credit with MECH 4530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3502 (formerly MECH 3500).

**MECH 4542 Principles of Turbomachinery 4 cr**

(Lab required) Principles and design of turbomachinery, including fluid dynamics, thermodynamics and engineering applications. A variety of turbomachines are introduced, including hydraulic pumps and turbines, centrifugal compressors and fans, and axial flow compressors and fans. May not be held for credit with MECH 4310 when titled "Turbomachinery."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 2202 (or the former MECH 2200) and MECH 3492 (or the former MECH 3490).

**Mutually Exclusive:** MECH 4310

**MECH 4550 Noise Control 4 cr**

(Lab required) An elective course open to all branches of Engineering; a recommended course for students taking Air Conditioning. Wave propagation, transducers and measurement techniques, psycho-acoustic criteria, legislation, techniques of noise and vibration control.

**MECH 4560 Selected Topics in Fluid Mechanics 4M 4 cr**

(Lab required) Topics may include: wind tunnel design; experimental techniques; some exact solutions of the conservation equations; fundamentals of turbulence; secondary flows; fluidization; elementary meteorology; fluidics; other topics of current interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MATH 3132 or the former MATH 3100] and [MECH 3492 or the former MECH 3490].

**MECH 4582 Vehicle Testing, Condition Monitoring, and Fault Analysis 4 cr**

(Lab required) General testing and fault diagnostic techniques for ground vehicles including common signal analysis techniques, vibration testing and fault analysis methods. Basic knowledge of vibration based condition monitoring including the basic theory and applications of engineering tools, damage analysis and detection, and modal analysis. May not be held for credit with MECH 4322 when titled "Ground Vehicle Testing Technology."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3420.

**Mutually Exclusive:** MECH 4322

**MECH 4620 Corrosion of Metals and Alloys 4 cr**

(Lab required) Electrochemical basis of corrosion, corrosion prevention by cathodic protection, inhibitors, alloying and heat treatment, passivation, stress corrosion cracking, corrosion fatigue; ionic and electronic conduction; oxidation of metals and alloys.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3542 (or MECH 3540).

**MECH 4672 Advanced Mechanism Design 4 cr**

(Lab required) Graphical, analytical and computer techniques for the analysis and design of mechanisms to produce a desired set of motion characteristics; design of linkages, double lever, slider and dwell mechanism; cognate linkages. Kinetic synthesis tasks function generation, path generation and motion generation. May not be held for credit with MECH 4670.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3482 (formerly MECH 2120).

**Mutually Exclusive:** MECH 4670

**MECH 4680 Energy Conservation and Utilization 4 cr**

(Lab required) Energy supply and demand, advanced thermodynamic cycles, conventional energy sources, alternative energy, conservation of energy, environmental considerations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2202 (formerly MECH 2200).

**MECH 4690 Topics in Heat Transfer and Energy 3 cr**

(Lab required) Some combination of the following advanced topics: conduction heat transfer, radiation, heat-exchanger design, two-phase phenomena, fluidization, alternative energy, energy conservation. Other topics of current interest may also be included.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3460 (or MECH 3470).

**Mutually Exclusive:** MECH 4694

**MECH 4692 Renewable Energy 4 cr**

(Lab required) Introduction to renewable energy systems, current and future global energy issues and the need for renewable energy applications, and distributed renewable energy generation. Renewable energy systems that will be considered are; solar heat, solar PV, biomass heat and power, hydro power, and wind power. Students will develop simple numerical models of renewable energy systems. Prerequisites MECH 2202 (formerly MECH 2200) and MECH 2262 (formerly MECH 2260). Pre- or Co requisite; MECH 3460 (formerly MECH 3470).

**MECH 4694 Advanced Topics in Heat Transfer 4 cr**

(Lab required) Some combination of the following advanced topics; conduction heat transfer radiation, heat-exchanger design, two-phase phenomena, fluidization, alternative energy, energy conservation. Other topics of current interest may also be included. May not be held for credit with MECH 4690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3460 (or MECH 3470).

**Mutually Exclusive:** MECH 4690

**MECH 4702 Design of Thermal Systems 4 cr**

(Lab required) Modeling of thermal systems; system simulation; design applications of optimization methods: Lagrange multipliers, search methods, and dynamic geometric and linear programming. May not be held for credit with MECH 4700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 2202 (or MECH 2200).

**Mutually Exclusive:** MECH 4700

**MECH 4812 Automotive Engineering 4 cr**

(Lab required) Introduction to vehicle dynamics; power trains; braking systems; road loads, aerodynamics and fuel efficiency; ride and suspension systems; steering systems; tire properties and dynamics; structural analysis and crash safety; performance vehicle design. May not be held for credit with MECH 4810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3502 (or the former MECH 3500). Pre or Co-requisite: MECH 3420.

**Mutually Exclusive:** MECH 4810

**MECH 4822 Numerical Heat Transfer in Fluid Flow 4 cr**

(Lab required) General conservation equations; specific forms of the conservation equations and energy equations; finite difference methods: one dimensional steady problems, one dimensional unsteady problems, two dimensional steady problems; two dimensional unsteady problems; convection, solution for the flow fluid. May not be held for credit with the former MECH 4820.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MATH 3132 or the former MATH 3100), (MECH 2150 or MATH 2120), MECH 3460 (or the former MECH 3470) and MECH 3492 (or the former MECH 3490).

**Mutually Exclusive:** MECH 4820

**MECH 4832 Biomaterials in Biomedical Engineering 4 cr**

(Lab required) Biomechanics and design of hard biomaterials and soft biomaterials and their applications in orthopedics, cardiovascular and neural systems. Course includes fundamental biological concepts, materials science fundamentals and medical/clinical concerns.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 3542 (or the former MECH 3540) or (BIOE and BIOE 3590).

**MECH 4860 Engineering Design 5 cr**

(Lab required) Design projects; teams of students prepare written and oral design reports on solutions to specific problems from Manitoba industries; series of seminars by invited speakers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: eligibility for graduation in the current academic year or registered in third year Industrial Cooperative Education Program. Prerequisites: (ENG 2030 or ENG 2040 or the former ENG 2010) and MECH 3170 and (MECH 3652 or the former MECH 4650).

**MECH 4870 Fracture and Failure of Engineering Materials 4 cr**

(Lab required) Criteria for crack initiation and propagation leading to structural failure. Fracture mechanics and fracture toughness phenomena. Effects of structure geometry, loading rate, environment, temperature, composition and microstructure on material integrity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3542 (or MECH 3540).

**MECH 4900 Mechatronics System Design 4 cr**

(Lab required) The course covers topics in the analysis of control systems and components with the goal to provide students with tools and an understanding of issues related to integrating mechanical, electronic and software components towards building mechatronic devices. Hands-on-experience is provided in the laboratory sessions on simulation and actual computer control of various devices. Problems considered would include application to fluid power systems, systems integration and validation. The focus is placed on learning to work with real hardware.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 3430.

**MECH 4930 Mechanical Engineering Industry Internship (IIP) 0 cr**

Supervised work experience normally of 12-16 months duration, concluded by a work report. (Pass/Fail grade only.)

## Medical Rehabilitation (REHB)

**REHB 2450 Research Methodology for Medical Rehabilitation 3 cr**

A theory and practical course designed to provide a basic understanding of research principles and their application in Medical Rehabilitation. 45 hours.

## Microbiology (MBIO)

**MBIO 1010 Microbiology I 3 cr**

(Lab required) Topics will include the definition and history of microbiology, concepts of practical microbiology, prokaryotic cell structure, prokaryotic specialization in gene expression and transfer of genetic information, the role of microbes in environments including the human body, and applications of microbiology to food production and biotechnology. May not be held with MBIO 1011.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [BIOL 1020 or BIOL 1021] and [one of CHEM 1100, CHEM 1101, the former CHEM 1300, or the former CHEM 1301].

**Equiv To:** MBIO 1011

**Mutually Exclusive:** MBIO 1220, MBIO 2100, MBIO 2101, MBIO 2110, MBIO 2111

**Attributes:** Science, Recommended Intro Courses

**MBIO 1220 Essentials of Microbiology 3 cr**

An introduction to the essential principles of microbiology including immunity, with emphasis on microbial disease. Not available to students who have previously obtained credit in or are currently enrolled in MBIO 1010 or MBIO 1011 (or the former MBIO 2100 or MBIO 2101). NOTE: MBIO 1220 is intended for students planning to enter the College of Nursing or other health care or related programs. Students that have completed MBIO 1010 but wish to take MBIO 1220 to satisfy Faculty of Nursing entrance requirements must obtain departmental permission prior to registering for MBIO 1220. MBIO 1220 cannot be used to satisfy the requirements of the Microbiology Honours or Major degree programs. MBIO 1220 can be used as an elective course in any Science program.

**Mutually Exclusive:** MBIO 1010, MBIO 1011, MBIO 2100, MBIO 2101

**Attributes:** Science, Recommended Intro Courses



**MBIO 1410 Introduction of Molecular Biology 3 cr**

An introduction to the mechanisms, themes and patterns that are present in the molecular biology of organisms ranging from bacteria to humans. The basic applications of molecular biology to disciplines such as medical microbiology, criminology, genetic fingerprinting, genome sequencing, and bioinformatics will be discussed. NOTE: MBIO 1410 is intended for students outside of Microbiology and Biological Sciences who require an introduction to molecular biology, such as those with interests in bioinformatics, biophysics, or bioengineering. Although this course may be used as an elective in an Arts or Science program, it may not be used to meet a program requirement for an Honours or Major program in Microbiology. Not available to students who have previously obtained credit in, or are currently enrolled in the following courses: the former MBIO 2410, BIOL 2500, BIOL 2501, MBIO 2020, MBIO 2021, the former MBIO 2100, MBIO 2101, MBIO 3410 or MBIO 3411.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of grade 12 Biology, grade 12 Chemistry, BIOL 1000, CHEM 1000, or higher level Chemistry or Biology course; or consent of department.

**Mutually Exclusive:** BIOL 2500, BIOL 2501, MBIO 2020, MBIO 2021, MBIO 2100, MBIO 2101, MBIO 2410, MBIO 3410, MBIO 3411

**Attributes:** Science, Recommended Intro Courses

**MBIO 2020 Microbiology II 3 cr**

(Lab required) Topics will include bacterial growth, chromosome replication, the specifics of transcription and translation and their application to the regulation of microbial gene expression. Families of bacterial and animal viruses, their modes of reproduction and pathogenicity will be discussed. Mutation and gene transfer in bacteria will be introduced. May not be held with MBIO 2021, the former MBIO 2110, or the former MBIO 2111.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 1010 or MBIO 1011] and [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)] or (the former CHEM 1310 or the former CHEM 1311).

**Equiv To:** MBIO 2021

**Mutually Exclusive:** MBIO 1410, MBIO 2110, MBIO 2111

**Attributes:** Science

**MBIO 2230 Introductory Biogeochemistry 3 cr**

The roles and interactions of biological, chemical and geological reactions in determining the composition of the environment. Microorganisms as major agents of biogeochemical change and their roles in the element cycles will be especially emphasized.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 1110, CHEM 1111, the former CHEM 1310, or the former CHEM 1311] and [one of MBIO 1010, MBIO 1011, BIOL 1030, or BIOL 1031].

**Attributes:** Science

**MBIO 2420 Introductory Virology 3 cr**

An introduction to the general principles of eukaryotic virology, with emphasis on animal virus systems. These principles will be reinforced and expanded to deal with specific viruses that cause acute and chronic infections in humans. Topics to be discussed include the molecular structure of viruses; the basic multiplication strategies of the major virus families; mechanisms of host immune evasion and viral latency, persistence, and oncology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MBIO 1010 or MBIO 1011) and (BIOL 2520 or BIOL 2521).

**Attributes:** Science

**MBIO 2700 Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy 3 cr**

An introductory course dealing with the kinds of molecules encountered in biochemistry, and the concept of metabolic energy as a product of catabolism and a requirement for biosynthesis. Also offered as CHEM 2700. May not be held with the former MBIO 2360, the former MBIO 2361, MBIO 2701, MBIO 2730, the former MBIO 2770, the former CHEM 2360, the former CHEM 2361, CHEM 2700, CHEM 2701, CHEM 2730, the former CHEM 2860, or the former CHEM 2770.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM 1110 or CHEM 1111) and (one of CHEM 1120, CHEM 1121, or CHEM 1126)] or (the former CHEM 1310 or the former CHEM 1311)] and [BIOL 1030 or BIOL 1031].

**Equiv To:** CHEM 2700, CHEM 2701, MBIO 2701

**Mutually Exclusive:** CHEM 2360, CHEM 2361, CHEM 2730, CHEM 2770, CHEM 2860, MBIO 2360, MBIO 2361, MBIO 2730, MBIO 2770

**Attributes:** Science

**MBIO 2710 Biochemistry 2: Catabolism, Synthesis, and Information Pathways 3 cr**

An introductory course dealing with the basic metabolic processes that occur in living cells, including the production and use of metabolic energy, the breakdown and synthesis of biomolecules; the synthesis of DNA, RNA and proteins; and the regulation of these processes. Also offered as CHEM 2710. May not be held with the former MBIO 2370, the former MBIO 2371, MBIO 2711, MBIO 2750, the former MBIO 2780, the former CHEM 2370, the former CHEM 2371, CHEM 2710, CHEM 2711, CHEM 2750, or the former CHEM 2780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of MBIO 2700, MBIO 2701, the former MBIO 2360, the former MBIO 2361, CHEM 2700, CHEM 2701, the former CHEM 2360, the former CHEM 2361, or the former CHEM 2860] and [one of CHEM 2100, CHEM 2101, the former CHEM 2210, or the former CHEM 2211].

**Equiv To:** CHEM 2710, CHEM 2711, MBIO 2711

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2750, CHEM 2780, MBIO 2370, MBIO 2371, MBIO 2750, MBIO 2780

**Attributes:** Science

**MBIO 2730 Elements of Biochemistry 1 3 cr**

Basic concepts of biochemistry including the properties of biomolecules (amino acids and proteins, enzymes, carbohydrates, lipids, and nucleic acids) and aspects of energy production in cells. Primarily for students in Agricultural and Food Sciences and four-year Biological Sciences programs in Science. May not be used as part of an Honours, Major, or Minor program in Chemistry. May not be used as part of an Honours or Major program in Microbiology. This course is also given in Chemistry as CHEM 2730. May not be held with the former CHEM 2360, the former CHEM 2361, CHEM 2700, CHEM 2701, CHEM 2730, the former CHEM 2770, the former CHEM 2860, the former MBIO 2360, the former MBIO 2361, MBIO 2700, MBIO 2701, or the former MBIO 2770.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of CHEM 1110, CHEM 1111, CHEM 1130, the former CHEM 1310, the former CHEM 1311, or the former CHEM 1320] and [six credit hours of university level BIOL courses or (HEAL 1500 and HEAL 1502)].

**Equiv To:** CHEM 2730

**Mutually Exclusive:** CHEM 2360, CHEM 2361, CHEM 2700, CHEM 2701, CHEM 2770, MBIO 2360, MBIO 2361, MBIO 2700, MBIO 2701, MBIO 2770

**Attributes:** Science

**MBIO 2750 Elements of Biochemistry 2 3 cr**

The continuation of CHEM 2730/MBIO 2730, dealing with nitrogen and lipid metabolism, representative biosynthetic pathways, and synthesis and importance of DNA, RNA and proteins. Primarily for students in Agricultural and Food Sciences and four-year Biological Sciences programs in Science. May not be used as part of an Honours, Major, or Minor program in Chemistry. May not be used as part of an Honours or Major program in Microbiology. This course is also given in Chemistry as CHEM 2750. May not be held with the former CHEM 2370, the former CHEM 2371, CHEM 2710, CHEM 2711, CHEM 2750, the former CHEM 2780, the former MBIO 2370, the former MBIO 2371, MBIO 2710, MBIO 2711, or the former MBIO 2780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of CHEM 2730, CHEM 2700, CHEM 2701, the former CHEM 2770, the former CHEM 2360, the former CHEM 2361, the former CHEM 2860, MBIO 2730, MBIO 2700, MBIO 2701, the former MBIO 2770, the former MBIO 2360, or the former MBIO 2361.

**Equiv To:** CHEM 2750

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2710, CHEM 2711, CHEM 2780, CHEM 2860, MBIO 2370, MBIO 2371, MBIO 2710, MBIO 2711, MBIO 2780

**Attributes:** Science

**MBIO 3000 Applied Biological Safety 3 cr**

A comprehensive overview of applied biological safety in research and industrial environments and the disease-causing features of relevant infectious agents and considerations for their containment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 1010 or MBIO 1011] and [one of CHEM 1110, CHEM 1111, CHEM 1130, the former CHEM 1310, the former CHEM 1311, or the former CHEM 1320]; or permission of instructor.

**Attributes:** Science

**MBIO 3010 Mechanisms of Microbial Disease 3 cr**

A consideration of host-parasite relationships, an introduction to the immune response, microbial pathogenesis, viral diseases, clinical microbiology and public health, and an introduction to antimicrobial agents. May not be held with MBIO 3011.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MBIO 2020 (MBIO 2021) or the former MBIO 2100 or former MBIO 2101.

**Equiv To:** MBIO 3011

**Attributes:** Science

**MBIO 3032 Microbiology III: Physiology and Metabolism 3 cr**

The course will include an introduction to microbial growth and genomics approaches used for the analysis of microbial metabolism. Using these tools, the physiology of microbial cell walls, transport, and motility, as well as microbial metabolism as related to ATP production, respiration, fermentation and carbon fixation will be discussed. May not be held with the former MBIO 3030, the former MBIO 3031, or MBIO 3033.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 2020 or MBIO 2021] and [one of MBIO 2710, MBIO 2711, the former MBIO 2370, the former MBIO 2371, CHEM 2710, CHEM 2711, the former CHEM 2370, or the former CHEM 2371].

**Equiv To:** MBIO 3033

**Mutually Exclusive:** MBIO 2100, MBIO 2101, MBIO 3030, MBIO 3031

**Attributes:** Science

**MBIO 3282 Microbial Communities 3 cr**

The course will examine microbial communities, which will be discussed in terms of their composition, physiological adaptations and their effects on their abiotic and biological surroundings. Topics will include nutrient cycling, biodegradation and adaptation to extreme environments, and the applications arising from these microbial functions. Methods for quantitation of microbial biomass and biological activity will be discussed. May not be held with MBIO 3283, the former MBIO 2280, or the former MBIO 3280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 1010 or MBIO 1011] and [one of CHEM 1110, CHEM 1111, the former CHEM 1310, or the former CHEM 1311].

MBIO 2020, MBIO 2021, or MBIO 1410 are recommended prerequisites.

**Equiv To:** MBIO 3283

**Mutually Exclusive:** MBIO 2280, MBIO 3280

**Attributes:** Science

**MBIO 3410 Molecular Biology 3 cr**

A rigorous treatment of the foundations of modern day molecular biology as it pertains to molecular disease, gene and cell manipulation, and cellular controls. May not be held with MBIO 3411.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of MBIO 2700, MBIO 2701, CHEM 2700, CHEM 2701, MBIO 2730, CHEM 2730, the former MBIO 2360, the former MBIO 2361, the former CHEM 2360, the former CHEM 2361, the former MBIO 2770, or the former CHEM 2770], and [one of MBIO 2020, MBIO 2021, BIOL 2520, BIOL 2521, BIOL 2500, BIOL 2501, or PLNT 2520].

**Equiv To:** MBIO 3411

**Mutually Exclusive:** MBIO 1410

**Attributes:** Science

**MBIO 3430 Molecular Evolution 3 cr**

An analysis starting with prebiotic evolution, progressing through the elaboration of macromolecules and examining their adaptation to their function as cellular components. Proteins, carbohydrates, and nucleic acids as structural, catalytic, and genetic elements in evolution of living systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of MBIO 2020, MBIO 2021, MBIO 2710, MBIO 2711, the former MBIO 2370, the former MBIO 2371, CHEM 2710, CHEM 2711, the former CHEM 2370, the former CHEM 2371, MBIO 2750, the former MBIO 2780, CHEM 2750, the former CHEM 2780, BIOL 2500, BIOL 2501, PLNT 2520, BIOL 2520, or BIOL 2521.

**Attributes:** Science

**MBIO 3450 Regulation of Biochemical Processes 3 cr**

Mechanisms of regulation of enzyme activity, including allostery, control of selected biosynthetic and degradative pathways and regulation of gene expression. May not be held with MBIO 3451.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 2020 or MBIO 2021] and [one of MBIO 2710, MBIO 2711, the former MBIO 2370, the former MBIO 2371, CHEM 2710, CHEM 2711, the former CHEM 2370, or the former CHEM 2371]; or consent of the department.

**Equiv To:** MBIO 3451

**Attributes:** Science

**MBIO 3460 Membrane and Cellular Biochemistry 3 cr**

(Lab required) Isolation, fractionation, structure and function of cellular membranes and subcellular components. The central role of these elements in the biochemistry of cellular processes will be stressed. May not be held with MBIO 3461.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(one of MBIO 2710, MBIO 2711, CHEM 2710, CHEM 2711) and (CHEM 2720 or CHEM 2721)] or [one of the former MBIO 2370, the former MBIO 2371, the former CHEM 2370, or the former CHEM 2371].

**Equiv To:** MBIO 3461

**Attributes:** Science

**MBIO 3472 Microbial Systematics 3 cr**

Characterization and classification of the major group of microorganisms. Bases for divisions and the relatedness among organisms will be studied. May not be held with the former MBIO 3470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of MBIO 3032, MBIO 3033, the former MBIO 3030, or the former MBIO 3031.

**Mutually Exclusive:** MBIO 3470

**Attributes:** Science

**MBIO 3600 Molecular Microbiology Techniques 3 cr**

A laboratory-based course, intended to teach the fundamental techniques required to work in a modern molecular microbiology laboratory. Students will develop a thorough understanding of the theory underpinning the techniques introduced in this course, laboratory skills in current molecular microbiology techniques, and application of techniques to investigate scientific questions, such as the identification of unknowns. Learning outcomes include development of technical skills, competency in following protocols, presentation of results and scientific writing. May not be held with MBIO 3601, the former MBIO 4600, the former MBIO 4601, or MBIO 4030 when titled Advanced Microbial Genetics Lab.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 3410 or MBIO 3411]; and [(MBIO 2710, MBIO 2711, CHEM 2710, or CHEM 2711) and (CHEM 2720 or CHEM 2721)] or [one of the former MBIO 2370, the former MBIO 2371, the former CHEM 2370, or the former CHEM 2371].

**Equiv To:** MBIO 3601

**Mutually Exclusive:** MBIO 4030, MBIO 4600, MBIO 4601

**Attributes:** Science

**MBIO 3700 Experimental Microbiology Laboratory 3 cr**

This lab course will introduce students to the morphological and physiological study of microorganisms. Students will reinforce their basic lab skills while carrying out discovery-based experiments involving microscopy, antibiotic susceptibility testing, bacterial enumeration, physiology and identification. May not be held with the former MBIO 3030 or the former MBIO 3031.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MBIO 2020 or MBIO 2021; and [(MBIO 2700, MBIO 2701, CHEM 2700, or CHEM 2701) and (CHEM 2720 or CHEM 2721)] or [one of the former MBIO 2370, the former MBIO 2371, the former CHEM 2370, or the former CHEM 2371].

**Mutually Exclusive:** MBIO 3030, MBIO 3031

**Attributes:** Science

**MBIO 3980 Work Term 1 0 cr**

Work assignments in business, industry or government for students registered in the Microbiology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MBIO 2370 (MBIO 2371) or CHEM 2370 (CHEM 2371).

**Attributes:** Science

**MBIO 3990 Work Term 2 0 cr**

Work assignments in business, industry or government for students registered in the Microbiology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

**MBIO 4020 Immunology 3 cr**

Topics will include antigens, antibodies, antigen-antibody reactions, immunogenetics, regulation of immune reactions, complement, hypersensitivities, autoimmunity, immunodeficiencies, transplantation and tumour immunology. May not be held with the former MBIO 4010, the former MBIO 4011, or MBIO 4021.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of MBIO 3010, MBIO 3011, MBIO 3410 (B), or MBIO 3411 (B).

**Equiv To:** MBIO 4021

**Mutually Exclusive:** MBIO 4010, MBIO 4011

**Attributes:** Science

**MBIO 4030 Special Topics in Microbiology 3 cr**

Microbiology is a very broad field that encompasses a wide range of specialized topics. In this course, students can pursue a specific topic in detail through lectures, assigned readings, seminars and research projects. The course is normally restricted to third and fourth year Honours and Major students. Topics to be covered by the course shall be decided by the instructor(s) in consultation with the student(s) and with the approval from the Department. Grades are based on written assignments and reports. Evaluation may also include oral presentation and poster presentation(s).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of Department.

**Mutually Exclusive:** MBIO 3600, MBIO 3601, MBIO 4300, MBIO 4700

**Attributes:** Science

**MBIO 4032 Special Topics in Microbiology 3 cr**

(Lab required) Microbiology is a very broad field that encompasses a wide range of specialized topics. In this course, students can pursue a specific topic in detail through laboratory-based research projects and may include lectures, assigned readings, and presentation of seminars. The course is normally restricted to third and fourth year Honours and Major students in Microbiology, Biochemistry, and Genetics. Topics to be covered by the course shall be decided by the instructor(s) in consultation with the student(s) and with the approval from the Department.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of Instructor.

**Attributes:** Science

**MBIO 4300 Infectious Diseases Around the World 3 cr**

This course will build upon MBIO 3010. The course will cover the different influential factors such as climate, travel, poverty and socio-economic conditions, government and religion, and how they impact the prevention, spread and treatment of key infectious disease in different parts of the world. May not be held with MBIO 4030 when titled Infectious Diseases around the World.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MBIO 3010 or MBIO 3011.

**Mutually Exclusive:** MBIO 4030

**Attributes:** Science

**MBIO 4410 Virology 3 cr**

A comprehensive examination of fundamental properties of viruses, virus taxonomy, and the different ways in which viruses replicate. The ways viruses cause disease and experimental methods used in virology also will be examined. May not be held with MBIO 4411.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 3010 or MBIO 3011] and [MBIO 3410 or MBIO 3411] and [one of MBIO 2710, MBIO 2711, the former MBIO 2370, the former MBIO 2371, CHEM 2710, CHEM 2711, the former CHEM 2370, or the former CHEM 2371].

**Equiv To:** MBIO 4411

**Attributes:** Science

**MBIO 4442 Research in Systems Microbiology 3 cr**

(Lab required) Systems microbiology integrates physiological information and functional genomics (genomics, transcriptomics, proteomics, metabolomics) data, as well as large scale mutagenesis and chemogenomics to create models of the complex interactions within microbial cells to understand how a bacterial cell functions as an integrated whole. Applications to more complex microbial communities will also be discussed. May not be held with the former MBIO 4440.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of MBIO 3032, MBIO 3033, the former MBIO 3030, or the former MBIO 3031.

**Mutually Exclusive:** MBIO 4440

**Attributes:** Science

**MBIO 4480 Microbes in our Environment 3 cr**

(Lab required) A course investigating the diversity of roles microbes play in our immediate environment, and how they affect it. Environments to be examined may include the human body, waste treatment facilities and extreme environments. Molecular tools to study the community structure and roles of individual organisms will also be discussed. May not be held with the former MBIO 3480 or the former MBIO 4320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of [(MBIO 3032 or MBIO 3033) and MBIO 3700] or (the former MBIO 3030, or the former MBIO 3031).

**Mutually Exclusive:** MBIO 3480, MBIO 4320

**Attributes:** Science

**MBIO 4520 Industrial Bioprocesses 3 cr**

(Lab required) The course will cover bioprocesses for a range of commercially important healthcare and industrial products. Topics will also include bioreactor design and control for these bioprocesses, metabolic engineering for product enhancement, applied engineering and downstream processing. May not be held for credit with the former MBIO 4510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of [(MBIO 3032 or MBIO 3033) and MBIO 3700] or (the former MBIO 3030, or the former MBIO 3031).

**Mutually Exclusive:** MBIO 4510

**Attributes:** Science

**MBIO 4530 Project in Microbiology 6 cr**

(Lab Required) A research project chosen in consultation with the department head, and supervised by a staff member. A written report is normally required. The course is available only to final year Honours students in Microbiology, the Joint Microbiology-Chemistry programs, or the Genetics program. May not be held with CHEM 4710.

**Mutually Exclusive:** BTEC 4000, CHEM 4710, CHEM 4711

**Attributes:** Science

**MBIO 4531 Projet de recherche en microbiologie 6 cr**

Projet de recherche choisi en consultation avec l'administrateur du cours ou un superviseur approprié de la Faculté. Un rapport écrit à mi-parcours et un rapport oral et écrit à la fin du projet sont exigés. Cours offert uniquement aux étudiantes et étudiants dans leur dernière année du programme de majeure conjointe en biochimie-microbiologie, d'un programme spécialisé en microbiologie, ou d'un programme en génétique. On ne peut se faire créditer MBIO 4531 et MBIO 4530, CHEM 4711 ou CHEM 4710.

**Equiv To:** MBIO 4530

**Mutually Exclusive:** BTEC 4000, CHEM 4710, CHEM 4711

**Attributes:** Université de Saint-Boniface, Science

**MBIO 4540 Biological Energy Transduction 3 cr**

Biochemistry of biological processes involving interconversion of different forms of energy such as oxidative phosphorylation, membrane transport and contractile processes. May not be held with MBIO 4541. MBIO 3032, MBIO 3033, the former MBIO 3030, or the former MBIO 3031 is recommended as a prerequisite to this course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of MBIO 2710, MBIO 2711, the former MBIO 2370, the former MBIO 2371, CHEM 2710, CHEM 2711, the former CHEM 2370, or the former CHEM 2371.

**Equiv To:** MBIO 4541

**Attributes:** Science

**MBIO 4602 Molecular Genetics of Prokaryotes - Lectures 3 cr**

A detailed examination of genetic mechanisms of replication, expression, mutability, repair and transposition of DNA in bacteria and their viruses, and their applications in recombinant DNA technology. The contribution of these genetic mechanisms to virulence in bacterial pathogens will also be examined. May not be held with MBIO 4603, the former MBIO 4600, or the former MBIO 4601.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 2020 or MBIO 2021] and [MBIO 3410 or MBIO 3411].

**Equiv To:** MBIO 4603

**Mutually Exclusive:** MBIO 4600, MBIO 4601

**Attributes:** Science

**MBIO 4612 Molecular Genetics of Eukaryotes - Lectures 3 cr**

A comprehensive study dealing with replication and expression of DNA, genome structure, and the involvement of genes in diseases such as cancer. May not be held with MBIO 4613 or the former MBIO 4610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 3410 or MBIO 3411] and [one of MBIO 2710, MBIO 2711, the former MBIO 2370, the former MBIO 2371, CHEM 2710, CHEM 2711, the former CHEM 2370, or the former CHEM 2371]. BIOL 2500 or BIOL 2501 is recommended.

**Equiv To:** MBIO 4613

**Mutually Exclusive:** MBIO 4610

**Attributes:** Science

**MBIO 4672 Applied Molecular Biology 3 cr**

The overall objective of this course is to introduce and describe the current molecular techniques and their application to biological problems. These include, but are not limited to, basic gene cloning, mutagenesis and over-expression. May not be held with the former MBIO 4570, MBIO 4670, the former MBIO 4580, MBIO 4581.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [MBIO 3410 or MBIO 3411] and [one of MBIO 2710, MBIO 2711, the former MBIO 2370, the former MBIO 2371, CHEM 2710, CHEM 2711, the former CHEM 2370, or the former CHEM 2371].

**Mutually Exclusive:** MBIO 4570, MBIO 4580, MBIO 4581, MBIO 4670

**Attributes:** Science

**MBIO 4700 Computational Molecular Microbiology 3 cr**

The introduction to bioinformatics concepts achieved by applying computational tools to analyse sequence/molecular data relevant to Microbiology. The course will introduce existing bioinformatics tools that deal with biological databases, sequence alignment, gene and protein structure prediction, molecular phylogenetics, genomics and proteomics. May not be held with MBIO 4030 when the topic was Applied Bioinformatics Resources for Microbial Based Research.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MBIO 3410 (B) or MBIO 3411 (B).

**Mutually Exclusive:** MBIO 4030

**Attributes:** Science

**MBIO 4980 Work Term 3 0 cr**

Work assignments in business, industry or government for students registered in the Microbiology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

**MBIO 4990 Work Term 4 0 cr**

Work assignments in business, industry or government for students registered in the Microbiology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**Attributes:** Science

## Midwifery (MDFY)

**MDFY 2010 Preparation for Professional Midwifery Education and Practice 3 cr**

This course provides students with an understanding of the midwifery model of care in remote, rural, and urban settings in Manitoba and contrasts this model with those in other Canadian jurisdictions and internationally. Students also learn about the historical context of midwifery and the issues related to the future of the midwifery profession in Canada, including Indigenous midwifery practices. This course introduces theories and models of teaching and learning as it relates to the health promotion of individuals, groups, and communities. Strategies for interpersonal communication and counseling are introduced.

**MDFY 2020 Bioscience for Midwives 3 cr**

(Lab required) This course provides an overview of the biochemical and microbiological concepts that underlie screening and diagnostic testing in the childbearing year. Content areas include practical applications of clinical chemistry, specimen collection, medical microbiology, and the interpretation of laboratory results.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 2010, MDFY 2440, NURS 2522, and NURS 3550.

**MDFY 2030 Pharmacology for Midwives 3 cr**

This course introduces concepts of pharmacotherapeutics. It provides an overview of basic concepts in pharmacology and introduces therapeutics relevant to the pharmacological aspects of the practice of midwifery. Unifying concepts include pharmacokinetics, pharmacodynamics, toxicology, adverse reactions in pregnancy and lactation, and in the neonate. This course includes content related to traditional Indigenous midwifery practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 2010, MDFY 2440, NURS 2522, and NURS 3550.

**MDFY 2040 Normal Childbearing Skills 6 cr**

(Lab required) This course provides students with fundamental theory, assessment skills, and psychomotor skills to support clinical practice in the normal childbearing year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 2010, MDFY 2440, NURS 2522, and NURS 3550.

**MDFY 2090 Normal Childbearing Clinical Practice and Tutorial 12 cr**

This clinical practice course enables students to apply the knowledge, skills and judgment related to the normal childbearing process to clinical practice. This course offers students the opportunity to reflect about and critically analyze clinical practice experiences and to share this analysis with their peers and instructors. This course will include content related to traditional Indigenous midwifery practices. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 2020, MDFY 2030, and MDFY 2040.

**MDFY 2440 Human Reproductive Physiology 3 cr**

(Lab required) This course provides an in-depth understanding of human reproduction with particular emphasis on intrinsic control mechanisms and extrinsic methods of regulation of reproduction. This course also provides the basis for the understanding of alterations from normal mechanisms of reproductive processes.

**MDFY 3010 Advanced Clinical Skills I 3 cr**

This week long intensive course provides students with a series of lectures and practical skills labs to build on clinical skills acquired in MDFY 2040 and MDFY 2090. This course expands on knowledge and skills related to intrapartum care such as, perineal repair, emergency skills, fetal health surveillance, ethical issues, and other relevant topics. Knowledge related to effective interprofessional consultation and communication is introduced. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 2090.

**MDFY 3020 Midwifery Clinical Practice and Interprofessional Roles 3 cr**

This clinical practice experience focuses on preparing the student for their interprofessional placements. Students will be in midwifery clinical placements during the span of the course and complete the didactic part of this course online. This course expands on knowledge and skills related to variations in normal during the prenatal, intrapartum and postpartum periods. Knowledge related to effective interprofessional consultation and communication is reinforced. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 3010 and MDFY 3090.

**MDFY 3030 Interprofessional Practice I 6 cr**

This clinical practice course provides students with the opportunity to develop their skills in the provision of culturally safe care in culturally diverse settings. The tutorial offers students the opportunity to reflect about and critically analyze clinical practice experiences and to share this analysis with their peers and instructors. This course includes content related to traditional Indigenous midwifery practices. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 3020, MDFY 3050, and MDFY 3060.

**MDFY 3032 Interprofessional Practice II 6 cr**

This clinical practice course enables the student to advance their skills in the provision of care during the childbearing year in interprofessional clinical settings. The tutorial offers students the opportunity to reflect about and critically analyze clinical practice experiences and to share this analysis with their peers and instructors. This course includes content related to traditional Indigenous midwifery practices. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 3020, MDFY 3050, and MDFY 3060.

**MDFY 3050 Newborn Feeding: Methods and Contemporary Issues 3 cr**

This course enables the student to obtain knowledge related to all methods of newborn feeding and the evidence related to the outcomes of each method. Students will also learn about strategies for promotion and support of breastfeeding. This course also addresses policy issues related to breastfeeding in the context of family systems theory and feminist theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 3010 and MDFY 3090.

**MDFY 3060 Professional Issues in Midwifery 3 cr**

This course enables the student to engage in a critical analysis of ethical, professional and emerging trends in the profession of midwifery in Manitoba, Canada and the international context. This course includes content related to traditional Indigenous midwifery practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 3010 and MDFY 3090.

**MDFY 3090 Complex Care I Clinical Practice and Tutorial 12 cr**

This clinical practice course provides students with the knowledge and skills to begin to manage pathological and high risk conditions of pregnancy, birth, and newborn care. The focus is on advanced assessment and intervention for clients requiring complex care during the childbearing year. This course will include content related to traditional Indigenous midwifery practices. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MDFY 2090.

**MDFY 4010 Advanced Clinical Skills II 3 cr**

(Lab required) This course provides students with a series of lectures and practical skills labs to build on clinical skills acquired in previous MDFY courses. This course expands on knowledge and skills related to prenatal, intrapartum and postpartum care with a focus on developing fundamental skills in managing complex care for the clients and newborns. Professional behaviour and interprofessional communication continues to be a focus. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 3030 and MDFY 3032.

**MDFY 4090 Complex Care II Clinical Practice and Tutorial 12 cr**

This clinical practice course enables the student to apply knowledge and skills related to the management of more complex and emergency care scenarios in the clinical setting. The focus is on the role of the primary midwife regarding more independent management, consultation and transfer related to these conditions. The tutorial offers students the opportunity to reflect about and critically analyze clinical practice experiences and to share this analysis with their peers and instructors. This course includes content related to traditional Indigenous midwifery practices. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 3030 and MDFY 3032.

**MDFY 4100 Clerkship and Tutorial 12 cr**

This clinical practice course enables the student to demonstrate entry-level competence as a primary care provider in midwifery practice. In this course students demonstrate independent decision-making and apply full range of their academic knowledge to professional practice. This course offers students the opportunity to reflect about and critically analyze clinical practice experiences as the primary care provider, and to share this analysis with their peers and instructors. This course includes content related to traditional Indigenous midwifery practices. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MDFY 4010 and MDFY 4090.

## Music (MUSC)

**MUSC 1004 Introduction to Music in History 1 3 cr**

A survey of Western music from early monophony to c. 1750 through an examination of genres and aesthetic foundations. The course will include comparison to non-Western musical traditions.

**MUSC 1010 Music Matters: Excursions in Western Musical Culture 3 cr**

This course introduces and explores selected western musical phenomena from aesthetic, social, and historical perspectives. Topics will include art and vernacular musics; style and genre; social function and context; the nature and varieties of musical experience. May not be held with MUSC 1050. This course may not be used for credit towards the Bachelor of Music or the Bachelor of Jazz Studies degree.

**Mutually Exclusive:** MUSC 1050

**Attributes:** Recommended Intro Courses

**MUSC 1014 Introduction to Music in History 2 3 cr**

A continuation of MUSC 1004, covering the eras from c. 1750 to the present. A survey of Western music from c. 1750 to the present through an examination of genres and aesthetic foundations. The course will include contemporary art music and comparison to non-Western musical traditions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1004 or consent of the Faculty of Music.

**MUSC 1020 Introduction to Popular Music 3 cr**

This course begins with a brief examination of the origins of the popular music industry in the late 19th and early 20th centuries through the development of rock 'n' roll in the 1950s and then surveys the subsequent proliferation of different types of popular music into the 21st century. The course will address representative genres, artists, and record labels in their cultural, political, historical, and technological contexts.

**Attributes:** Recommended Intro Courses

**MUSC 1030 History of Musical Theatre 3 cr**

A broad survey of the development and history of musical theatre from the early days of Vaudeville and burlesque through its evolution to the grand scale Broadway productions of today. This course is designed to reveal the origins and development of modern musical theatre through the study of influential artists, movements and major figures. This course will include a field trip component.

**Attributes:** Recommended Intro Courses

**MUSC 1110 Music Theory 1 3 cr**

This course is designed to develop fluency in the writing and recognition of the elements of music: melodic and harmonic intervals, modes and scales, rhythm and metre, triads and inversions, and the principles of melodic and homophonic design. This course is normally restricted to students admitted to the Bachelor of Music or Bachelor of Jazz Studies program. Non-Music students will only be admitted if there is sufficient room in the class.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1930, or knowledge of music rudiments demonstrated by a rudiments test administered by the Faculty of Music before the first day of classes.

**Attributes:** Recommended Intro Courses

**MUSC 1112 Jazz Theory 1 3 cr**

This course is designed to develop fluency in the writing and recognition of the elements of jazz: melodic and harmonic intervals, modes and scales, rhythm and meter, harmonic structure, and the principles of melodic and homophonic design. May not be held with the former MUSC 2112.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1110 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 2112

**MUSC 1120 Music Theory 2 3 cr**

An examination of the idioms of vocal melody through the writing and analysis of duple paraphrase, duple- and syncopated-rhythm counterpoint in two parts, and tonal homophony leading to the Chorale phrase and Bar form.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1110.

**Attributes:** Recommended Intro Courses

**MUSC 1180 Ensemble 2 cr**

Participation in University Symphony Orchestra, University Wind Ensemble, Upper Voices, Concert # Choir, University Jazz Orchestra, University Concert Band or University Singers, as is appropriate to the student's background and/or major applied area (placement to be determined by ensemble committee).

**MUSC 1184 Jazz Ensemble 2 cr**

Participation in jazz ensemble(s) as assigned by the ensemble committee. May not be held with the former MUSC 1182. Course entry is subject to audition for students not enrolled in the Bachelor of Jazz Studies program.

**Equiv To:** MUSC 1182

**MUSC 1190 Ensemble 2 cr**

Participation in a Faculty of Music Ensemble other than the one designated in MUSC 1180 or MUSC 1184 (placement to be determined by the Ensemble Committee).

**MUSC 1194 Jazz Improvisation 1 3 cr**

The practical application of rhythmic, melodic, and harmonic devices, as well as scales, chords, and substitutions in the context of song forms, song fragments, and repertoire. May not be held with the former MUSC 1192.

**Mutually Exclusive:** MUSC 1192

**MUSC 1280 Musical Style and Structure 1 3 cr**

An integrated study of the history and theory of Western music to 1750. Continuation in the Music Minor requires a grade "C" or better in this course. This course may not be used as credit towards the Bachelor of Music or the bachelor of Jazz Studies degree.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1930 or Conservatory Canada Grade 4 Theory or RCM Advanced Rudiments or consent of the Faculty of Music.

**Attributes:** Recommended Intro Courses

**MUSC 1290 Musical Style and Structure 2 3 cr**

An integrated study of the history and theory of Western music from 1750 to the present. Continuation in the Music Minor requires a grade of "C" or better in this course. This course may not be used for credit towards the Bachelor of Music or the Bachelor of Jazz Studies degree.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1280 or consent of the Faculty of Music.

**Attributes:** Recommended Intro Courses

**MUSC 1384 Musicianship 1 2 cr**

(Lab required) A practical approach to the cultivation of critical aural perception, specifically, to develop the student's sight-singing, transcription and keyboard skills. May not be held with MUSC 1380 or MUSC 1386. For Music students only.

**Equiv To:** MUSC 1380, MUSC 1386

**MUSC 1386 Jazz Musicianship 1 2 cr**

(Lab required) A practical approach to the cultivation of critical aural perception, specifically, to develop the student's sight-singing, transcription, and keyboard skills within a jazz context. For Music students only. May not be held with MUSC 1384.

**Equiv To:** MUSC 1384

**MUSC 1388 Jazz Musicianship 2 2 cr**

(Lab required) A practical approach to the cultivation of critical aural perception, specifically, to develop the student's sight-singing, transcription, and keyboard skills within a jazz context. A continuation of MUSC 1386. For Music students only. May not be held with MUSC 1394.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1386 or consent of the Faculty of Music.

**Equiv To:** MUSC 1394

**MUSC 1394 Musicianship 2 2 cr**

(Lab required) A continuation of MUSC 1384. May not be held with MUSC 1388 or the former MUSC 1390. For Music students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1384 or consent of the Faculty of Music.

**Equiv To:** MUSC 1388, MUSC 1390

**MUSC 1400 Major Practical Study 6 cr**

Individual instruction in one of the following: any of the standard orchestral instruments (strings, woodwinds, brasses, percussion), classical guitar, harp, harpsichord, lute, organ, piano, recorder composition or voice. An important constituent of the grading procedure for this course is performance in, and attendance at, the recitals/concerts of the Faculty of Music. For Music students only.

**MUSC 1460 Minor Practical Study 3 cr**

Individual instruction in an area other than that selected for MUSC 1400 or in composition by special permission. Written consent of the Dean is required prior to registration.

**MUSC 1930 Rudiments of Music 3 cr**

An introduction to fundamental aspects of music such as sound generation, notation, melodic and harmonic construction, with emphasis on an aural approach. This course may not be used for credit towards the Bachelor of Music or the Bachelor of Jazz Studies degree.

**Attributes:** Recommended Intro Courses

**MUSC 2072 Jazz History 1 3 cr**

A broad survey of the development of jazz and early popular styles of the 20th Century up until the early 1950s. This course is designed to reveal the origins of modern jazz and conventional jazz performance practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014 or consent of the Faculty of Music.

**MUSC 2082 Jazz History 2 3 cr**

A broad survey of jazz styles from 1950 to the present, with an emphasis on the development of contemporary performance practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2072 or consent of the Faculty of Music.

**MUSC 2100 Introduction to Music Teaching and Learning 3 cr**

This course provides an introduction to philosophical, sociological, and psychological perspectives relevant to music teaching and learning, including reflective practice, development of music teacher identity, and critical analysis of pedagogical principles.

**MUSC 2110 Music Theory 3 3 cr**

An examination of the idioms of instrumental melody through the writing and analysis of triple paraphrase, triple- and quadruple-rhythm counterpoint in two parts, and chromatic homophony leading to the Minuet and binary form.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1120 or the consent of the Faculty of Music.

**MUSC 2120 Music Theory 4 3 cr**

An examination of the diffusion of tonality in instrumental textures through the writing and analysis of chromatic paraphrase, florid counterpoint in two parts and chromatically-extended homophony leading to the Cavatina and ternary form.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2110 or consent of the Faculty of Music.

**MUSC 2122 Jazz Theory 2 3 cr**

A continuation of Jazz Theory 1. New topics will include transcription analysis, transposition of lead sheets, modal and substitute harmony.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1112 or the former MUSC 2112 or consent of the Faculty of Music.

**MUSC 2180 Ensemble 2 cr**

Participation in University Symphony Orchestra, University Wind Ensemble, Upper Voices, Concert Choir, University Jazz Orchestra, University Concert Band or University Singers, as is appropriate to the student's background and/or major applied area (placement to be determined by ensemble committee).

**MUSC 2184 Jazz Ensemble 2 cr**

Participation in jazz ensemble(s) as assigned by the ensemble committee. May not be held with the former MUSC 2182. Course entry is subject to audition for students not enrolled in the Bachelor of Jazz Studies program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1184 or the former MUSC 1182.

**Equiv To:** MUSC 2182

**MUSC 2190 Ensemble 2 cr**

Participation in a Faculty of Music Ensemble other than the one designated in MUSC 2180 or MUSC 2184 (placement to be determined by the Ensemble Committee).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1190 or consent of the Faculty of Music.

**MUSC 2194 Jazz Improvisation 2 3 cr**

A continuation of MUSC 1194 Jazz Improvisation 1. The practical application of rhythmic, melodic, and harmonic devices, as well as scales, chords, and substitutions in the context of song forms, song fragments, and repertoire. May not be held with the former MUSC 2192.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1194 or the former MUSC 1192 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 2192

**MUSC 2384 Musicianship 3 2 cr**

(Lab required) A continuation of MUSC 1394. May not be held with MUSC 2380 or MUSC 2386. For Music students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1394 or consent of the Faculty of Music.

**Equiv To:** MUSC 2380, MUSC 2386

**MUSC 2386 Jazz Musicianship 3 2 cr**

(Lab required) A practical approach to the cultivation of critical aural perception, specifically, to develop the student's sight-singing, transcription, and keyboard skills within a jazz context. A continuation of MUSC 1388. For Music students only. May not be held with MUSC 2384.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1388 or consent of the Faculty of Music.

**Equiv To:** MUSC 2384

**MUSC 2388 Jazz Musicianship 4 2 cr**

(Lab required) A practical approach to the cultivation of critical aural perception, specifically, to develop the student's sight-singing, transcription, and keyboard skills within a jazz context. A continuation of MUSC 2386. For Music students only. May not be held with MUSC 2394.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2386 or consent of the Faculty of Music.

**Equiv To:** MUSC 2394

**MUSC 2394 Musicianship 4 2 cr**

(Lab required) A continuation of MUSC 2384. May not be held with MUSC 2388 or MUSC 2390. For Music students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2384 or consent of the Faculty of Music.

**Equiv To:** MUSC 2388, MUSC 2390

**MUSC 2400 Major Practical Study 6 cr**

Individual instruction, normally in the area chosen in MUSC 1400.

An important constituent of the grading procedure for this course is performance in and attendance at the recitals/concerts of the Faculty of Music. For Music students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1400 or MUSC 1414.



**MUSC 2460 Conducting 3 cr**

The principles and development of baton technique and expressive gestures. Fundamentals of vocal and instrumental score reading, preparation and interpretation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 1120 or equivalent, or consent of the Faculty of Music.

**MUSC 2480 Minor Practical Study 3 cr**

Individual instruction in an area other than that selected for MUSC 2400. Normally a continuation of MUSC 1460. Written consent of the Dean is required to register.

**MUSC 3010 Advanced Diction 1 3 cr**

Advanced training in rules of pronunciation, language use and translation skills in Italian and German. May not be held with MUSC 3820 when titled Advanced Diction 1.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 3820

**MUSC 3012 Advanced Diction 2 3 cr**

Advanced training in rules of pronunciation, language use and translation skills in French and English. May not be held with MUSC 3820 when titled Advanced Diction 2.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 3820

**MUSC 3034 Medieval Music History 3 cr**

A study of music history with emphasis on historical, stylistic, and cultural developments and issues of the Middle Ages. May not be held with the former MUSC 1070 or the former MUSC 3054.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 1070, MUSC 3054

**MUSC 3044 Renaissance Music History 3 cr**

A study of music history with emphasis on historical, stylistic, and cultural developments and issues of the Renaissance. May not be held with the former MUSC 1070 or the former MUSC 3054.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 1070, MUSC 3054

**MUSC 3050 Research Methods 3 cr**

Techniques of bibliography and expository writing in music. Minor research projects in selected areas; the use of primary and secondary sources.

**MUSC 3056 Plainchant and Liturgy in Medieval Europe 3 cr**

Intensive study of plainchant and liturgy in medieval Europe. Topics will include the development and standardization of "Gregorian" chant, issues of style and genre, related repertoires, and issues of historiography and performance practice. May not be held with MUSC 3830 when titled Seminar in Gregorian Chant.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 3830

**MUSC 3064 Baroque Music History 3 cr**

A history of European art music from the late 16th to the early 18th centuries (the so-called Baroque period) beginning with the invention of opera and the monodic and concerted styles in Italy and their subsequent adoption in the rest of Europe and the emergence of national schools and culminating in the works of Bach and Handel. Not to be held with MUSC 1080.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 1014 or consent of the Faculty of Music.

**Equiv To:** MUSC 1080

**MUSC 3074 Classical Music History 3 cr**

A history of European art music from the early 18th to the early 19th centuries (the so-called Classical period) beginning with the innovations of Neapolitan opera and sinfonia their subsequent adoption in the rest of Europe, culminating in the Viennese school of Haydn, Mozart and Beethoven. Not to be held with MUSC 2070.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 1014 or consent of the Faculty of Music.

**Equiv To:** MUSC 2070

**MUSC 3084 Romantic Music History 3 cr**

A study of the changing styles, forms and contexts of music from the late 18th century to 1915 (the Romantic Period). Not to be held with MUSC 2080.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 1014 or consent of the Faculty of Music.

**Equiv To:** MUSC 2080

**MUSC 3090 Introduction to Ethnomusicology 3 cr**

A study of style, performance methods and social role of selected non-Western and indigenous Western music, with particular emphasis on native Canadian music, through readings in field studies and methodology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014.

**MUSC 3100 Opera Repertoire 3 cr**

The nature of the opera, its beginnings and development to modern times.

**MUSC 3102 Composition, Technology and Improvisation for Music Educators 3 cr**

This course explores the development of musical creativity through active participation in composition, improvisation, and informal music learning. Students will engage with a variety of activities, strategies and tools appropriate for numerous music education contexts.

**MUSC 3104 History of Opera 1: from Monteverdi to Mozart 3 cr**

A history of opera from its origins to the late eighteenth century, tracing various styles, genres and composers through representative works in the central Italian, as well as the French, English and German schools.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 1014 or consent of the Faculty of Music.

**MUSC 3112 Jazz Composition and Arranging 1 3 cr**

A study of the fundamentals of part writing such as instrumental range and transposition, various styles of unison writing, simple harmonic writing, melodic, harmonic and rhythmic devices along with standard and non-standard song structures. Course will culminate in a recital of student compositions and arrangements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2122 or consent of the Faculty of Music.

**MUSC 3114 History of Opera II: from Mozart to the Modern Era 3 cr**

A history of opera from the late 18th century and the masterpieces of Mozart to the present, tracing the various styles, genres and composers through representative works.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014 or consent of the faculty of Music.

**MUSC 3116 Standard Orchestral Excerpts and Solos 1 (Cello and Bass) 3 cr**

An in-depth study of standard orchestral excerpts for Cello and Bass from the Baroque and Classical eras, with emphasis on technical and stylistic analysis, execution, and preparation for professional auditions and performance. May not be held with MUSC 3830 when titled Cello Orchestral Excerpts Part 1. Performance stream students (Cello and Bass) only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor approval.

**Mutually Exclusive:** MUSC 3830

**MUSC 3118 Standard Orchestral Excerpts and Solos 2 (Cello and Bass) 3 cr**

An in-depth study of standard orchestral excerpts for Cello and Bass from the Romantic and Modern eras, with emphasis on technical and stylistic analysis, execution, and preparation for professional auditions and performance. May not be held with MUSC 3830 when titled Cello Orchestral Excerpts Part 2. Performance stream students (Cello and Bass) only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor approval.

**Mutually Exclusive:** MUSC 3830

**MUSC 3126 Jazz Composition and Arranging 2 3 cr**

A continuation of MUSC 3112. The student will write for larger ensembles, including jazz orchestra. Course will culminate in a performance of student compositions and arrangements. May not be held with the former MUSC 4112.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3112 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 4112

**MUSC 3150 Orchestration 3 cr**

A study of the technical capabilities and tonal characteristics of orchestral instruments, as well as practical scoring and arranging for various groups, from chamber to full orchestra and band.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2120 or MUSC 2122 or consent of the Faculty of Music.

**MUSC 3180 Ensemble 2 cr**

Participation in University Symphony Orchestra, University Wind Ensemble, Upper Voices, Concert Choir, University Jazz Orchestra, University Concert Band or University Singers, as is appropriate to the student's background and/or major applied area (placement to be determined by ensemble committee).

**MUSC 3184 Jazz Ensemble 2 cr**

Participation in jazz ensemble(s) as assigned by the ensemble committee. May not be held with the former MUSC 3182. Course entry is subject to audition for students not enrolled in the Bachelor of Jazz Studies program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2184 or the former MUSC 2182.

**Equiv To:** MUSC 3182

**MUSC 3190 Ensemble 2 cr**

Participation in a Faculty of Music Ensemble other than the one designated in MUSC 3180 or MUSC 3184 (placement to be determined by the Ensemble Committee).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2190 or consent of the Faculty of Music.

**MUSC 3194 Jazz Improvisation 3 3 cr**

A continuation of MUSC 2194 Jazz Improvisation 2. The practical application of rhythmic, melodic, and harmonic devices, as well as scales, chords, and substitutions in the context of song forms, song fragments, and repertoire. May not be held with the former MUSC 3192.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2194 or the former MUSC 2192 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 3192

**MUSC 3200 Orff Schulwerk 1 6 cr**

(Lab required) The philosophy, techniques and materials in Orff-Schulwerk, including practical activities in the areas of Basic Orff, creative movement, recorder, aural skills, and choral techniques. Applicants should have a working knowledge of music rudiments. May not be held with the former MUSC 3130 or the former MUSC 3106, or MUSC 3360 when titled Choral, Recorder and Movement.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1930 or consent of instructor.

**Mutually Exclusive:** MUSC 3106, MUSC 3130, MUSC 3360

**MUSC 3210 Orff Schulwerk 2 6 cr**

(Lab required) An exploration of Orff-Schulwerk theory and pedagogy with materials and activities in Basic Orff, creative movement, recorder, aural skills, and choral techniques. This course is designed to further participants' musical growth and their understanding of lesson planning and curriculum for the elementary years. Laboratory component includes the study of both soprano and alto recorders. May not be held with the former MUSC 3140.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3200 (C+) or the former MUSC 3106 or the former MUSC 3130 or consent of Instructor.

**Equiv To:** MUSC 3140

**MUSC 3220 Kodály Music Education 1 6 cr**

(Lab required) An introduction to contemporary Kodály-inspired pedagogy for preschool and early years contexts. In addition to exploring philosophy, practice, and materials for music teaching and learning, course participants will have opportunities to develop their personal vocal, musicianship and conducting skills in the lab component. May not be held with the former MUSC 3108 or MUSC 3360 when titled Kodály 1: Pedagogy and Materials.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1930 or consent of the Instructor.

**Mutually Exclusive:** MUSC 3108, MUSC 3360

**MUSC 3222 Kodály Music Education 2 6 cr**

(Lab required) Inspired pedagogy, lesson planning, and project work for upper elementary and middle years with continued development of musicianship, conducting, and ensemble music-making in the lab component.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3220 or the former MUSC 3108 or consent of the Instructor.

**MUSC 3230 Acoustics of Music 3 cr**

A study of the physical basis of music; consideration of the nature of musical sound, tone production of typical musical instruments, scales, and temperaments, and architectural acoustics. Experiments and projects.

**Attributes:** Mathematics Requirement

**MUSC 3270 Performance Skills 3 cr**

For performance majors in the Faculty of Music. Provides training in performance-related skills of the music profession, including such topics as acting, body awareness, self-promotion, career management, master classes, concert organizing, concert promotion and participation.

**MUSC 3360 Topics in Music Education 3 cr**

This course may vary from year to year depending on the needs and interests of instructors and students.

**Mutually Exclusive:** MUSC 3220

**MUSC 3380 From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century 3 cr**

A survey of popular music in North America and Britain from the mid-sixties to the present, beginning with the two foremost bands of the British Invasion, the Beatles and Stones, and the development of folk rock....The nineties focuses on the continual mainstreaming of music on the edge of rap, alternative and world beat.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014 or consent of the Faculty of Music.

**MUSC 3390 From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20th Century 3 cr**

A survey of popular music in North America from the ragtime craze and Tin Pan Alley tradition, through the development of blues and country to the emergence of Rhythm and Blues and Rock 'n' Roll to the beginnings of the British Invasion.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014 or consent of the Faculty of Music.

**MUSC 3404 From New Wave to Rave: A History of Popular Music in the Late 20th Century 3 cr**

A survey of popular music from the end of twentieth century, beginning with the revolutions that occurred during the late seventies and early eighties (disco and rap, punk and hardcore) that transformed pop music, setting the course for music of the two final decades of the century.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014 or consent of the Faculty of Music.

**MUSC 3470 Major Practical Study 6 cr**

Individual instruction, normally in the area chosen in MUSC 2400.

An important component of the grading procedure for this course is performance in and attendance at the recitals/concerts of the Faculty of Music. For Music students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014, MUSC 1120, MUSC 1394, and MUSC 2400.

**MUSC 3480 Minor Practical Study 3 cr**

Individual instruction in an area other than that selected for Major Practical Study. Normally a continuation of MUSC 2480. Written consent from the Dean is required prior to registration.

**MUSC 3550 Recital 1 3 cr**

The program must be approved by the applied instructor and the jury members. The program must be approved by the applied instructor and the jury members. For Music students in B.Mus. Performance only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014, MUSC 1120, MUSC 1394, and MUSC 2400, or consent of the Faculty of Music.

**MUSC 3554 Jazz Recital 1 3 cr**

The program must be approved by the applied instructor and the jury members. For Music students in B.Jazz Studies degree only. May not be held with MUSC 4562.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 1014, MUSC 1112, MUSC 1388, and MUSC 2400 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 3552

**MUSC 3620 Independent Study 1 3 cr**

Individual project designed by the student and a supervising faculty member. This study may be in an academic or applied area. Approval from the Faculty of Music is required.

**MUSC 3650 Electroacoustic Music 3 cr**

An introduction to electroacoustic music composition with the focus on acousmatic music. The course covers sound aesthetics, historical perspective of electro-acoustic music, repertoire and basic studio techniques such as sound editing, digital signal processing, multi-channel techniques and sound mixing.

**MUSC 3690 Percussion Techniques 3 cr**

Class instruction in percussion instruments. Development of basic playing techniques and examination of materials and procedures for individual and group instruction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460 or consent of the Faculty of Music.

**MUSC 3730 Early Music Development 3 cr**

Procedures and materials for the development of musicality in children through listening activities, movement, creativity, singing and classroom instruments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisites: MUSC 2460 or the former MUSC 3770 or consent of the Faculty of Music.

**MUSC 3772 Vocal Pedagogy for Choirs 3 cr**

The study of basic principles of vocal pedagogy and technique as they apply to educational settings and choral contexts. Study of the anatomy and physiology of breathing, phonation, and resonant tone production. Overview of stages of vocal development, and introduction to diction for choirs. Examination of materials and procedures for group vocal instruction. May not be held with the former MUSC 3770.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460 or consent of the Instructor.

**Mutually Exclusive:** MUSC 3770

**MUSC 3780 Woodwind Techniques 3 cr**

Class instruction in woodwind instruments. Development of basic playing techniques and examination of materials and procedures for individual and group instruction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460 or consent of the Faculty of Music.

**MUSC 3790 Brass Techniques 3 cr**

Class instruction in brass instruments. Development of basic playing techniques and examination of materials and procedures for individual and group instruction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460 or consent of the Faculty of Music.

**MUSC 3800 String Techniques 3 cr**

Class instruction in string instruments. Development of basic playing techniques and examination of materials and procedures for individual and group instruction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460 or consent of the Faculty of Music.

**MUSC 3820 Topics in Music 3 cr**

This course may vary from year to year depending on the needs and interests of instructors and students.

**Mutually Exclusive:** MUSC 3010, MUSC 3012, MUSC 3992

**MUSC 3830 Topics in Music 3 cr**

This course may vary from year to year depending on the needs and interests of instructors and students.

**Mutually Exclusive:** MUSC 3056, MUSC 3116, MUSC 3118

**MUSC 3884 Introduction to Jazz for Music Educators 3 cr**

Procedures for organizing, rehearsing, and directing small and large group jazz ensembles. Study of repertoire and performance materials, with emphasis on personal understanding of jazz improvisation and style. Not to be held with MUSC 3880.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 2460 or consent of the Faculty of Music.

**Equiv To:** MUSC 3880

**MUSC 3894 Guitar Techniques 3 cr**

Class instruction in guitar technique. Development of basic techniques and examination of materials and procedures for individual and group instruction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460 or consent of the Faculty of Music.

**MUSC 3964 History of Western Art Music After 1900 3 cr**

A survey of the processes, contexts and conceptual constructs of Western art music from 1900 to present.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 1014 or consent of the Faculty of Music.

**MUSC 3974 Music Theory After 1900 3 cr**

A survey of music theoretical approaches, analytical techniques and compositional trends in Western art music from 1900 to the present.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2120 or MUSC 2122, or consent of the Faculty of Music.

**MUSC 3992 Advanced Counterpoint 3 cr**

The study of contrapuntal structures in modal, tonal, neo-tonal and/or post-tonal music. This course will include the analysis of composition in two or more parts in a variety of historical genres, and the creation of pieces modeled directly on the works studied. May not be held with MUSC 3820 when titled Advanced Counterpoint.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 1014 and MUSC 2120.

**Mutually Exclusive:** MUSC 3820

**MUSC 4010 French Diction and Repertoire 3 cr**

Specialized instruction in French diction, translation and transcription using the International Phonetic Alphabet, with direct application to performance activities in French vocal repertoire. This course will be rotated on a three-year cycle with MUSC 4020 and MUSC 4030.

**MUSC 4020 Italian Diction and Repertoire 3 cr**

Specialized instruction in Italian diction, translation and transcription using the International Phonetic Alphabet, with direct application to performance activities in Italian vocal repertoire. This course will be rotated on a three-year cycle with MUSC 4010 and MUSC 4030.

**MUSC 4030 German Diction and Repertoire 3 cr**

Specialized instruction in German diction, translation and transcription using the International Phonetic Alphabet, with direct application to performance activities in German vocal repertoire. This course will be rotated on a three-year cycle with MUSC 4010 and MUSC 4020.

**MUSC 4110 Special Area Paper 3 cr**

The student will select a particular area of special interest or significance, work under supervision of a faculty member, and present results in an extended paper. For Music students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MUSC 2120 or MUSC 2122), MUSC 2394 and MUSC 3470.

**MUSC 4130 History of Women in Music 3 cr**

A study of the female contribution to the art of music from the Middle Ages to the present; emphasis on the changing roles of, and attitudes towards, women as composers and performers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1014 or consent of the Faculty of Music.

**MUSC 4140 History of Canadian Music 3 cr**

A survey of music in Canada from Colonial times to the present, encompassing both folk, popular and classical traditions.

**MUSC 4156 Choral Music Literature and Programming 3 cr**

Survey of historic and contemporary choral repertoire including major choral forms, composers, and performance practice, with a focus on representative works. Introduction to concert programming and planning for diverse choral ensembles. Examination of materials and resources for organizing and administering community, church, and school coral programs. May not be held with the former MUSC 4150 or the former MUSC 4154.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460 or consent of Instructor.

**Equiv To:** MUSC 4150, MUSC 4154

**MUSC 4160 Major Practical Study 3 cr**

Individual instruction, normally in the area chosen in MUSC 3470.

An important constituent of the grading procedure for this course is performance in and attendance at the recitals/concerts of the Faculty of Music. For Music students only.

**MUSC 4180 Ensemble 2 cr**

Participation in University Symphony Orchestra, University Wind Ensemble, Upper Voices, Concert Choir, University Jazz Orchestra, University Concert Band or University Singers, as is appropriate to the student's background and/or major applied area (placement to be determined by ensemble committee).

**MUSC 4184 Jazz Ensemble 2 cr**

Participation in jazz ensemble(s) as assigned by the ensemble committee. May not be held with the former MUSC 4182. Course entry is subject to audition for students not enrolled in the Bachelor of Jazz Studies program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3184 or the former MUSC 3182.

**Equiv To:** MUSC 4182

**MUSC 4190 Ensemble 2 cr**

Participation in a Faculty of Music Ensemble other than the one designated in MUSC 4180 or MUSC 4184 (placement to be determined by the Ensemble Committee).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3190 or consent of the Faculty of Music.

**MUSC 4194 Jazz Improvisation 4 3 cr**

A continuation of MUSC 3194 Jazz Improvisation 3. The practical application of rhythmic, melodic, and harmonic devices, as well as scales, chords, and substitutions in the context of song forms, song fragments, and repertoire. May not be held with the former MUSC 4192.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3194 or the former MUSC 3192 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 4192

**MUSC 4212 Orff Schulwerk 3 6 cr**

(Lab required) Continues instruction in the theory, philosophy, and pedagogy related to Orff process. Students are expected to create, orchestrate and perform at a high level, and to reach a high standard of competence in the art of teaching especially at the middle school level. Course work features mixed meters, and an exploration of medieval modes and their place in music history and in the Schulwerk. Competence in composing and arranging in the Elemental style and familiarity with materials from the Schulwerk, and Medieval, Renaissance, and Contemporary sources is developed along with recorder work using the full complement of recorders. Fluency on alto and soprano recorder is expected prior to start of the course. May not be held with the former MUSC 3140.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3210 (B) or consent of Instructor.

**Equiv To:** MUSC 3140

**MUSC 4224 Kodály Music Education 3 6 cr**

Kodály-inspired pedagogy for older beginners, senior years contexts, and community ensembles, with continued skill development in musicianship, conducting, and ensemble music-making in the lab component. Open to students outside of the Faculty of Music with written permission from the Faculty of Music.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3222 or consent of Instructor.

**MUSC 4330 Advanced Analysis 3 cr**

A survey of analytical approaches to tonal and post-tonal music. Aspects of musical structure, perception and performance will be explored through readings and the analysis of major works from the core repertoire.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2120 or MUSC 2122 or consent of the Faculty of Music.

**MUSC 4360 Wind Repertoire 3 cr**

A selected survey of wind literature from 1500 to the present.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MUSC 4772 or the former MUSC 4770) and (MUSC 4782 or the former MUSC 4780), or consent of the Faculty of Music.

**MUSC 4370 Wind Conducting Techniques 3 cr**

A study of the psychological, philosophical and practical aspects of conducting wind ensembles at all levels.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MUSC 4772 or the former MUSC 4770) and (MUSC 4782 or the former MUSC 4780), or consent of the Faculty of Music.

**MUSC 4380 Piano Repertoire 3 cr**

A comprehensive survey of major composers and their compositions for solo Piano. (Required course for piano Performance majors)

**MUSC 4390 Piano Chamber Music Literature Seminar 3 cr**

A selected survey of piano chamber music.

**MUSC 4430 Pedagogy and Repertoire 3 cr**

A consideration of approaches to the teaching of style and technique, through an examination of the repertoire for the student's major practical study.

**MUSC 4440 Vocal Pedagogy 3 cr**

An exploration of the foundations of the singer's art and craft, including the physical nature of the singing voice, stages of development, and various national, historical and individual pedagogical approaches to the teaching of singing.

**MUSC 4452 Jazz Pedagogy 3 cr**

An introduction to the fundamentals of pedagogy within a jazz-specific context. May not be held with the former MUSC 3442 or the former MUSC 4442.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3194 or the former MUSC 3192 or consent of the Faculty of Music.

**Equiv To:** MUSC 4442

**Mutually Exclusive:** MUSC 3442

**MUSC 4470 Major Practical Study 6 cr**

Individual instruction, normally in the area chosen in MUSC 3470.

An important component of the grading procedure for this course is performance in and attendance at the recitals/concerts of the Faculty of Music. For Music students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (MUSC 2120 or MUSC 2122), MUSC 2394 and MUSC 3470.

**MUSC 4480 Minor Practical Study 3 cr**

Individual instruction in an area other than that selected for Major Practical Study. Normally a continuation of MUSC 3480. Written consent of the Dean is required prior to registration.

**MUSC 4490 Piano Pedagogy 3 cr**

An introduction to teaching of styles and techniques through an examination of piano repertoire.

**MUSC 4520 Coaching Skills 3 cr**

Introduction to and training in philosophies and techniques of vocal coaching including both song and operatic repertoire.

**MUSC 4530 Operatic Piano 3 cr**

Development of skills required of an operatic pianist, including standard arias, operatic scores, working with conductors and developing an orchestral sound. May include participation in community opera events. (by audition only)

**MUSC 4560 Recital 2 6 cr**

The program must be approved by the applied instructor and the jury members. For Music students in B.Mus. Performance only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2120, MUSC 2394 and MUSC 3550 or consent of the Faculty of Music.

**MUSC 4562 Jazz Recital 2 6 cr**

Preparation and performance of a public graduation recital. The program must be approved by the applied instructor and the jury members. For Music Students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2082, MUSC 2122, MUSC 2394 and MUSC 3554 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 4564

**MUSC 4564 Jazz Recital 2 3 cr**

The program must be approved by the applied instructor and the jury members. For Music students in B.Jazz Studies degree only. May not be held with MUSC 4562.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 2082, MUSC 2122, MUSC 2388, and MUSC 3554 or consent of the Faculty of Music.

**Mutually Exclusive:** MUSC 4562

**MUSC 4630 20th to 21st Century Piano Repertoire 3 cr**

Piano repertoire from 1900 to the present.

**MUSC 4650 Interactive Computer Music 3 cr**

An introduction to interactive computer music composition. The course covers different techniques for interaction between performers and a computer. Experiments will be done using major software for live MIDI and audio processing. The course also covers sound synthesis. Possibilities are given to write with either projects involving performers or multi-disciplinary projects (e.g., installation including visual elements).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3650 or consent of the Faculty of Music.

**MUSC 4660 Computer Assisted Composition 3 cr**

An introduction to Computer Assisted Composition. The course covers a variety of mathematical models for structuring musical parameters, such as probability, iterative functions, spectral pitch organization, rule-based systems and morphological models. Different environments using the Lisp language are used as a base for experiments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 1414 or consent of the Faculty of Music.

**MUSC 4752 Elementary and Middle Years Choral Methods 3 cr**

Introduction to methods and pedagogical approaches for students in elementary and middle years choirs. Application of vocal technique, score preparation, and advanced conducting principles to unison, 2-part, and 3-part vocal music for unchanged and changing voices in a variety of styles. Examination of materials and resources for classroom instruction in choral music, including appropriate repertoire and methods of assessment. May not be held with MUSC 4750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460 and (MUSC 3772 or the former MUSC 3770) or consent of the Instructor.

**Equiv To:** MUSC 4750

**MUSC 4762 Senior Years and Community Choral Methods 3 cr**

Methods and pedagogical approaches for rehearsing, evaluating, organizing, and conducting changed voices in school and community ensembles. Introduction of teaching strategies and application of vocal technique, score preparation, and advanced conducting principles to mixed voice repertoire in a variety of genres for diverse groups of singers. Examination of materials and resources related to choral music instruction. May not be held with the former MUSC 4760.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460, MUSC 3772, (the former MUSC 3770), MUSC 4752, (the former MUSC 4750) or consent of the Instructor.

**Equiv To:** MUSC 4760

**MUSC 4772 Instrumental Music Methods 1 3 cr**

The study of principles and methods related to beginning and middle school instrumental pedagogy. Techniques for teaching individual instruments in a group setting and the instruction/administering of a large ensemble program. Close examination of the fundamentals of tone production, technique and instrument specific skills. The study of rehearsal techniques, lesson planning, score preparation and assessment practices. Examination of appropriate instructional materials and repertoire for beginning and middle school instrumental ensembles. May not be held with the former MUSC 4770.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 2460. Pre- or corequisites: MUSC 3690 or MUSC 3780 or MUSC 3790 or MUSC 3800 or MUSC 3894 or consent of Instructor.

**Equiv To:** MUSC 4770

**MUSC 4782 Instrumental Music Methods 2 3 cr**

The continued study of instrumental pedagogy at the high school level. Continued development of approaches to score study, rehearsal techniques and repertoire selection. Application of conducting skills for advancing instrumental ensembles. May not be held with the former MUSC 4780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MUSC 3780 and MUSC 3790 and MUSC 4772 or the former MUSC 4770 or consent of the Faculty of Music. Pre-corequisite: MUSC 3690 or consent of the Instructor.

**Equiv To:** MUSC 4780

**MUSC 4894 Advanced Guitar Techniques 3 cr**

This course is an extension of MUSC 3894 with a particular focus on developing curricular resources for creative composition, diverse musical styles, and informal music learning. This course provides a brief introduction to electric guitar and ukulele.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MUSC 3894 or consent of the Faculty of Music.

**MUSC 4896 Cultural Perspectives for Music Educators 3 cr**

A study of non-Western musical practices and approaches to learning music, and implications for music teaching. This course is intended to prepare students for the diversity of the 21st century music classroom and studio.

## Nursing (NURS)

**NURS 1500 Preparing for Professional Nursing Education 3 cr**

Students will develop knowledge, skills, attitudes, and approaches to learning that increases their opportunity for success in baccalaureate nursing education. Restricted to the students in the Aboriginal Cohort in Nursing program.

**Equiv To:** UCNN 1500

**NURS 2100 Introduction to Family Caregiving Across the Lifespan 3 cr**

This course provides an interdisciplinary approach to introduce the concept of family caregiving. In this course, students will be provided with information regarding caregivers and the vital role(s) they play in providing support and assistance to those who have physical, psychological, or developmental needs. Health-related quality of life and wellness, legal, economic, and policy issues related to caregiving are explored.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOC 1000 (or SOC 1221 or the former SOC 1200) or PSYC 1200 (or PSYC 1221).

**NURS 2110 Health Assessment of Individuals 3 cr**

The focus is on health assessment of adults including the normal changes which occur in childhood and aging. The course will provide opportunity to learn the health history and physical examination skills essential to health assessment.

**Equiv To:** NURS 2210

**NURS 2200 Selected Topics in Aging and Health 3 cr**

Emphasis will be placed on theory and research related to a current topic in aging and health. Special attention will be directed to integrating concepts and processes of aging. A practicum/field work component will be an integral part of the course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: core courses in the Inter-faculty Option in Aging or permission from the course leader.

**NURS 2500 Health and Illness 1: Pathophysiology/ Pharmacology/ Assessment 6 cr**

This course provides students with a comprehensive survey of selected pathophysiological processes that produce alterations in human health, and the related pharmacological interventions and health assessment techniques. May not be held with the former NURS 2120, the former NURS 2220, the former NURS 3290, or the former NURS 3310.

**Equiv To:** UCNN 2500

**Mutually Exclusive:** NURS 2120, NURS 2220, NURS 3290, NURS 3310

**NURS 2510 Client and Context 1: Human Growth & Development 2 cr**

This course provides students with knowledge of normal human growth and development across the lifespan. May not be held with NURS 1260. Registration is normally restricted to students in Year 2 of the program.

**Equiv To:** UCNN 2510

**Mutually Exclusive:** NURS 1260

**NURS 2514 Health and Illness 3: Pathophysiology/Pharmacology/ Assessment 6 cr**

This course provides students with a comprehensive survey of selected pathophysiological processes that produce alterations in human health, and the related pharmacological interventions and health assessment techniques. Registration is normally restricted to students in Year 2 of the program. May not be held with the former NURS 2120, the former NURS 2220, the former NURS 3290 or the former NURS 3310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 2500.

**Equiv To:** UCNN 2514

**Mutually Exclusive:** NURS 2120, NURS 2220, NURS 3290, NURS 3310

**NURS 2518 Health & Illness 2: The Older Client 3 cr**

This course provides students with knowledge of the age-related changes and illnesses experienced by older adults. It introduces students to health problems commonly occurring in this age group. Nursing strategies to encourage, maintain and enhance functional abilities and independence in older adults in the context of long term care are evaluated. Registration is normally restricted to students in Year 2 of the BN program. May not be held with NURS 2230 or NURS 2512.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or co-requisites: NURS 2500 or NURS 2510.

**Equiv To:** UCNN 2518

**Mutually Exclusive:** NURS 2230, NURS 2512

**NURS 2520 Professional Foundations 1: Development of Professional Identity 2 cr**

This course provides the student with an introduction to the conduct, knowledge and values that characterize a professional registered nurse. Registration is normally restricted to students in Year 2 of the program.

**Equiv To:** UCNN 2520

**NURS 2522 Client & Context 2: Human Diversity 3 cr**

This course provides students with knowledge of the social factors that enhance or diminish the health of individuals, families and communities. Students will also analyze the concept of client-centred care and its relevance in the practices of health care professionals. Registration is normally restricted to students in Year 2 of the BN program. May not be held with NURS 2516.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or co-requisites: NURS 2500 and NURS 2520.

**Equiv To:** UCNN 2522

**Mutually Exclusive:** NURS 2516, UCNN 2516

**NURS 2530 Nursing Skills 1 1 cr**

This course introduces students to the basic health assessment and psychomotor skills necessary to provide novice-level nursing care in the practice setting. Registration is normally restricted to students in Year 2 of the program. This course is graded on a Pass/Fail Basis. May not be held with NURS 2120 and NURS 2130. Pre-or

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Co-requisite: NURS 2500.

**Equiv To:** UCNN 2530

**Mutually Exclusive:** NURS 2120, NURS 2130

**NURS 2532 Nursing Skills 2 1 cr**

This course introduces students to the basic health assessment and psychomotor skills necessary to provide novice-level nursing care in the practice setting. Registration is normally restricted to students in Year 2 of the program. This course is graded on a Pass/Fail Basis. May not be held with NURS 2120 and NURS 2130.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: NURS 2530 and NURS 2540. Pre- or Co-requisite: NURS 2514.

**Equiv To:** UCNN 2532

**Mutually Exclusive:** NURS 2120, NURS 2130

**NURS 2540 Nursing Practice 1 2 cr**

This course enables students to demonstrate clinical competence by applying the theoretical knowledge, psychomotor skills and health assessment skills covered in Year 1 Term 1 courses in the practice setting. Registration is normally restricted to students in Year 2 of the program. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisites: NURS 2500, NURS 2510, NURS 2518 (or the former NURS 2512), NURS 2520 and NURS 2530.

**Equiv To:** UCNN 2540

**Mutually Exclusive:** NURS 2190, RRCN 2190, UCNN 2190

**NURS 2542 Nursing Practice 2 3 cr**

This course enables students to demonstrate clinical competence by applying the theoretical knowledge, psychomotor skills and health assessment skills covered in Year 1 Term 2 courses in the practice setting. This course is graded on a pass/fail basis. May not be held with NURS 2190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisites: NURS 2514, NURS 2522 (or the former NURS 2516), and NURS 2532.

**Equiv To:** UCNN 2542

**Mutually Exclusive:** NURS 2190, RRCN 2190, UCNN 2190

**NURS 2610 Health and Physical Aspects of Aging 3 cr**

An introduction to health, well-being and aging. Emphasis on health as multidimensional including physical, social and mental health. Integration of theory and research in examining selected issues related to health and physical aspects of aging. May not be held with NURS 2610 and PHED 2610. (A required Option in Aging course)

**Equiv To:** KIN 2610, PHED 2610

**NURS 3200 Nursing of Individuals and Families with Long-Term Illness and Disability 4 cr**

Nursing of individuals and families of all age groups who require palliative nursing measures or need assistance in adapting to long-term illness. The learner will participate in planning relevant clinical experiences to meet own learning objectives.

**NURS 3220 Community Health Nursing I 4 cr**

An analysis of concepts of prevention of disease/dysfunction and promotion of health in community based populations. Focus is on primary and secondary prevention and the promotion of health with identified risk groups. Population groups are assessed for risks to their physical and psychosocial health and current preventive and promotive measures analyzed and critiqued. The impact of macro systems in promoting health are discussed. MNHW NURS 3360.

**Equiv To:** NURS 3360

**NURS 3230 Perspectives on Mental Health Nursing 4 cr**

Emphasis will be placed on the mental health needs of individuals and their families who are experiencing mental health problems and/or mental illness. Diverse perspectives on mental health and illness will be explored. A clinical practicum will provide an opportunity to apply mental health nursing principles in community settings.

**NURS 3330 Women and Health 3 cr**

Introduction to health concepts and issues as they relate to women from a woman's health perspective. Emphasis on enhancing self-care and prevention. Studies the relationship between a woman and the Canadian Health Care System, and appropriate methodology for self-care, vis-a-vis nutrition, reproduction, menarche, menopause, etc. Caution: This course is not intended for 1st year students.

**NURS 3350 Counselling Skills for Nurses 3 cr**

Builds on the significance of interpersonal skills in nursing practice in health and illness. Examines theoretical basis and practical application of a counselling approach with clients. Students will have the opportunity for experiential learning.

**Equiv To:** UCNN 3350

**NURS 3390 Nursing in Rural Environments 4 cr**

Emphasis will be placed on the health needs of residents in a rural environment. The nature of nursing and issues encountered in a rural setting, whether in a health care institution or a community health nursing practice are explored. A clinical practicum is an integral part of the course.

**NURS 3400 Men's Health: Concerns, Issues and Myths 3 cr**

An exploration and examination of concerns, issues and myths surrounding men's health and men's health related behaviours. Students will develop a knowledge base for promoting health and preventing illness in men.

**NURS 3430 Seminar in Professional Nursing Foundations 2 cr**

The study and application of academic skills, nursing informatics and theoretical foundations, designed to assist diploma-prepared registered nurses to successfully transition to university and the Baccalaureate Program for Registered Nurses. May not be held with NURS 3190.

**NURS 3450 Introduction to Legal and Ethical Foundations of Nursing Practice 3 cr**

The legal and ethical foundations that guide nursing practice are examined. The process of critical analysis and reasoning will be applied to common legal and ethical issues.

**Equiv To:** NURS 3560, RRCN 3450, UCNN 3450

**NURS 3510 Client and Context 3: Supportive and Palliative Care 3 cr**

This course provides students with the knowledge and critical thinking skills to provide supportive and palliative nursing care to individuals and families experiencing a variety of life-threatening illnesses including end of life. Registration is normally restricted to students in Year 3 of the program. May not be held with the former NURS 4250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HNSC 2170 and NURS 2542.

**Equiv To:** UCNN 3510

**Mutually Exclusive:** NURS 4250

**NURS 3512 Health and Illness 4: Acute and Chronic Illness 5 cr**

This course provides students with the knowledge and critical thinking skills necessary to provide nursing care to individuals and families experiencing acute and chronic illness. Registration is normally restricted to students in Year 3 of the program. May not be held with the former NURS 3290 or the former NURS 3310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: HNSC 1210 and NURS 2542.

**Equiv To:** UCNN 3512

**Mutually Exclusive:** NURS 3290, NURS 3310

**NURS 3514 Health and Illness 5: Mental Health and Illness 3 cr**

This course provides students with the knowledge and critical thinking skills necessary to provide nursing care to individuals and families experiencing acute and chronic mental illness and/or mental health problems. Registration is normally restricted to students in Year 3 of the program. May not be held with the former NURS 4260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: NURS 3512, NURS 3510 and NURS 3540.

**Equiv To:** UCNN 3514

**Mutually Exclusive:** NURS 4260

**NURS 3520 Professional Foundations 2: Health Education 2 cr**

This course provides students with the knowledge and skills necessary to provide health information to clients across the lifespan in a variety of settings in both planned and spontaneous situations. Emphasis will be placed on client assessment and the appropriate use of existing health information resources. Registration is normally restricted to students in Year 3 of the program. May not be held with NURS 2230 or NURS 4200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 2542.

**Equiv To:** NURS 4200, UCNN 3520, UCNN 4200

**Mutually Exclusive:** NURS 2230

**NURS 3530 Nursing Skills 3 1 cr**

This course introduces students to the basic health assessment and psychomotor skills necessary to provide intermediate-level nursing care in the practice setting. Registration is normally restricted to students in Year 3 of the program. This course is graded on a Pass/Fail basis. May not be held with the former NURS 3280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: NURS 2542.

**Equiv To:** UCNN 3530

**Mutually Exclusive:** NURS 3280



**NURS 3532 Nursing Skills 4 1 cr**

This course provides students with the opportunity to consolidate the health assessment and psychomotor skills necessary to attain proficiency in the provision of nursing care. Registration is normally restricted to students in Year 3 of the BN program. This course is graded on a pass/fail basis. May not be held with NURS 3280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 3540. Pre- or Co-requisite: NURS 3514.

**Equiv To:** UCNN 3532

**Mutually Exclusive:** NURS 2130, NURS 3280

**NURS 3540 Nursing Practice 3 4 cr**

This course enables students to demonstrate clinical competence by applying the theoretical knowledge, psychomotor skills and health assessment skills covered in Year 3 Term 1 courses in the practice setting. Registration is normally restricted to students in Year 3 of the program. This course is graded on a Pass/Fail basis. May not be held with the former NURS 3300, the former NURS 3310, or the former NURS 4270.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Co-requisites: NURS 3512, NURS 3510, NURS 3520, and NURS 3530.

**Equiv To:** UCNN 3540

**Mutually Exclusive:** NURS 3300, NURS 3310, NURS 4270

**NURS 3542 Nursing Practice 4 4 cr**

This course enables students to demonstrate clinical competence by applying the theoretical knowledge and simulation skills covered in Year 3 Term 2 courses in the practice setting. Registration is normally restricted to students in Year 3 of the program. This course is graded on a Pass/Fail basis. May not be held with the former NURS 3300, the former NURS 3310, or the former NURS 4270.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Co-requisites: NURS 3514, NURS 3550, NURS 3560 and NURS 3532.

**Equiv To:** UCNN 3542

**Mutually Exclusive:** NURS 3300, NURS 3310, NURS 4270

**NURS 3550 Professional Foundations 3: Evidence Informed Practice in the Health Sciences 4 cr**

This course provides students with the knowledge and skills to locate and critically appraise nursing and health care literature, and to make decisions about how research knowledge can be transferred into nursing and health care practice. Registration is normally restricted to students in Year 3 of the program. May not be held with the former NURS 3210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 2542.

**Equiv To:** UCNN 3550

**Mutually Exclusive:** NURS 3210

**NURS 3560 Professional Foundations 4: Law and Ethics in Nursing Practice 3 cr**

This course provides the student with knowledge regarding the legal and ethical foundations that guide nursing practice. Registration is normally restricted to students in Year 3 of the program. May not be held with NURS 3450 or NURS 4220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 2542.

**Equiv To:** NURS 3450, RRCN 3450, UCNN 3450, UCNN 3560

**Mutually Exclusive:** NURS 4220

**NURS 4160 Community Health Nursing II 4 cr**

Application, integration and synthesis of knowledge and skills in the utilization of the nursing process with families. Development of skills in the process of change with families. Orientation to the concept of prevention and health promotion as focal concepts in the practice of nursing with families in communities. May not be held with NURS 4300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: NURS 3220.

**Equiv To:** NURS 4300

**NURS 4170 Issues and Trends in Nursing and Health Care 3 cr**

Study of the forces shaping nursing education, service and research and analysis of current issues in nursing and health care. The learner will develop awareness of professional nursing roles and responsibilities.

**Mutually Exclusive:** NURS 4310

**NURS 4190 Leadership in Nursing Practice 3 cr**

Focuses on selected theories of leadership and management. Effective interpersonal behaviour in health care organizations will be examined. The learner will explore own potential to effect change in the health care system.

**Mutually Exclusive:** NURS 4310

**NURS 4210 Independent Study in Nursing 4 cr**

The learner will have an opportunity to formulate a learning contract to explore, in depth, an area of nursing. This learning contract is to include a major emphasis on the theoretical basis of the selected topic.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 35 credit hours of completed study in the program.

**NURS 4290 Clinical Practicum 10 cr**

This course enables students to integrate and critically apply concepts, theories and relevant research to an area of practice and a client group of their choice. Care will address all levels of health, reflect application of a focused body of theory, and consider concepts of leadership, research, ethics, family and community care. Course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: all courses in the program.

**Mutually Exclusive:** NURS 4580

**NURS 4500 Health and Illness 6: Gender and Reproductive Health 3 cr**

This course provides students with the knowledge and critical thinking skills to provide nursing care in response to the social construction of gender; gender-related health care needs; and the reproductive health needs of individuals and families. Registration is normally restricted to students in Year 4 of the program. May not be held with NURS 2240.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 3542.

**Equiv To:** UCNN 4500

**Mutually Exclusive:** NURS 2240

**NURS 4510 Client and Context 4: Family Health 3 cr**

This course provides students with the knowledge and critical thinking skills to support the health promotion of families across the lifespan. Registration is normally restricted to students in Year 4 of the program. May not be held with NURS 2240.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 3542.

**Equiv To:** UCNN 4510

**Mutually Exclusive:** NURS 2240

**NURS 4520 Professional Foundations 5: Interprofessional and Collaborative Practice 3 cr**

This course provides students with the knowledge, attitudes and skills necessary to collaborate with other care providers, including those from other health care disciplines, to problem solve and make decisions to enhance client care outcomes. For Bachelor of Nursing students. Registration is normally restricted to students in Year 4 of the program. For Baccalaureate Program for Registered Nurses students: permission of the College of Nursing Registrar. For students in the Faculties of Health Sciences; Social Work; Education; Kinesiology and Recreation Management; Arts, Department of Psychology; and Faculty of Agricultural and Food Sciences, Department of Human Nutritional Sciences: completion of at least Year 3 of their program and permission of the Nursing Registrar. Students from other faculties and programs interested in taking this course will be considered on a case-by-case basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 3542.

**Equiv To:** UCNN 4520

**NURS 4530 Nursing Practice 5 4 cr**

This course enables students to demonstrate clinical competence by applying the knowledge and skills covered in Years 2 and 3 and Term 1, Year 4 courses, in the clinical setting. Registration is normally restricted to students in Year 4 of the program. This course is graded on a pass/fail basis. May not be held with NURS 2180.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or Co-Requisites: NURS 4500, NURS 4510, NURS 4520.

**Equiv To:** UCNN 4530

**Mutually Exclusive:** NURS 2180

**NURS 4540 Health and Illness 7: Community and Population Health 5 cr**

This course provides students with the knowledge and critical thinking skills to work with groups and communities to support population based health promotion and disease prevention. Registration is normally restricted to students in Year 4 of the program. May not be held with the former NURS 4420 or the former NURS 4440.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 4530.

**Equiv To:** UCNN 4540

**Mutually Exclusive:** NURS 4420, NURS 4440

**NURS 4550 Professional Foundations 6: Leadership and Change Management 4 cr**

This course provides the student with knowledge regarding contemporary issues in nursing and health care, and the forces that shape contemporary and future nursing practice. Emphasis is placed on leadership development, change theory and critical inquiry. Registration is normally restricted to students in Year 4 of the program. May not be held with the former NURS 4310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 3542.

**Equiv To:** UCNN 4550

**Mutually Exclusive:** NURS 4310

**NURS 4560 Professional Foundations 7: Preparation for Nursing Practice 7 1 cr**

This course will enable students, in collaboration with the course leader, to assess their readiness for NURS 4580: Nursing Practice 7 and to remediate any knowledge or skill deficits identified during the assessment process. Students will also complete all requirements necessary for the selection and confirmation of the clinical setting in which they will complete NURS 4580: Nursing Practice 7. Registration is normally restricted to students in Year 4 of the program. This course is graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Co-requisite: NURS 4570.

**Equiv To:** UCNN 4560

**NURS 4570 Nursing Practice 6 4 cr**

This course enables students to demonstrate clinical competence by applying knowledge and skills covered in Years 2, 3 and 4 courses in the clinical setting. Registration is normally restricted to students in Year 4 of the program. This course is graded on a pass/fail basis. May not be held with the former NURS 4430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 4530. Pre-or Co-requisites: NURS 4540 and NURS 4550. Co-requisite: NURS 4560.

**Equiv To:** UCNN 4570

**Mutually Exclusive:** NURS 4430

**NURS 4580 Nursing Practice 7 9 cr**

This course enables students to consolidate the knowledge, skills, and attitudes included in the Bachelor of Nursing program and achieve the CRNM entry-level competencies. May not be held with NURS 4290. Registration in this course is dependent on the completion of all other courses in the program. This course is graded on a pass/fail basis.

**Equiv To:** UCNN 4580

**Mutually Exclusive:** NURS 4290, UCNN 4290

## Occupational Therapy (OT)

**OT 4130 Re-Entry Fieldwork 8 cr**

Self-directed period of fieldwork preparation followed by a seven-week fieldwork education experience under the supervision of a licensed occupational therapist. Course evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: an earned degree in occupational therapy, permission of Head of Department of Occupational Therapy.

## Operations Management (OPM)

**OPM 3630 Simulation Models for Operations Management 3 cr**

Seminar on the concept, techniques, and application of simulation for problem-solving and decision-making in operations management. Existing operational models will be studied and applied in computerized form.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of instructor.

**OPM 3640 Project Planning and Control 3 cr**

Seminar on management of complex projects of various kinds with emphasis on planning and control by means of network methods. PERT and CPM methods computer applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**OPM 3650 Management of Quality and Reliability 3 cr**

This course offers a practical introduction to modern quality assurance and reliability management concepts, methods and practices. It builds upon the relevant subject matter in basic courses in production management and prepares for positions in the field of quality and reliability management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SCM 2160 [or the former OPM 2600 (D)] and STAT 1000.

**OPM 3660 Operations Management in Service Organizations 3 cr**

This course explores the applications of operations management concepts to the management of service operations. The characteristics of a service operation, while generally comparable to manufacturing a product, often place a unique demand upon the service manager. These demands, along with the analysis of actual company situations through case study applications, are emphasized.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SCM 2160 [or former OPM 2600] (D) and STAT 1000.

**OPM 3670 POM Project in Industry 3 cr**

An applied course, designed to bridge the gap between theoretical concepts developed in previous POM courses and current industrial practices by means of an industrial project.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [SCM 2160 or former OPM 2600 (D)] and STAT 1000 or consent of instructor.

**OPM 4620 Production Management Seminar 3 cr**

Problems, development, and application of analytical methods in production and operations management with emphasis on planning and control.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MSCI 2150 (D) and SCM 2160 or OPM 2600 (D).

## Oral Biology (ORLB)

**ORLB 1302 Cell and Tissue Biology 4 cr**

Structure, function and chemical composition of eucaryotic cells and oral bacteria will be studied. Taste signaling, diseases, and molecular interactions within and between cells and the immune system will be described in detail. May not be held with ORLB 1050.

**Mutually Exclusive:** ORLB 1050

**ORLB 1310 Head, Neck and Nervous System, Part 1 4 cr**

Gross anatomy of the head and neck are described and observed by regional dissection. Overviews of the nervous system and surface anatomy of the mouth are included. May not be held with ORLB 1060.

**Mutually Exclusive:** ORLB 1060

**ORLB 1320 Head, Neck and Nervous System, Part 2 3 cr**

An introduction to the structure and function of the central and peripheral nervous systems and associated structures, the neurophysiology and the stomatognathic system, pain and analgesics. May not be held with ORLB 1070.

**Mutually Exclusive:** ORLB 1070

**ORLB 1330 Human Growth and Development 3 cr**

Human development from the origin of the reproductive cells through fertilization, conception, embryonic/fetal development, birth, growth and aging. Particular emphasis is given to development and growth of structures of the head and neck. May not be held with ORLB 1080.

**Mutually Exclusive:** ORLB 1080

**ORLB 1340 Oral Tissues, Structure and Function 3 cr**

This course is designed to present the normal morphology, developmental biology, biochemical structure, metabolism and functions of the dentition and para oral tissues, cartilage, bone and exocrine glands of the head and neck. Structural functional aspects of oral anatomy, biochemistry/molecular biology and physiology will be included. May not be held with ORLB 1090.

**Mutually Exclusive:** ORLB 1090

**ORLB 1500 BSC DENT 1 0 cr****ORLB 2300 Pathology and Microbiology 1 1 cr**

Study of the basic mechanisms of microbial pathogenicity and general pathology as they relate to dentistry and dental treatment. Includes the pathogenesis of bacterial, viral and fungal infections and the aetiology of neoplastic, inflammatory and metabolic diseases. May not be held with ORLB 2100.

**Mutually Exclusive:** ORLB 2100

**ORLB 2312 Structure and Function of Major Organ Systems 4 cr**

This course emphasizes the basic structure at both organ and cellular levels of a number of organ systems and an understanding of their role in total body function. May not be held with ORLB 2070.

**Mutually Exclusive:** ORLB 2070

**ORLB 2320 Cariology and Plaque Associated Diseases 3 cr**

A study of the various dietary, host and microbial factors in the etiology of dental caries and periodontal disease, and a discussion of the various methods of plaque control. May not be held with the former ORLB 2090.

**Mutually Exclusive:** ORLB 2090

**ORLB 2330 Nutrition in Dentistry 2 cr**

An examination of the fundamentals of nutrition and the relationship between nutrition and health within the context of the health professions. The focus is on nutritional strategies used to promote health and in the treatment of common health conditions. The primarily on-line content is followed up with a combination of oral health specific patient/clinical exercises for Dentistry students. May not be held with ORLB 2150, HYG 2370, HNSC 2170, or PHRM 2420.

**Mutually Exclusive:** HNSC 2170, HYG 2370, ORLB 2150, PHRM 2420

**ORLB 2500 BSC DENT 2 0 cr****ORLB 3300 Pathology and Microbiology 2 1 cr**

A study of selected infectious diseases and the application of general diagnostic pathology in dental practice. May not be held with ORLB 3020.

**Mutually Exclusive:** ORLB 3020

## Pharm. D (PHMD)

**PHMD 1000 Introduction to Professional Practice 1 cr**

This course provides an introduction to various aspects of professional practice with a focus on patient care and safety. The course will include discussion and activities that incorporate cultural diversity, determinants of health, health literacy and Indigenous health. Registration is normally restricted to students in Year 1 of the program. Students will be graded on a pass/fail basis.

**PHMD 1002 Applied Pharmacy Practice Lab 1 4 cr**

(Lab required) This course is an introduction to community pharmacy practice with a focus on communication skills that are patient centered. The course provides opportunities to apply knowledge when completing patient assessments that will ensure positive patient outcomes. The process of prescription filling includes ensuring the legal requirements are met, minimizing errors, calculations and adverse drug reactions. Students will be introduced to drug information resources, adherence aids and physical assessment. May not be held with PHRM 1110 or the former PHRM 1100. Registration is normally restricted to students in Year 1 of the program.

**Mutually Exclusive:** PHRM 1100, PHRM 1110

**PHMD 1004 Introduction to Pharmacotherapy Literature 1 cr**

An introduction to the concepts of evidence-based medicine and applied medical/biostatistics in the evaluation of relevant pharmacotherapy literature. Registration is normally restricted to students in Year 1 of the program.

**PHMD 1006 Pharmacy Informatics 1 cr**

This course will introduce students to the use of information and communication technologies for delivering patient care and fostering collaboration between healthcare providers. Students will also be introduced to the professional, ethical, and legal implications of using such technologies for communicating health information. Registration is normally restricted to students in Year 1 of the program.

**PHMD 1008 Medicinal Chemistry 4 cr**

This course explores the physicochemical aspects of drug structure in absorption, distribution, metabolism, and excretion and the interaction between drugs and their receptors as they relate to the biochemical, pharmacological, and therapeutic actions of medicinal compounds. Students will learn the fundamental relationships between the structures of drugs and the resulting activity. May not be held with PHRM 2222 or the former PHRM 2220 or PHRM 3220. Registration is normally restricted to students in Year 1 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 2370 or MBIO 2370.

**Mutually Exclusive:** PHRM 2220, PHRM 2222, PHRM 3220

**PHMD 1010 Applied Pathophysiology 4 cr**

A comprehensive foundation of the underlying patho-physiological mechanisms associated with various types of human disease. Course content will serve as an essential requirement to prepare students for subsequent advanced clinical courses related to diagnosis and medical management (pharmacological and non-pharmacological approaches) of the disease(s). May not be held with PHRM 1430. Registration is normally restricted to students in Year 1 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2420.

**Mutually Exclusive:** PHRM 1430, PHRM 1440

**PHMD 1012 Extemporaneous Pharmaceutical Compounding 3 cr**

(Lab required) In a classroom and laboratory setting, this course provides an introduction to the compounding of pharmaceutical products and the physiochemical basis of product formulation. Practical aspects of formulation and patient counselling regarding the products is also explored. May not be held with PHRM 1300. Registration is normally restricted to students in Year 1 of the program.

**Mutually Exclusive:** PHRM 1300, PHRM 1310

**PHMD 1014 Clinical Therapeutics 1 3 cr**

This course introduces principles of drug therapy for the management of both self-care conditions and ambulatory ailments, with an additional focus on health promotion. Within the conditions covered, identifying signs and symptoms to complete a differential diagnosis, development of treatment plans and follow-up monitoring will be emphasized. Treatment approaches discussed will include non-pharmacological options, non-prescription options and some prescription treatments. May not be held with PHRM 2320 or the former PHRM 2310. Registration is normally restricted to students in Year 1 of the program.

**Mutually Exclusive:** PHRM 2310, PHRM 2320

**PHMD 1016 Pharmaceutics 3 cr**

(Lab required) This course introduces principles of formulation and good pharmaceutical manufacturing practice, including aspects of product development and assessment, stability testing, and quality control. It also explores the application of dosage forms to clinical situations. May not be held with PHRM 2270. Registration is normally restricted to students in Year 1 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 1012.

**Mutually Exclusive:** PHRM 2270

**PHMD 1040 Service Learning / IPE 1 1 cr**

The course is a service-learning experience that provides students an opportunity to work in community-based patient or client centered settings. The course will focus on developing communication skills, interprofessional collaboration with other healthcare students and patient advocacy while working with patients or clients from diverse backgrounds. The course also includes an opportunity for students to experience various pharmacy practice environments through a job shadowing experience under the supervision of practicing pharmacists and senior pharmacy students. Registration is normally restricted to students in Year 1 of the program. Students will be graded on a pass/fail basis.

**PHMD 2000 Drug Delivery 3 cr**

(Lab required) This course discusses the concepts and application of various drug delivery and drug administration routes to improve therapeutic outcomes. The course is a continuation of PHMD 1012 and PHMD 1016, and is directly associated to drug dosage forms and preparations. May not be held with PHRM 3320. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 1016.

**Mutually Exclusive:** PHRM 3320

**PHMD 2004 Critical Appraisal of Pharmacotherapy Literature 1 4 cr**

This course develops skills in the critical appraisal of common research designs used in the pharmacotherapy literature with emphasis on the evaluation of research to inform practice. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 1004.

**PHMD 2006 Applied Biopharmaceutics and Pharmacokinetics 3 cr**

This course introduces the principles of Biopharmaceutics and Pharmacokinetics to understand and predict how drugs are absorbed, distributed, metabolized and eliminated from the body. Students will apply these principles to the practical application of dosage calculations using various scenarios. May not be held with PHRM 2280. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 1016.

**Mutually Exclusive:** PHRM 2280

**PHMD 2008 Pharmacy Law 1 cr**

In this course Federal and Provincial Legislation as well as the ethical and professional standards that govern the profession of pharmacy and how they apply to practice will be discussed. Successful completion of this course meets the Jurisprudence Examination requirement for licensure. Registration is normally restricted to students in Year 2 of the program.

**PHMD 2010 Principles of Biotechnology 2 cr**

Introduction to biotechnology in pharmaceutical science and pharmacy. Students will learn the concepts and technologies used in production of biologics and will understand pharmaceutical considerations of biotech products. May not be held with PHRM 3640. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 2370 or MBIO 2370.

**Mutually Exclusive:** PHRM 3640

**PHMD 2012 Pharmacogenetics 2 cr**

This course examines the influence of genetic variation in the population on the pharmacodynamics and pharmacokinetics of drugs. A general introduction to pharmacogenetics will cover basic genetics necessary to understand the course material. Selected drugs will be examined in depth showing how genetic variation alters an individual's pharmacodynamic and pharmacokinetic response. Based on the individual's genetic variation, dose adjustments or alternative therapies will be recommended. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHEM 2370 or MBIO 2370.

**PHMD 2016 Clinical Pharmacokinetics - Pharmacodynamics 3 cr**

This course is designed to develop and integrate the advanced knowledge and skills required to apply pharmacokinetics-pharmacodynamics (PK-PD) to therapeutic drug management and patient care. Emphasis is on (1) demonstrating the value of PK-PD in selecting and monitoring drug therapies that maximize efficacy and minimize toxicity, and (2) appropriately using PK-PD formulae and models that account for factors such as patient demographics, organ function, disease states and drug interactions. May not be held with PHRM 3550 or the former PHRM 3500. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 2006.

**Mutually Exclusive:** PHRM 3500, PHRM 3550

**PHMD 2020 Introductory Pharmacy Practice Experience - Community 4 cr**

This four week introductory rotation provides pharmacy students with an opportunity to contribute to patient care in a community pharmacy setting. Pharmacy students will build upon the knowledge, skills and abilities they have developed during the first year and a half of the Pharm.D. program. Opportunity will be provided to help pharmacy students cultivate their patient care skills and begin to gain personal clinical experiences working with a variety of patients and other members of the healthcare team encountered in a community pharmacy. Students will begin to make health care decisions with the help and guidance of a pharmacist preceptor. Pharmaceutical care, pharmacy law and ethics, the operation of a community pharmacy, formal presentations, drug information, patient safety and interprofessional practice are key areas of this rotation. Registration is normally restricted to students in Year 2 of the program. Students will be graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 2008, PHMD 2022 and PHMD 2026.

**PHMD 2022 Applied Pharmacy Practice Lab 2-1 2 cr**

This course develops essential skills required for the community pharmacy practice. Focus is on prescription triage and counselling, patient assessment and education, effective communication, care plan-development and documentation, working with in a health care team, use of home medical devices, immunization, lab ordering and interpretation. May not be held with PHRM 2100. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 1002 and PHMD 1014.

**Mutually Exclusive:** PHRM 2100

**PHMD 2024 Applied Pharmacy Practice Lab 2-2 2 cr**

This course develops essential skills required for institutional pharmacy practice. Focus is on hospital prescription triage, medication distribution, patient assessment and education, discharge counselling, effective communication, care plan development and documentation, and working within a health care team. May not be held with PHRM 2100. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 2022 and PHMD 2026.

**Mutually Exclusive:** PHRM 2100

**PHMD 2026 Clinical Therapeutics 2-1 4 cr**

Aspects of providing direct patient care are covered to identify, solve and prevent actual or potential drug-related problems. Emphasis is placed on the evaluation, selection and monitoring of drug therapy as it applies to patient care. May not be held with PHRM 3310. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 1014 .

**Mutually Exclusive:** PHRM 3310

**PHMD 2028 Clinical Therapeutics 2-2 4 cr**

Aspects of providing direct patient care are covered to identify, solve and prevent actual or potential drug-related problems. Emphasis is placed on the evaluation, selection and monitoring of drug therapy as it applies to patient care. May not be held with PHRM 3310. Registration is normally restricted to students in Year 2 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 2026 .

**Mutually Exclusive:** PHRM 3310

**PHMD 2030 Introductory Pharmacy Practice Experience - Hospital 4 cr**

This four week introductory rotation provides students with an opportunity to actively participate in patient care within a hospital pharmacy practice setting. Pharmacy students will build upon the knowledge, skills and abilities they have developed during the first two years of the Pharm.D. program. Opportunity will be provided to allow pharmacy students to continue to cultivate their patient care skills and gain personal clinical experiences working with a variety of patients and other members of the healthcare team within a hospital setting. Students will begin to make healthcare decisions with the help and guidance of a pharmacist preceptor. Area of focus include: the role of the hospital pharmacist as part of the healthcare team; understanding the patient chart; documentation of patient care; pharmaceutical care; ordering and interpreting lab values as required for the management of drug therapy; case presentations; drug information; patient/medication safety; and interprofessional practice. Registration is normally restricted to students in Year 2 of the program. Students will be graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 2008, PHMD 2016, PHMD 2024 and PHMD 2028.

**PHMD 2040 Service Learning / IPE 2 1 cr**

This course is a continuation of PHMD 1040 and is an opportunity for students to further develop skills related to communication with a focus on patient advocacy and interprofessional collaboration. Registration is normally restricted to students in Year 2 of the program. Prerequisite: PHMD 1040. Students will be graded on a pass/fail basis.

**PHMD 3002 Applied Pharmacy Practice Lab 3 4 cr**

The course develops advanced skills required for pharmacy practice in all settings (i.e. community, hospital, and primary care). The focus is on interaction with patients and other health care professionals and the application of advanced knowledge, skills and values required for the provision of exemplary pharmaceutical care. May not be held with PHRM 3110 or the former PHRM 3100. Registration is normally restricted to students in Year 3 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 2024 and PHMD 2028.

**PHMD 3004 Critical Appraisal of Pharmacotherapy Literature 2 cr**

This course develops skills in the critical appraisal of research in the fields of pharmacoepidemiology and pharmacoconomics with emphasis on how this research may inform decisions regarding medication safety, drug approval, and drug evaluation. May not be held with PHRM 3520 or the former PHRM 3510. Registration is normally restricted to students in Year 3 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 2004

**Mutually Exclusive:** PHRM 3510, PHRM 3520

**PHMD 3006 Advanced Clinical Therapeutics 6 cr**

A problem-based clinical therapeutics course that builds on PHMD 1014, PHMD 2026 and PHMD 2028. The emphasis is on the provision of pharmaceutical care to enhance students' ability to identify, resolve and prevent drug-related problems in advanced clinical scenarios. Registration is normally restricted to students in Year 3 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 2028.

**PHMD 3008 Concepts of Integrative Medicine 2 cr**

Introduction to the integrative medicine paradigm of health care. Systems of complementary and alternative medicine as well as utilization of natural health products are emphasized. May not be held with PHRM 3430. Registration is normally restricted to students in Year 3 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 2028.

**PHMD 3010 Pharmacy Management 4 cr**

The course introduces basic business management concepts with a focus on pharmacy practice. The course will provide an introduction to strategic planning, marketing principles, human resource management and operational and financial management of different pharmacy practice areas. May not be held with PHRM 4230. Registration is normally restricted to students in Year 3 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 2020 and PHMD 2030

**Mutually Exclusive:** PHRM 4230

**PHMD 3012 Applied Professional Practice 3 cr**

This course offers the opportunity to explore professionalism, ethics and contemporary issues of the health care system. May not be held with PHRM 3230 or the former PHRM 3210. Registration is normally restricted to students in Year 3 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 1000

**Mutually Exclusive:** PHRM 3210, PHRM 3230

**PHMD 3014 Clinical Therapeutics 3 8 cr**

A case-based therapeutics course that builds on PHMD 2028. The course will integrate knowledge from previous pharmacy courses with newly acquired therapeutic knowledge, incorporating critical evaluation skills and clinical judgment into clinical case topic discussions in order to enhance students' ability to identify, resolve and prevent drug-related problems for individual patients. Not to be held with PHRM 4310.

Registration is normally restricted to students in Year 3 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 2028.

**PHMD 3016 Toxicology of Medications and Drugs of Abuse 2 cr**

Toxicology of prescription and non-prescription medications and drugs of abuse. The emphasis is on the study of emergency treatments of the overdosed patient. Forensic aspects of common poisonings and drug overdoses are also discussed. May not be held with PHRM 4450.

Registration is normally restricted to students in Year 3 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 2016 and PHMD 2028.

**PHMD 4000 Pharmacy Research Project 6 cr**

This course is designed to give students experience in scientific research. Each student will select an advisor from the Rady Faculty of Health Sciences and define a pharmacy or pharmacy practice based problem to research. Students are then required to complete their research and present their findings to an Advisory Committee in both oral and written format. Registration is normally restricted to students in Year 4 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHMD 3004. Students will be graded on a pass/fail basis.

**PHMD 4020 Advanced Pharmacy Practice Experience- Community 8 cr**

This eight week rotation focuses on the provision of patient focused pharmacy care in a community pharmacy practice setting. Pharmacy students will complete rotations at community pharmacy practice sites offering an expanded scope of pharmacy practice. Pharmacy students will build upon the knowledge, skills and abilities they have developed during the first three years of the PharmD curriculum to further refine their clinical skills in preparation to enter independent practice. As Pharmacy Interns students will serve as an active member of the healthcare team and provide safe and effective care under the indirect supervision of a pharmacist preceptor to a variety of patients presenting with chronic and acute conditions. Registration is normally restricted to students in Year 4 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 2020 and PHMD 3006 and PHMD 3014. Students will be graded on a pass/fail basis.

**PHMD 4030 Advanced Pharmacy Practice Experience- Hospital 8 cr**

This eight week clinical rotation focuses on the provision of patient focused pharmacy care in a collaborative healthcare practice setting e.g. hospital, long-term care, and ambulatory. Pharmacy students will apply the knowledge, skills and abilities they have developed during the previous three years of the PharmD program to further refine their clinical skills in preparation to enter independent practice. Students will serve as an active member of the healthcare team incorporating professional, legal and ethical principles; identifying and resolving drug therapy problems; providing drug information and patient education. As Pharmacy Interns students will gain clinical experience providing safe and effective, patient focused and evidence-informed care to a variety of patients (under the indirect supervision of a pharmacist preceptor) with acute and chronic conditions and across all levels of care offered within the institution as well as for patients in the transitions between levels of care. Registration is normally restricted to students in Year 4 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 2030 and PHMD 3006 and PHMD 3014. Students will be graded on a pass/fail basis.

**PHMD 4040 Advanced Pharmacy Practice Experience-Primary Care 8 cr**

This eight week clinical rotation focuses on the provision of patient focused pharmacy care in a primary care site. Pharmacy students will apply the knowledge, skills and abilities they have developed during the previous three years of the PharmD program to further refine their clinical skills in preparation to enter independent practice. Students will serve as an active member of the interprofessional healthcare team incorporating professional, legal and ethical principles; identifying and resolving drug therapy problems; providing drug information and patient education. As Pharmacy Interns students will gain clinical experience providing safe and effective, patient focused and evidence-informed care to a variety of patients collaboratively with the interprofessional team under the indirect supervision of a pharmacist preceptor. Registration is normally restricted to students in Year 4 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 2020 and PHMD 3006 and PHMD 3014. Students will be graded on a pass/fail basis.

**PHMD 4060 Advanced Pharmacy Practice Experience- Elective 8 cr**

Project-based course offering students opportunities for experiential learning in specialty areas of professional practice, in advocacy activities, and in health-related community service. Students have the option of applying to conduct projects at sites pre-approved by the College or to propose alternative avenues for self-directed learning. All project proposals need to obtain final approval from the College of Pharmacy, which facilitates students' placement. Assessment will be based on written reports submitted by individual students and evaluations by preceptors. Registration is normally restricted to students in Year 4 of the program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHMD 3006 and PHMD 3014. Students will be graded on a pass/fail basis.

## Pharmacology (PHAC)

**PHAC 2100 Pharmacology 6 cr**

General principles of pharmacology including consideration of the pharmacodynamics of important drugs and control and modification of drug action.

**PHAC 3000 Foundations of Pharmacology 3 cr**

Students will be taught a comprehensive range of basic pharmacology principles that prepare a strong foundation for future studies in pharmacology, toxicology and health sciences. Topics of emphasis include drug classification, nomenclature, administration, absorption, distribution, elimination, toxicity and addiction. There will also be a strong focus on the nature of drug interactions with molecular targets, and the cell signaling events that follow to produce therapeutic and toxic effects.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 1030 or (BIOL 2410 and BIOL 2420) or permission of course director.

**PHAC 4030 Drugs in Human Disease I 3 cr**

This course will teach foundational pathophysiological concepts underlying human disease and integrate them with the therapeutic and adverse effects of important drug groups. Emphasis will be placed on disorders of the autonomic and central nervous systems, and the cardiovascular system.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 1030 or (BIOL 2410 and BIOL 2420) or permission of course director. PHAC 3000 is also recommended.

**PHAC 4040 Drugs in Human Disease II 3 cr**

This course will teach foundational pathophysiological concepts underlying human disease and integrate them with the therapeutic and adverse effects of important drug groups. Emphasis will be placed on endocrine and organ system disorders, allergy and inflammation, infection, and cancer. The course also offers an introduction to basic clinical pharmacology as well as several current specialized topics in pharmacology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 1030 or (BIOL 2410 and BIOL 2420) or permission of course director. PHAC 3000 is also recommended.

## Pharmacy (PHRM)

**PHRM 1000 Introduction to Pharmacy 1 cr**

This course provides an orientation to Pharmacy and to the application of medicines within the context of today's dynamic medical care system. It has been designed to highlight professionalism early in the Pharmacy curriculum and will provide the opportunity for students to interact with Pharmacy professionals "at the cutting edge" of pharmacy practice.

**PHRM 1110 Pharmacy Skills Laboratory 3 cr**

This is a multifaceted course using an integrated skills laboratory format to develop essential skills that students require for pharmacy practice. These skills primarily involve communication, problem solving and critical thinking that form the foundation for life-long learning. Exploring ethical principles and professionalism are also essential components of this course.

**Mutually Exclusive:** PHMD 1002

**PHRM 1300 Fundamentals of Pharmaceutics 2 cr**

In a classroom and laboratory setting, this course provides an introduction to the compounding of pharmaceutical products and the physiochemical basis of product formulation. Practical aspects of formulation and an introduction to the dispensing function are also explored.

**Mutually Exclusive:** PHMD 1012, PHRM 1310

**PHRM 1310 Fundamentals of Pharmaceutics 3 cr**

(Lab required) In a classroom and laboratory setting, this course provides an introduction to the compounding of pharmaceutical products and the physicochemical basis of product formulation. Practical aspects of formulation and patient counselling regarding the products is also explored. May not be held with PHRM 1300. Registration is normally restricted to students in Year 1 of the program.

**Mutually Exclusive:** PHMD 1012, PHRM 1300

**PHRM 1430 Applied Pathophysiology for Pharmacy Students 3 cr**

A comprehensive theoretical foundation of the phenomena that produce alterations in human physiology function across the lifespan. Course content will prepare the student for subsequent courses related to diagnosis and management of disease processes associated with pathophysiological dysfunction/alterations.

**Mutually Exclusive:** PHMD 1010, PHRM 1440

**PHRM 1440 Applied Pathophysiology 4 cr**

A comprehensive foundation of the underlying patho-physiological mechanisms associated with various types of human disease. Course content will serve as an essential pre-requisite required to prepare students for subsequent advanced clinical courses related to diagnosis and medical management (pharmacological and non-pharmacological approaches) of the disease(s). May not be held with PHRM 1430. Registration is normally restricted to students in Year 1 of the program.

**Mutually Exclusive:** PHMD 1010, PHRM 1430

**PHRM 1700 Structured Practical Experiential Program 1 1 cr**

This course is a service-learning experience, providing students the opportunity to work in community-based patient/client-centred settings. This course also includes two half day job shadowing experiential rotations in a variety of pharmacy practice settings (eg. community pharmacy practice, institutional pharmacy practice) under the supervision of pharmacist preceptors consistent with the Manitoba Pharmacy Act. It serves to familiarize students with the health care setting and the pharmacist's role. Students will be graded on a pass/fail basis.

**PHRM 2100 Pharmacy Skills Lab 2 3 cr**

This course develops essential skills required for pharmacy practice. Focus is on drug distribution, pharmacy law, communication with "standardized patients" and drug information.

**Mutually Exclusive:** PHMD 2002, PHMD 2022, PHMD 2024

**PHRM 2222 Medicinal Chemistry 6 cr**

This course explores the physicochemical aspects of drug structure in absorption, distribution, metabolism, and excretion and the interaction between drugs and their receptors as they relate to the biochemical, pharmacological, and therapeutic actions of medicinal compounds. Not to be held with the former PHRM 220 or PHRM 3220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHEM 2210, CHEM 2360, CHEM 2370.

**Mutually Exclusive:** PHMD 1008, PHRM 2220, PHRM 3220

**PHRM 2270 Pharmaceutics/Biopharmaceutics 6 cr**

This course introduces principles of formulation and good pharmaceutical manufacturing practice, including aspects of product development and assessment, stability testing, and quality control. It also explores the application of dosage forms to clinical situations.

**Mutually Exclusive:** PHMD 1016

**PHRM 2280 Pharmacokinetics 3 cr**

This course introduces principles of pharmacokinetics to predict how drugs will be absorbed, distributed, metabolized and excreted from the body. Practical application of concepts and calculations will be emphasized.

**Mutually Exclusive:** PHMD 2006

**PHRM 2320 Clinical Pharmacy 1 5 cr**

This course introduces principles of drug therapy to manage self-care conditions and ambulatory ailments. There is also a component of health promotion with a focus on clinically relevant nutrition topics for pharmacists. Non-prescription and prescription treatment approaches will be covered within the course. May not be held with the former PHRM 2310.

**Mutually Exclusive:** PHMD 1014, PHRM 2310

**PHRM 2700 Structured Practical Experiential Program 2 2 cr**

This course offers experiential learning in a variety of pharmacy practice settings (eg. community pharmacy practice, institutional pharmacy practice) It consists of 2 one week rotations at the end of the second year of the program. This course builds on skills learned in SPEP 1 and focuses on the practice of drug preparation and distribution, non-prescription medication counseling, and jurisprudent under the supervision of pharmacist preceptors consistent with the Manitoba Pharmacy Act. Students will be graded on a pass/fail basis.

**PHRM 3110 Pharmacy Skills Laboratory III 3 cr**

This course develops essential skills required for pharmacy practice. The focus is on interaction with patients and other health care professionals and the application of essential knowledge, skills and values required for the provision of pharmaceutical care. May not be held with PHRM 3100.

**Mutually Exclusive:** PHRM 3100

**PHRM 3230 Principles of Professional Practice 2 cr**

This course offers the opportunity to explore professionalism, ethics and socio-economic aspects of the health care system. May not be held with PHRM 3210.

**Mutually Exclusive:** PHMD 3012, PHRM 3210

**PHRM 3310 Clinical Pharmacy 2 10 cr**

This course builds on principles of drug therapy introduced in Clinical Pharmacy 1. Aspects of providing direct patient care are emphasized to identify, solve and prevent actual or potential drug-related problems. The course also expands knowledge of "Over the Counter (OTC)" medications as therapeutic alternatives and introduces home diagnostic testing

**Mutually Exclusive:** PHMD 2014, PHMD 2026, PHMD 2028

**PHRM 3320 Pharmaceutical Analysis Lab 3 cr**

This course offers the opportunity to prepare pharmaceutical dosage forms and perform analytical testing on the products. Qualitative and quantitative instrumental assay techniques are introduced.

**Mutually Exclusive:** PHMD 2000

**PHRM 3430 Natural Products 3 cr**

Medicinal products of natural origin; introduction to systems of complementary medicine. Therapeutic aspects and products are emphasized

**PHRM 3520 Principles of Scientific Literature Evaluation 4 cr**

Primary literature is critically analyzed. Discussion of how study results impact on treatment strategies are emphasized. May not be held with PHRM 3510.

**Mutually Exclusive:** PHMD 3004, PHRM 3510



**PHRM 3550 Clinical Pharmacokinetics 3 cr**

This course explores the practical application of pharmacokinetic concepts, calculations, and patient factors which effect pharmacokinetics in the clinical setting. Emphasis is on selected medications that require closer monitoring to ensure efficacy and patient safety. May not be held with PHRM 3500 or 046.350.

**Mutually Exclusive:** PHMD 2016, PHRM 3500

**PHRM 3640 Principles of Biotechnology 3 cr**

Introduction of biotechnology in pharmaceutical science and pharmacy. Students will be introduced to concepts from molecular biology, immunology, biotechnology and pharmacogenomics.

**Mutually Exclusive:** PHMD 2010

**PHRM 3700 Structural Practical Experiential Program 3 4 cr**

This course offers experiential learning in a variety of pharmacy practice settings (e.g. community pharmacy practice, institutional pharmacy practice) It consists of 2 two week rotations at the end of the third year of the program. This course builds on skills learned in SPEP 1 and SPEP 2 and focuses on the introduction of applying pharmaceutical care to patients under the supervision of pharmacist preceptors consistent with the Manitoba Pharmacy Act. Students will be graded on a pass/fail basis.

**PHRM 4230 Pharmacy Practice Management 4 cr**

An Introduction to administrative and behavioural sciences as they relate to planning, organization and operation of pharmacy practice and to the control of human and financial resources.

**Mutually Exclusive:** PHMD 3010

**PHRM 4310 Clinical Pharmacy 3 4 cr**

A problem-based therapeutics course that builds on PHRM 3310. The emphasis is on the provision of pharmaceutical care to enhance students' ability to identify, resolve and prevent drug-related problems in given clinical scenarios.

**PHRM 4450 Toxicology 3 cr**

Toxicology of prescription and non-prescription medications and drugs of abuse. The emphasis is on the study of emergency treatments of the overdosed patient. Forensic aspects of common poisonings and drug overdoses are also discussed

**PHRM 4470 Current Topics 3 cr**

A discussion of topics of immediate interest to the profession. Subject to satisfactory completion of required projects and presentations. Attendance of 80% is mandatory. Students will be graded pass/fail.

**PHRM 4700 Structural Practical Experiential Program 4 10 cr**

This course offers experiential learning in a variety of pharmacy practice settings (e.g. community pharmacy practice, institutional pharmacy practice) It consists of 2 six week rotations. This course builds on skills learned in SPEP 1, SPEP 2 and SPEP 3 and focuses on practicing advanced pharmaceutical care and further developing therapeutic and disease knowledge under the supervision of pharmacist preceptors consistent with the Manitoba Pharmacy Act. Students will be graded on a pass/fail basis.

**PHRM 4800 PHARM ELECTIVES 10 cr**

This program offers students the opportunity to explore areas in research and professional practice that are not part of the required undergraduate courses. Students have the option of applying to conduct projects at sites pre-approved by the College or to propose alternative avenues for self-directed learning. All project proposals need to obtain final approval from the College of Pharmacy which facilitates students' placement. Assessment will be based on written reports submitted by individual students to the College of Pharmacy. Students will be graded on a pass/fail basis.

## Philosophy (PHIL)

**PHIL 1200 Introduction to Philosophy 6 cr**

An introduction to five main areas of philosophy. Topics are logical thinking; the criteria and limits of human knowledge; and three of: God, right and wrong, free will and the nature of consciousness, scientific inquiry, and social justice. Students may not hold credit for PHIL 1200 and any of: PHIL 1511 or the former PHIL 1510 or the former PHIL 1261.

**Equiv To:** PHIL 1261, PHIL 1510, PHIL 1511

**Attributes:** Humanities, Recommended Intro Courses

**PHIL 1290 Critical Thinking 3 cr**

A course which helps students to think clearly and critically, and to present, defend, and evaluate arguments. The instructor will discuss good and bad reasoning, everyday fallacies, some specific argument forms such as the categorical syllogism, and ways and means of defining words. Students may not hold credit for PHIL 1290 and any of: PHIL 1291 or the former PHIL 1320 or PHIL 1321.

**Equiv To:** PHIL 1291

**Mutually Exclusive:** PHIL 1320, PHIL 1321

**Attributes:** Humanities, Recommended Intro Courses

**PHIL 1300 Introduction to Logic 3 cr**

A course which helps students to think clearly and critically, and to present, defend and evaluate arguments. The course deals with categorical logic, non-formal fallacies, definition, modern symbolic logic and scientific method. Students may not hold credit for PHIL 1300 and the former PHIL 1320 or PHIL 1321.

**Mutually Exclusive:** PHIL 1320, PHIL 1321, PHIL 1330

**Attributes:** Humanities, Recommended Intro Courses

**PHIL 1420 Philosophy as a Way of Life 3 cr**

This course explores various texts and traditions that offer visions of the good life and focuses on connecting philosophical arguments with contemporary issues and day-to-day decision making. The goal is to think deeply and rigorously about foundational questions like how should we live, does life have a meaning, what justifies our beliefs, what obligations do we have to each other, and how to make rational decisions.

**Attributes:** Humanities, Recommended Intro Courses

**PHIL 2140 Theory of Knowledge 3 cr**

This course challenges and investigates our view of knowledge and rationality. Problems dealt with normally include: the nature of knowledge, sense experience, truth and necessary truth, the analytic-synthetic distinction, memory, induction, etc. Students may not hold credit for both PHIL 2140 and the former PHIL 2760.

**Mutually Exclusive:** PHIL 2760

**Attributes:** Humanities

**PHIL 2150 Mind and Body 3 cr**

An introduction to theories of the mind and body, including dualism, identity theory and functionalism. The course deals with topics such as consciousness, thought, and desire.

**Attributes:** Humanities

**PHIL 2160 Fundamentals of the Philosophy of Language 3 cr**

An introduction to theories of language, including those of Gottlob Frege and Bertrand Russell. The course deals with a variety of linguistic phenomena pertaining to names, definite descriptions, demonstratives, identity sentences, and belief reports.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

**Prerequisite:** [six credit hours of 1000-level philosophy] or [successful completion of 30 hours of university credit].

**Attributes:** Humanities

**PHIL 2170 Special Topics 3 cr**

Topics and content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Humanities

**PHIL 2190 Philosophy and Sexuality 3 cr**

This course examines various moral and legal issues related to sexuality. Topics may include: casual sex, monogamy, love, and commitment; the definition of marriage; the meaning of gender; the nature of consent; the moral and legal status of prostitution and pornography; the scope of sexual privacy and other moral challenges presented by new technology. Students may not hold credit for both PHIL 2190 and PHIL 2170 when titled "Sexuality."

**Attributes:** Humanities

**PHIL 2200 Intermediate Logic 3 cr**

A systematic investigation of the theory and techniques of modern symbolic logic, with an examination of contributions made by contemporary philosophers in dealing with philosophical problems closely connected with logic. Students may not hold credit for both PHIL 2200 and the former PHIL 2430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHIL 1300 of the former PHIL 1320 or PHIL 1321 or written consent of instructor.

**Mutually Exclusive:** PHIL 2430

**Attributes:** Humanities

**PHIL 2290 Ethics and Society 6 cr**

An examination of some contemporary ethical theories and their application to a number of practical issues. Issues to be discussed may include: reverse discrimination, freedom of expression, paternalism, and theories of punishment. Students may not hold credit for PHIL 2290 and any of the former PHIL 2531 or PHIL 2740 or PHIL 2741 or PHIL 2750 or PHIL 2751.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: successful completion of 30 hours of university credit.

**Equiv To:** PHIL 2531

**Mutually Exclusive:** PHIL 2740, PHIL 2741, PHIL 2750, PHIL 2751

**Attributes:** Humanities

**PHIL 2300 Political Philosophy 6 cr**

An analysis and evaluation of the main ideals - justice, freedom, happiness, equality, and self-realization - of the great political philosophers (e.g., Plato, Hobbes, Locke, Mill, and Marx) and of their theories of human nature and their blueprints for society. Students may not hold credit for both PHIL 2300 and PHIL 2301.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: successful completion of 30 hours of university credit.

**Equiv To:** PHIL 2301

**Attributes:** Humanities

**PHIL 2580 Metaphysics 3 cr**

A study of some fundamental problems relating to the nature of reality, e.g., mind and body, cause and effect, human freedom, and the problem of universals. Students may not hold credit for both PHIL 2580 and the former PHIL 2450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: six credit hours of Philosophy at the 1000 level.

**Mutually Exclusive:** PHIL 2450

**Attributes:** Humanities

**PHIL 2612 A Philosophical History of Science 3 cr**

A philosophical study of the evolution of science and scientific methodology from the ancient Greeks to the present. A background in science is not required. Students may not hold credit for both PHIL 2612 and the former PHIL 2610.

**Mutually Exclusive:** PHIL 2610

**Attributes:** Humanities, Written English Requirement

**PHIL 2614 Philosophy of Science 3 cr**

A critical study of the nature of scientific knowledge. A background in science is not required. Students may not hold credit for both PHIL 2614 and the former PHIL 2610.

**Mutually Exclusive:** PHIL 2610

**Attributes:** Humanities, Written English Requirement

**PHIL 2630 Continental Rationalism 3 cr**

A study of the great Continental philosophers, Descartes, Spinoza, and Leibniz, who viewed reason, rather than experience, as the key to knowledge of the universe. Students may not hold credit for both PHIL 2630 and PHIL 2631.

**Equiv To:** PHIL 2631

**Attributes:** Humanities

**PHIL 2640 British Empiricism 3 cr**

The course surveys and analyzes the theories of the great British empiricists, Locke, Berkeley, and Hume, on the nature and foundations of human knowledge and its relation to experience. Students may not hold credit for both PHIL 2640 and PHIL 2641.

**Equiv To:** PHIL 2641

**Attributes:** Humanities

**PHIL 2650 Plato 3 cr**

An examination of Plato's views on knowledge, reality, human nature, politics, and morals through a study of his most significant dialogues. Students may not hold credit for both PHIL 2650 and the former PHIL 2651.

**Equiv To:** PHIL 2651

**Attributes:** Humanities

**PHIL 2660 Aristotle 3 cr**

A study of Aristotle's most important views on reality, knowledge, human nature, morals, and politics. Students may not hold credit for both PHIL 2660 and PHIL 2661.

**Equiv To:** PHIL 2661

**Attributes:** Humanities

**PHIL 2710 Twentieth-Century European Philosophy: Existentialism 3 cr**

This course will be devoted to a study of existentialist themes as they appear in the philosophical writings of some of the following: Kierkegaard, Nietzsche, Camus, Sartre, de Beauvoir, Buber, Hadot, Foucault, R.D. Laing, and others. Students may not hold credit for PHIL 2710 and any of: the former PHIL 2820 or the former PHIL 2821.

**Mutually Exclusive:** PHIL 2820, PHIL 2821

**Attributes:** Humanities

**PHIL 2730 Fundamentals of the Philosophy of Religion 3 cr**

A critical study of some fundamental problems in the philosophy of religion, such as the existence and nature of God, the justification of religious beliefs, the status of mystical and other religious experiences, and the significance of religious discourse. Students may not hold credit for PHIL 2730 and any of: PHIL 2701 or the former PHIL 2700.

**Mutually Exclusive:** PHIL 2700, PHIL 2701

**Attributes:** Humanities

**PHIL 2740 Ethics and Biomedicine 3 cr**

An examination of some contemporary ethical theories and their application to a few important ethical issues in contemporary medicine and biology. Examples of topics to be covered include: euthanasia and medically assisted suicide, human reproductive cloning, and human enhancement. Students may not hold credit for PHIL 2740 and any of: PHIL 2741 or PHIL 2290 or PHIL 2531.

**Equiv To:** PHIL 2741

**Mutually Exclusive:** PHIL 2290, PHIL 2531

**Attributes:** Humanities

**PHIL 2750 Ethics and the Environment 3 cr**

An examination of some important ethical issues connected with environmental pollution and resource depletion. Examples to be covered include: the ideal of liberty and environmental limits; scarcity and the ideal of justice; growth vs. steady-state economics; animal rights, and survival ethics vs. welfare ethics. Students may not hold credit for PHIL 2750 and any of: PHIL 2751 or PHIL 2290 or the former PHIL 2531.

**Equiv To:** PHIL 2751

**Mutually Exclusive:** PHIL 2290, PHIL 2531

**Attributes:** Humanities

**PHIL 2770 Philosophy of Art 6 cr**

An introductory analysis of some contemporary aesthetic theories and an examination of such problems as the relation between art and morality, meaning and expression in art, the nature and functioning of criticism, and the justification of standards of aesthetic evaluation.

**Attributes:** Humanities

**PHIL 2790 Moral Philosophy 6 cr**

An introduction to moral philosophy and influential moral philosophers of the past and present. The main emphasis will be on the nature and justification of moral judgement. Philosophers such as Sidgwick, Kant, Rawls, Scanlon, and Ross will be discussed.

**Attributes:** Humanities, Written English Requirement

**PHIL 2800 Contemporary Political Philosophy 3 cr**

An examination of recent theories about whether there should be political authority, who should wield it, what is its proper scope and what are the duties and rights of citizens. The course will deal with representatives of such positions as anarchism, communism, conservatism, liberalism. Students may not hold credit for both PHIL 2800 and the former PHIL 3710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: successful completion of 30 hours of university credit.

**Mutually Exclusive:** PHIL 3710

**Attributes:** Humanities

**PHIL 2830 Business Ethics 3 cr**

The course will explore the application of ethical theory to business. Topics to be discussed will normally include: theories of justice, corporate responsibility, the ethics of advertising, consumer and environmental protection, and preferential hiring. Students may not hold credit for both PHIL 2830 and PHIL 2831.

**Attributes:** Humanities

**PHIL 2840 The Ethics of War and Peace 3 cr**

A study of the ethical issues connected with war and the securing of peace, as articulated in the writings of major philosophers and selected political and military thinkers. Relevant moral theories, such as non-violence, holy war, the just war, the ethical reasoning underlying policies of deterrence, will be critically examined in historical and contemporary context. Students may not hold credit for both PHIL 2840 and PHIL 2841.

**Attributes:** Humanities

**PHIL 2860 Philosophy of Law 3 cr**

An introduction to the philosophy of law and to rule systems generally. Sample topics include the concept of law (law and religion; natural law; and the "laws of the books"); the connection, if any, between law and morality; and the politics of law in Canada and elsewhere. Students may not hold credit for both PHIL 2860 and PHIL 2861.

**Attributes:** Humanities

**PHIL 2870 Philosophy and Law 3 cr**

An inquiry into the philosophy of law, on issues not covered in PHIL 2860. Students will examine such topics as: guilt and responsibility; theories of punishment; the right to dissent; legal reasoning; and, "professional ethics." Students may not hold credit for both PHIL 2870 and PHIL 2871.

**Equiv To:** PHIL 2871

**Attributes:** Humanities

**PHIL 3220 Feminist Philosophy 3 cr**

An examination of philosophical issues of special interest to students of feminism and women's issues. Topics typically include: feminist epistemology, metaphysical implications of feminism, and feminist ethics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours in Philosophy] or written consent of department head.

**Attributes:** Humanities, Written English Requirement

**PHIL 3290 Self-Transformation in Religion and Philosophy 3 cr**

This course examines contemporary expressions of spiritual exercises by tracing their traditions across an array of western religious and philosophical schools. The course explores themes of death, asceticism, aestheticism, everydayness and community. In particular, it explores how dialogue, reading, and writing have constituted tools for the cultivation of mental, physical and emotional states leading to self-transformation. Also offered as RLG 3290. May not be held with RLG 3290.

**Equiv To:** RLG 3290

**Attributes:** Humanities

**PHIL 3430 Problems in Legal Philosophy 3 cr**

A treatment of some problems arising in the philosophy of law including responsibility and the doctrine of mens rea, theories of punishment, law and morality, and the concept of law.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 3440 Problems in Social and Political Philosophy 3 cr**

A treatment of selected problems arising in social and political philosophy, e.g., the philosophy of the state, distributive justice, and the ethics of revolution.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 3580 Kant 3 cr**

A study of the 18th-century German thinker, Immanuel Kant, focusing on the revolutionary theories about reality and human knowledge contained in his major metaphysical work, *The Critique of Pure Reason*.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PHIL 2630 or PHIL 2631 or PHIL 2640 or PHIL 2641] or written consent of department head.

**Attributes:** Humanities

**PHIL 3630 Contemporary Epistemology 3 cr**

A critical examination of contemporary issues in the theory of knowledge including recent empiricist attempts to resolve the problem of justifying belief. Typical topics include foundations of knowledge, the concept of "truth", radical scepticism, the new riddle of induction, normative epistemology, the psychology and sociology of knowledge. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PHIL 2140 or the former PHIL 2760] or written consent of department head.

**Attributes:** Humanities

**PHIL 3650 Contemporary Metaphysics 3 cr**

A course in contemporary metaphysics. Possible topics include the metaphysics of causation, time and persistence, laws and modality, essence, and fundamentality. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PHIL 2580] or written permission of department head.

**Attributes:** Humanities

**PHIL 3760 Topics in Moral Theory 3 cr**

A critical examination of issues in moral theory, such as consequentialism and deontology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PHIL 2790] or written consent of department head.

**Attributes:** Humanities

**PHIL 3780 Research Topics in Philosophy 3 cr**

The course covers philosophical research on specialized topics. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 4460 Contemporary Issues 3 cr**

An intensive study of specially selected topics in contemporary philosophy. The subject matter of the course will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 4490 Philosophy of Mind 3 cr**

A seminar concentrating on the analysis of consciousness. Topics include: mind and brain, the explanation of human behaviour, and whether or not machines and animals can think.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 4510 Philosophy of Language 3 cr**

An examination of problems such as the nature of meaning, grammar, semantics, reference, truth, and methodology in the study of language.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 4520 Historical Topics 3 cr**

Selected topics in the history of philosophy. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 4580 Honours Seminar 6 cr**

A seminar course with subject matter varying from year to year, designed to meet special needs of Honours Philosophy students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 4610 Directed Reading in Philosophy 3 cr**

Subject matter will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**PHIL 4630 Symbolic Logic 3 cr**

Selected topics in mathematical logic, including propositional and quantificational logic, number theory, and the major metatheoretical results. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

## Physical Education (PHED)

**PHED 2442 Health Education 3 cr**

By integrating theory with practice, this course explores conceptions of health and education. Current health models and motivational theories will guide strategies for understanding health education. The course introduces students to conceptions of "active health" that challenge and support models of wellness and wellbeing. May not be held with the former PHED 3440.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 1200 (or the former PERS 1200 or the former PHED 1200).

**Mutually Exclusive:** PHED 3440

**PHED 2710 Human Movement Principles 3 cr**

An introduction to the principles of inclusive physical education through the integration of theory, practice and guided reflection pertaining to the development of fundamental movement skills and strategies applied to educational games, gymnastics, and dance. May not hold for credit with PHED 1420. Requires an active Recreation Services membership.

**Mutually Exclusive:** PHED 1420

**PHED 2742 Group Fitness and Leadership 3 cr**

(ELC) This course integrates theory and practice necessary to design and lead safe and effective group fitness programs (e.g., interval, circuit, conditioning, choreography). Emphasis is placed on the Manitoba Curriculum Student Learning Outcomes in "Fitness Management", and prepares students for Group Fitness Leader Certification. This course includes a field trip component. Requires an active Recreation Services membership. May not be held with the former PHED 1640 or the former PHED 2630 or the former PHED 2640 or the former PHED 2740 or the former KIN 2740.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2320 (or the former KIN 2320 or the former PHED 2320) or permission of instructor.

**Equiv To:** KIN 2740, PHED 2740

**Mutually Exclusive:** PHED 1640, PHED 2630, PHED 2640

**PHED 3102 Indigenous Song and Dance 3 cr**

An introduction to a variety of traditional and culturally relevant Indigenous songs and dances representative of Canada's Indigenous peoples, including First Nations, Metis and Inuit, taught using western and traditional teaching styles with an emphasis on hands-on learning. May not be held with the former PERS 4200. A fieldwork fee is attached to the course.

**Mutually Exclusive:** PERS 4200

**PHED 3122 Developmental Games and Activities 3 cr**

(ELC) Practical and theoretical aspects of designing educational game experiences applicable to early through senior years physical education, to include the design, implementation, and assessment of safe and inclusive physical activities as well as planning, organizational and teaching strategies. Introduces students to Manitoba Curriculum Student Learning Outcomes in "Movement Safety, Personal and Social Management". May not be held with the former PHED 2720 or the former PHED 2650.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHED 2710 or permission of instructor.

**Equiv To:** PHED 2650, PHED 2720

**PHED 3362 Culturally Relevant Pedagogies 3 cr**

(Lab required) An investigation of physical health and education from a critical theorist perspective, that is, one that investigates the different relations of power and privilege (based on ability, gender, race, socio-economic class, sexuality etc.) experienced within education and physical activity contexts. The physical education experiences of young people from diverse backgrounds will be analyzed from a holistic perspective. May not be held with the former PHED 3100 or the former PHED 3360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHED 3122 or the former PHED 2720.

**Equiv To:** PHED 3360

**Mutually Exclusive:** PHED 3100

**PHED 3522 Coaching the High Performance Athlete A 3 cr**

The development of advanced technical and theoretical expertise in coaching, including conflict management, psychology of performance, effective leadership, making ethical decisions, and practice planning. The course prepares students to be "Trained" in the Competition-Developmental level of the National Coaching Certification Program (NCCP). The student must demonstrate a high level of proficiency as an athlete, coach or official in their sport. May not be held with the former PHED 3520 or the former KIN 3520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Faculty permission and 45 credit hours of university course work.

**Equiv To:** KIN 3520, PHED 3520

**PHED 3532 Coaching the High Performance Athlete B 3 cr**

The development of advanced technical and theoretical expertise in coaching, including prevention and recovery, leading drug free sport, developing athletic abilities, and designing a basic sport program. The course completes the fully "Trained" component of the Competition-Development level of the National Coaching Certification Program (NCCP). May not be held with the former PHED 3530 or the former KIN 3530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHED 3522 or the former PHED 3520 or the former KIN 3520.

**Equiv To:** KIN 3530, PHED 3530

**PHED 3722 Coaching Theory and Practice 3 cr**

(Lab required) An introduction to the theoretical and practical aspects of coaching at the community and school level, including the examination of topics of philosophical, psychological, ethical and technical significance. The course introduces students to the National Coaching Certification Program (NCCP) of Canada and the coach certification pathway. May not be held with the former PHED 2400, the former PHED 2402, the former KIN 3720, or the former KIN 3730, or the former PHED 3050.

**Mutually Exclusive:** KIN 3720, KIN 3730, PHED 2400, PHED 2402, PHED 3050

**PHED 3732 Dance and Rhythmic Activities 3 cr**

(ELC) Practical and theoretical aspects of designing dance and rhythmic activity experiences applicable to early through senior years physical education, to include the design, implementation, and assessment of safe and inclusive physical activities as well as planning, organizational and teaching strategies. Incorporates Manitoba Curriculum Framework of Outcomes for K to 8 dance (2011) and Grade 9-12 dance (2015). May not be held with the former PHED 2730 or the former PHED 3410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHED 2710.

**Equiv To:** PHED 2730, PHED 3410

**PHED 3750 Lifestyles Activities 3 cr**

An introduction to the knowledge, skills, and attitudes that aid in the development of lifelong physically active and healthy lifestyles. May not hold for credit with KIN 3750 (REC 3750). Requires an active Recreation Services membership. Note: A fieldwork fee is attached to the course.

**Equiv To:** KIN 3750, REC 3750

**PHED 3760 Diverse Populations Mentorship 3 cr**

Practical and theoretical aspects of designing physical activity experiences for students from diverse population, including on site leadership opportunities in a multicultural school context. Evaluated pass/fail.

**PHED 3770 Indigenous Games and Activities 3 cr**

This course will provide Indigenous and non-Indigenous students with a unique opportunity to explore, in theory and practice, traditional and contemporary world views related to historical, cultural, and environmental approaches to Indigenous games and activities.

**PHED 4710 Outdoor Education 3 cr**

To introduce the students to the basic outdoor skills associated with summer/winter backpacking/cross-country skiing/snow shoeing trips. Students will then learn to use a variety of outdoor settings for education opportunities on a variety of topics and disciplines. May not hold for credit with KIN 4710 (REC 4710). A fieldwork fee is attached to the course.

**Equiv To:** KIN 4710, REC 4710

## Physics (PHYS)

**PHYS 1018 The Mechanics of Nature 3 cr**

This course provides an overview of how aspects of the natural world can be modeled using the laws of mechanics within the contexts of everyday life, including astronomy and biology. Students will learn conceptual and calculational tools used to discover the essential physics observed in everyday experiences. Suitable for students seeking an introductory-level general-interest science course, and students seeking to prepare for taking other first year Physics and Astronomy courses. May not be used for credit in a Physics and Astronomy Honours, Joint Honours, or Major program. Not available to students who have previously obtained credit (grade of C or better) in PHYS 1020, PHYS 1021, PHYS 1050, or PHYS 1051.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisite: one of MATH 0401, MATH 1018, Applied Mathematics 40S, Pre-calculus Mathematics 40S, MSKL 0100, or equivalent.

**Mutually Exclusive:** PHYS 1020, PHYS 1021, PHYS 1050, PHYS 1051

**Attributes:** Science, Recommended Intro Courses

**PHYS 1020 General Physics 1 3 cr**

(Lab required) It's a crazy world; come and find out why objects fall, slide, bounce, stick, go in circles or stay straight, float or sink, glide or crash. Why don't satellites fall to the ground? What exactly does weightlessness mean anyway? Find answers to these and other questions as you get to know Newton's and other basic laws of nature and see what makes the world go round. This course, together with the sequel PHYS 1030, is recommended for students seeking either a single, comprehensive course in Physics, or entry into health science programs. It may also be used for entry into the Honours Physics program ("B+" or better) or the Major Physics program ("B" or better). May not be held with PHYS 1021, PHYS 1050, PHYS 1051, the former PHYS 1410, or the former PHYS 1420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of Physics 40S, PHYS 0900 (P), PSKL 0100 (P), PHYS 1018, or equivalent) and (one of Pre-calculus Mathematics 40S, Applied Mathematics 40S (with 70% or better), MSKL 0100, MATH 1018, or equivalent). It is strongly recommended that students attain a minimum of 70% as the average of their marks in Physics 40S and Pre-calculus Mathematics 40S.

**Equiv To:** PHYS 1021

**Mutually Exclusive:** PHYS 1018, PHYS 1050, PHYS 1051, PHYS 1410, PHYS 1420

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**PHYS 1030 General Physics 2 3 cr**

(Lab Required) Discover how physics is the basis of the hi-tech world we live in and how we live in it. Learn how to use simple, intuitive physics concepts that are described using little math and no calculus to understand a diversity of topics including how electricity is made, what drives the greenhouse effect, what makes a diamond sparkle, lasers, LASIC eye surgery and the workings of the human eye. This course, together with its prerequisite PHYS 1020, is recommended for students seeking either a single comprehensive course in Physics, or entry into health science programs. This course may not be held with PHYS 1031, the former PHYS 1410 the former PHYS 1420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of PHYS 1020, PHYS 1021, PHYS 1050, or PHYS 1051.

**Equiv To:** PHYS 1031

**Mutually Exclusive:** PHYS 1410, PHYS 1420

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**PHYS 1050 Physics 1: Mechanics 3 cr**

(Lab required) It's rocket science! Mechanics is the science of describing (Kinematics) and explaining (Dynamics) motion. The basic concepts of calculus together with laws of conservation of momentum and energy are used to develop the tools required to describe, analyze and predict the outcomes of linear and rotational motion in simple mechanical systems. A brief introduction to the Einstein theory of special relativity provides a taste of modern approaches to this subject. This course develops a strong scientific foundation for students considering a program of study in engineering or the physical sciences. May not be held with PHYS 1020, PHYS 1021, PHYS 1051, the former PHYS 1410, or the former PHYS 1420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of Physics 40S (60% or better), PHYS 0900 (P), PSKL 0100 (P), PHYS 1018, or equivalent. Pre- or corequisite: one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, the former MATH 1530, or MATH 1690.

**Equiv To:** PHYS 1051

**Mutually Exclusive:** PHYS 1018, PHYS 1020, PHYS 1021, PHYS 1410, PHYS 1420

**Attributes:** Science, Recommended Intro Courses

**PHYS 1070 Physics 2: Waves and Modern Physics 3 cr**

(Lab Required) At the heart of modern communications, waves and oscillations are key to understanding the world around us from subatomic scales to biology, traffic flow, the stock market, climate change and the cosmos itself. Learn about the mysterious quantum world, the basis of the latest nanotechnology, where particles are waves and waves are particles. Explore Bohr's model of the atom and discover Heisenberg's Uncertainty Principle. This calculus based course addresses the underlying concepts for all modern science and engineering. This course, like Physics 1 (PHYS 1050), is intended for students considering a program in the physical sciences. Recommended for entry into the Honours programs (with a grade of "B"). May not be held for credit with PHYS 1071, the former PHYS 1410, the former PHYS 1420, or PHYS 2152.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 1050 or PHYS 1051) or (a grade of "B" or better in PHYS 1020 or PHYS 1021) and (one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, or the former MATH 1530). Pre- or co-requisite: one of MATH 1232, MATH 1700, MATH 1701, MATH 1690, MATH 1710, or the former MATH 1730.

**Equiv To:** PHYS 1071

**Mutually Exclusive:** PHYS 1410, PHYS 1420, PHYS 2152

**Attributes:** Science, Recommended Intro Courses

**PHYS 2010 Computational Modeling of Natural and Human-Created Systems 3 cr**

This course uses computer simulations to explore emergent behavior in simple models of natural phenomena, traffic, financial systems, and human behavior. The goal of the course is to show how computational modeling can be applied to exciting interdisciplinary problems spanning a wide range of human knowledge, beyond what is normally considered to be physics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of COMP 1012, COMP 1013, COMP 1010 or COMP 1011) and (one of PHYS 1020, PHYS 1021, PHYS 1050, or PHYS 1051) and (one of MATH 1220, MATH 1300, MATH 1301, or the former MATH 1310) and (one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, the former MATH 1530, or MATH 1690).

**Attributes:** Science

**PHYS 2152 Modern Physics for Engineers 3 cr**

(Lab Required) An overview of topics in modern physics including wave particle duality, atomic structure and quantum mechanics. Elementary classical electromagnetic theory and wave theory are reviewed as an introduction to the modern physics concepts. For Engineering students only. May not be held with PHYS 1070 or PHYS 1071.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: a "C" or better in one of PHYS 1050, PHYS 1051; or a "B" or better in PHYS 1020 or PHYS 1021; and a "C" or better in one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520; and a "C" or better in one of MATH 1232, MATH 1700, MATH 1701, MATH 1710 or MATH 1690. Prerequisite or concurrent requirement: MATH 2130.

**Equiv To:** PHYS 2250, PHYS 2251

**Mutually Exclusive:** PHYS 1070, PHYS 1071

**Attributes:** Science

**PHYS 2210 Understanding Electricity and Magnetism 3 cr**

An introduction ranging from its history to connections with real-world phenomena in engineering and biology, and common sense on the understanding of the phenomena. The student is carefully guided through mathematical derivations. Physics is used to develop the theory and the applications of such things as motors, radios, magnetic resonance imaging (MRI) systems and computers. May not be held with the former PHYS 2200, or the former PHYS 2201, PHYS 2600 or PHYS 2610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(PHYS 1070 or PHYS 1071) or (a "C+" or better in both of (PHYS 1020 or PHYS 1021) and (PHYS 1030 or PHYS 1031))] and [one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520]. Pre- or corequisite: [MATH 1200 or the former MATH 1201 or MATH 1240 or MATH 1241] and [one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710].

**Mutually Exclusive:** PHYS 2200, PHYS 2201, PHYS 2600, PHYS 2610

**Attributes:** Science

**PHYS 2260 Optics 3 cr**

(Lab Required) A survey of refraction, reflection, simple lens systems and optical systems, dispersion, achromatism and an elementary treatment of diffraction, interference, and polarization. May not be held with PHYS 2261.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [PHYS 1050 or PHYS 1051] or [a "C+" or better in PHYS 1020 or PHYS 1021] and [one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, or MATH 1690]. Pre- or corequisites: [one of PHYS 1070, PHYS 1071, PHYS 1030, PHYS 1031, or PHYS 2152] and [one of MATH 1210, MATH 1211, MATH 1220, MATH 1300, MATH 1301, or MATH 1310] and [one of MATH 1232, MATH 1700, MATH 1701, or MATH 1710].

**Equiv To:** PHYS 2261

**Attributes:** Science

**PHYS 2270 Introductory Physics for Life Sciences: Fundamentals and Applications 3 cr**

Physical topics with a relation to biology are discussed. Radiative transfer of energy, boundary layers, heat conduction, diffusion, mass transport, and the use of radioactive materials in biology are considered. May not be held with PHYS 2271 or PHYS 2272.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (PHYS 1050 or PHYS 1051) or (a "C+" or better in PHYS 1020, or PHYS 1021) or permission of the department.

**Equiv To:** PHYS 2271

**Mutually Exclusive:** PHYS 2272

**Attributes:** Science

**PHYS 2272 Physics for Medicine & Biology 3 cr**

An intermediate course in physics with relevant applications to Medical and Biological Physics. The course will cover key topics in mechanics, fluid dynamics, exponential growth and decay, equilibrium and entropy, modeling of transport by drift and diffusion, and electricity and magnetism, as applied to the human condition; Linear and nonlinear feedback, regression and the Fourier series for signal and image analysis will also be covered. May not be held with PHYS 2270 or the former PHYS 2271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of PHYS 1070, PHYS 1071, or PHYS 2152) or (a grade of "C+" or better in one of PHYS 1030 or PHYS 1031) and (one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710, or the former MATH 1730).

**Mutually Exclusive:** PHYS 2270, PHYS 2271

**Attributes:** Science

**PHYS 2350 Energy Sources: Physical Aspects 3 cr**

A detailed investigation of the physical aspects of energy production and utilization. Critical comparison of the various energy sources including solar, nuclear, fossil, and wind will be emphasized. The physics of energy collection, production, storage, and distribution will be discussed in the context of thermodynamics, radiation, solid state and nuclear physics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (one of PHYS 1070, PHYS 1071 or PHYS 2152) or (a "C+" or better in PHYS 1030 or PHYS 1031) or permission of the department.

**Mutually Exclusive:** PHYS 1303

**Attributes:** Science

**PHYS 2386 Introduction to Quantum Mechanics and Special Relativity 3 cr**

The first in a sequence of three courses on quantum mechanics, which also includes an introduction to the theory of special relativity. The topics covered include Einstein's postulates of special relativity, the Lorentz transformation, relativistic kinematics and dynamics and four-vectors, kinetic theory of gases, cavity radiation and normal modes, Planck's quantization postulate and the Schrodinger theory of quantum mechanics. Special emphasis is placed on the derivation of the time dependent and time independent Schrodinger equation and its solutions in one dimension. May not be held with the former PHYS 2380.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of PHYS 1070, PHYS 1071 or PHYS 2152) or (a "C+" or better in PHYS 1030 or PHYS 1031) and (one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710, or the former MATH 1730).

**Mutually Exclusive:** PHYS 2380

**Attributes:** Science

**PHYS 2390 Theoretical Physics 1 3 cr**

This course provides an introduction to the mathematics required for both the Honours and Major programs in Physics and Astronomy. Topics include series expansions, partial derivatives, vector calculus and integral theorems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 1050 or PHYS 1051, or a "C+" or better in PHYS 1020 or PHYS 1021; and one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710. Pre- or Corequisite: one of PHYS 1070 or PHYS 1071 or PHYS 1030 or PHYS 1031.

**Attributes:** Science

**PHYS 2490 Theoretical Physics 2 3 cr**

This course provides a continuation of the introduction to the mathematics required for both the Honours and Major programs in Physics and Astronomy. Topics include Fourier series, differential equations, special functions, boundary value problems and transform methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 2390.

**Mutually Exclusive:** PHYS 2496

**Attributes:** Science

**PHYS 2496 Mathematical Physics 1 3 cr**

This course provides a continuation of the mathematics required for both the Honours and Major programs in Physics and Astronomy. Topics include sequences and series, an introduction to complex numbers, special functions, ordinary differential equations, Fourier series and transforms, and an introduction to probability and statistics. May not be held with PHYS 2490.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [PHYS 1050 or PHYS 1051] or [a "C+" or better in PHYS 1020 or PHYS 1021] and [one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, or MATH 1710]. Pre- or corequisite: one of PHYS 1070, PHYS 1071, PHYS 1030, PHYS 1031, or PHYS 2152.

**Mutually Exclusive:** PHYS 2490

**Attributes:** Science

**PHYS 2600 Electromagnetic Field Theory 3 cr**

(Lab Required) Electric field, electric potential, Gauss' law, capacitors, dielectric materials, magnetic fields, Ampere's law, magnetic induction, magnetic materials, displacement current, integral form of Maxwell's equations. In addition to the lectures, the course includes a tutorial session of two hours per week. May not be held with PHYS 2200 or PHYS 2201.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of PHYS 1070, PHYS 1071, or PHYS 2152, or a "C+" or better in PHYS 1030 or PHYS 1031; and one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710.

**Mutually Exclusive:** PHYS 2200, PHYS 2201, PHYS 2210

**Attributes:** Science

**PHYS 2610 Circuit Theory and Introductory Electronics 3 cr**

(Lab Required) Ohm's law, Kirchhoff's laws, DC circuit analysis, equivalent circuits, AC circuit analysis, complex impedance, RLC circuits, magnetic coupling, transformers, diodes and diode circuits. May not be held with PHYS 2200 or PHYS 2201.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 2600.

**Mutually Exclusive:** PHYS 2200, PHYS 2201, PHYS 2210

**Attributes:** Science

**PHYS 2650 Classical Mechanics 1 3 cr**

The first in a sequence of two courses on intermediate to advanced level mechanics. Topics include inertial and non-inertial reference frames, energy, oscillations, dynamics of systems of particles, motion of a projectile with air resistance, planar motion of rigid bodies, as well as gravitation and central-force motion.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a "C" or better in one of PHYS 1070, PHYS 1071, or PHYS 2152] or [a "C+" or better in PHYS 1030 or PHYS 1031]. Pre- or corequisite: one of PHYS 2496, PHYS 2490 or MATH 3132.

**Attributes:** Science

**PHYS 3220 Medical Physics and Physiological Measurement 3 cr**

This course will introduce the core subject areas of Medical Physics, in particular the physics of physiology and of radiology. The mechanics of body systems and the theory, medical applications and safety issues relating to the production, use, detection and measurements of electromagnetic radiation (both ionizing and non-ionizing) will be included. It will also cover Medical imaging (Ultrasound, CT and MRI) and will provide the student with an understanding of the physics underlying neurological, audiological, respiratory and vascular function and measurements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (one of PHYS 1070, PHYS 1071 or PHYS 2152) or (a "C+" or better in PHYS 1030 or PHYS 1031) or permission of the department. PHYS 2270 or PHYS 2272 is recommended.

**Equip To:** RTT 3220

**Attributes:** Science



**PHYS 3386 Quantum Mechanics 2 3 cr**

The second in the sequence of three courses on quantum mechanics which includes mathematical Hilbert space formalism, solutions of the Schrodinger equation in three dimensions with a special emphasis on central potentials, spin, angular momentum, ladder operators, Clebsch-Gordan coefficients and time-independent perturbation theory. May not be held with the former PHYS 3380.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 2386 or the former PHYS 2380) and (one of PHYS 2496, PHYS 2490, or MATH 3132). PHYS 3496 is recommended.

**Equip To:** PHYS 3380

**Attributes:** Science

**PHYS 3430 Honours Physics Laboratory 6 cr**

Six hours per week. This is a hands-on course of experimental essentials of modern physics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: one of PHYS 2260, PHYS 2261, PHYS 2610 or ECE 2160, or permission of the department.

**Attributes:** Science

**PHYS 3496 Mathematical Physics 2 3 cr**

This course provides a continuation of the mathematics required for both the Honours and Major programs in Physics and Astronomy. Topics include complex analysis, generalized coordinate systems, Sturm-Liouville theory and generalized orthogonal functions, partial differential equations, and applications in physics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of PHYS 2390, MATH 2720, MATH 2721, MATH 2130, MATH 2150, or MATH 2151] and one of PHYS 2496 or PHYS 2490. MATH 2090 or the former MATH 2300 is recommended.

**Attributes:** Science

**PHYS 3570 Physics of Materials 1 3 cr**

Introduction to the physics of materials. Solids within the elastic limit: stress and strain tensors, elastic constants. Liquids: continuity equation, Bernoulli, Euler and Navier-Stokes equations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisite: PHYS 3386 or the former PHYS 3380.

**Attributes:** Science

**PHYS 3630 Electro - and Magnetostatic Theory 3 cr**

Material covered will include electrostatics (i.e. Gauss' Law, Laplace and Poisson equations) and magnetostatics (Lorentz force, Maxwell equations) as well as the properties of electrostatic fields in matter and magnetism in materials.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 2600 and (one of PHYS 2496, PHYS 2490, or MATH 3132) or permission of the department. PHYS 3496 is recommended.

**Attributes:** Science

**PHYS 3650 Classical Mechanics 2 3 cr**

The second in a sequence of two courses on intermediate to advanced level mechanics. Topics include calculus of variations, Lagrangian and Hamiltonian dynamics, rotational motion of rigid bodies in three dimensions, canonical equations using Poisson brackets, nonlinear oscillations and chaos, and coupled oscillations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 2650. Pre- or corequisite: one of PHYS 3496, PHYS 2490, or MATH 3132.

**Attributes:** Science

**PHYS 3670 Classical Thermodynamics 3 cr**

An introduction to the laws of classical thermodynamics and their applications. Descriptions of the states of thermodynamic systems primarily at or near equilibrium that use measurable macroscopic properties, but also including discussion of some far-from-equilibrium stationary states, will be developed. The physics will be used to model exchanges of matter and energy for both reversible and irreversible processes in a variety of physical systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of PHYS 2496, PHYS 2490, or MATH 3132] and PHYS 2650. PHYS 2386 is strongly recommended.

**Attributes:** Science

**PHYS 4010 General Relativity and Gravitation 3 cr**

The course briefly covers Newtonian gravity, special relativity and Minkowski space, before moving on to relativistic electrodynamics with the focus on the energy-momentum tensor, relativistic hydrodynamics, non-inertial reference frames and the principle of covariance and Einstein's field equations, linearized field equations and gravitational waves, as well as Schwarzschild's solution with the application to a static black hole.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 3650 and (PHYS 3496 or PHYS 2490) or permission of the department. Pre- or corequisite: PHYS 4646 or the former PHYS 3640.

**Attributes:** Science

**PHYS 4250 Computational Physics 3 cr**

Application of numerical methods and programming skills to model a variety of physics problems on a computer. Topics include differential equations, boundary value and eigenvalue problems, special functions, and Monte Carlo methods, with examples from classical, quantum, and statistical mechanics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (one of COMP 1012, COMP 1013, COMP 1010, or COMP 1011) and (PHYS 3496 or PHYS 2490) or permission of the department.

**Attributes:** Science

**PHYS 4300 Topics in Physics 3 cr**

Topics will vary depending upon student needs and interests, and will include specialized topics not available in regular course offerings.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 3386 or the former PHYS 3380, or permission of the department.

**Mutually Exclusive:** ASTR 4100, ASTR 4200

**Attributes:** Science

**PHYS 4350 The Physics of Fluids 3 cr**

The course covers basic fluid dynamics based on the Euler equations. Topics include conservation laws; linear sound waves; instabilities; the generation of sound waves; linear and non-linear description of water waves including the Korteweg-de Vries equation, soliton solutions, and shock waves; elasticity and the stress tensor; Navier-Stokes equations and their solutions; the Hagen-Poiseuille law; Stokes' law and aerodynamics; attenuation of acoustic waves; non-linear acoustics; and the basic concepts of the description of turbulence including Kolmogorov's theory, correlation functions, and spectral tensors.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 3496.

**Attributes:** Science

**PHYS 4360 Medical Radiation Physics 3 cr**

The relevant physics of the production and interaction of radiation beams used in both diagnostic and therapeutic medicine will be covered. Such beams included X- and g-rays, particle beams, visible and I.R. radiation, microwaves, and ultrasound.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 3220 or the former PHYS 4560 or permission of the department.

**Attributes:** Science

**PHYS 4386 Quantum Mechanics 3 3 cr**

The third in the sequence of three courses on quantum mechanics which includes systems of identical particles, variational methods, time-dependent perturbation theory and scattering theory. May not be held with the former PHYS 4390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 3386 or the former PHYS 3380) and (PHYS 3496 or PHYS 2490).

**Equiv To:** PHYS 4390

**Attributes:** Science

**PHYS 4400 Linear Systems for Imaging 3 cr**

Fundamental principles of image formation, analysis of the characteristics of medical images, parametric description of image quality; application to transmission radiography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 3220 or permission of the department.

**Attributes:** Science

**PHYS 4516 Introduction to Nuclear and Particle Physics 3 cr**

Bulk properties of the atomic nucleus; nuclear models, nuclear disintegration; alpha-decay, gamma transitions, and beta-decay; scattering formalism and experiments; evidence for quark structure and properties of the hadrons (neutrons, protons, mesons); basic introduction to QCD; basic intro to the weak interaction and neutrino physics; basic introduction to the standard model. May not be held with the former PHYS 4510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 3386 or the former PHYS 3380) and (PHYS 4646 or the former PHYS 3640).

**Mutually Exclusive:** PHYS 4510

**Attributes:** Science

**PHYS 4520 Introduction to Solid State Physics 3 cr**

An introduction to the following topics as they relate to the properties of solids: crystal structure and lattice energy; lattice vibrations; specific heat; free-electron gas; electronic band structure; metals, semiconductors and insulators.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: (PHYS 3386 or the former PHYS 3380) and (PHYS 4680 or the former PHYS 3680).

**Attributes:** Science

**PHYS 4590 Advanced Optics 3 cr**

Light as a classical electromagnetic wave, optical fields in media, interference by wavefront and amplitude splitting, diffraction, diffraction theory of image formation, spatial filtering and image processing, coherence theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 2260 or PHYS 2261) and (PHYS 4646 or the former PHYS 3640).

**Attributes:** Science

**PHYS 4600 Lasers and Applications 3 cr**

Light and atoms: semi-classical theory, principles of laser operation and properties of laser light, polarization optics, Gaussian beam optics, laser spectroscopy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 2260 or PHYS 2261) and (PHYS 3386 or the former PHYS 3380).

**Attributes:** Science

**PHYS 4620 Advanced Classical Mechanics 3 cr**

Canonical invariants and Lagrange and Poisson brackets. Hamilton-Jacobi theory, action-angle variables, normal modes of vibration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 3650 and PHYS 3496.

**Attributes:** Science

**PHYS 4630 Physics of Materials 2 3 cr**

Physics of materials beyond the elastic limit, emphasizing atomistic features. Structural aspects, crystal defects, plastic deformation, radiation damage, diffusion and dislocations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 3570.

**Attributes:** Science

**PHYS 4646 Electro - and Magnetodynamics and Special Relativity 3 cr**

Topics covered will include time dependent Maxwell's equations, Ohm's and Faraday's Law, electromagnetic waves, potential and fields, radiation, and special relativity including the Lorentz transformations. May not be held with the former PHYS 3640.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 3630 or ECE 3590. Pre-or corequisite: one of PHYS 3496, PHYS 2490, or MATH 3132.

**Mutually Exclusive:** PHYS 3640

**Attributes:** Science

**PHYS 4676 Honours Thesis - Proposal and Preparation 3 cr**

For students in term 1 of their final year in Honours. The student will prepare a proposal for the undergraduate thesis and demonstrate the feasibility of the project under the supervision of a faculty member. The results of the study will be presented (in written and oral form) to an examining committee during the term. Both experimental and theoretical topics are acceptable. A grade of C (based on the presentations) is required to proceed to the next course which forms the final stage of the honours thesis. May not to be held with the former PHYS 4670 or the former PHYS 4672.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of the thesis supervisor.

**Mutually Exclusive:** PHYS 4670, PHYS 4672

**Attributes:** Science

**PHYS 4678 Honours Thesis - Dissertation 3 cr**

For students in term 2 of their final year in Honours. The student will complete the work needed and produce an undergraduate thesis under the supervision of a faculty member. The grade will be based on the examining committee's evaluation of a progress report (presented mid-term) and an evaluation of the thesis manuscript and oral presentation at the end of term. Both experimental and theoretical topics are acceptable. May not be held with the former PHYS 4670, the former PHYS 4672, or the former PHYS 4674.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of the department.

**Mutually Exclusive:** PHYS 4670, PHYS 4672, PHYS 4674

**Attributes:** Science

**PHYS 4680 Statistical Mechanics 3 cr**

Principles of statistical mechanics and their applications. Topics include phase space, Liouville and Poincare theorem, statistical ensembles, entropy, ideal classical gas, photon gas, Fermi gas, Bose-Einstein condensation, models of magnetism, and phase transitions. May not be held with the former PHYS 3680.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (PHYS 2386 or the former PHYS 2380) and PHYS 3670.

Pre- or corequisite: PHYS 3496 or PHYS 2490.

**Mutually Exclusive:** PHYS 3680

**Attributes:** Science

## Physiology (PHGY)

**PHGY 1030 Fundamentals of Medical Physiology 6 cr**

The function and regulation of the systems and major organs of the human body as they relate to clinical disorders.

**PHGY 5002 Respiratory Physiology and Pathophysiology 3 cr**

This course introduces students to the basic medical physiology of the respiratory system, with emphasis on clinically relevant lung pathophysiology, in particular how basic concepts relate to disease and its treatment, as well as how this determines research questions in the field. Registration is restricted to students in the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program.

**PHGY 5004 Cardiovascular Physiology and Pathophysiology 3 cr**

This course introduces students to basic medical physiology of the cardiovascular system, with emphasis on clinically relevant heart pathophysiology, in particular how basic concepts relate to disease and its treatment, as well as how this determines research questions in the field. Registration is restricted to students in the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program.

**PHGY 5006 Endocrine Physiology and Pathophysiology 3 cr**

This course introduces students to basic medical physiology of the endocrine system, with emphasis on clinically relevant endocrine pathophysiology, in particular how basic concepts relate to disease and its treatment, as well as how this determines research questions in the field. Registration is restricted to students in the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program.

**PHGY 5008 Neurophysiology and Pathophysiology 3 cr**

This course introduces students to basic medical physiology of the nervous system, with emphasis on clinically relevant neurological dysfunctions/disease states such as Parkinson's disease, cerebellar dysfunction, and spinal cord injury. Registration is restricted to students in the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program.

**PHGY 5010 Cell Physiology and Pathophysiology 3 cr**

This course introduces students to the basic medical physiology of the cellular system, with emphasis on clinically relevant cellular pathophysiology of various diseases. Registration is restricted to students in the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program.

**PHGY 5012 Laboratory Physiology and Pathophysiology 12 cr**

(Lab required) This course introduces students to basic laboratory research practices, providing a practical research experience in the biomedical or health-related sciences, under the supervision of an instructor(s). Research projects will be designed to include research techniques, data analysis and educational training. Registration is restricted to students in the Post-baccalaureate Diploma in Medical Physiology and Pathophysiology program.

## Plant Science (PLNT)

**PLNT 0410 Crop Production Principles and Practices 4 cr**

(Lab required) This course provides a broad understanding of the principles and practices of crop production. The importance of crop production for western Canada and for worldwide food production. Constraints, challenges and opportunities will be explored. The course will cover crop plant biology and provide an introduction to agronomic management practices for Manitoba crop production. Topics will include crop rotation, cultivar selection, tillage, seeding, fertilizer, pest control, precision agriculture and bio security.

**PLNT 0750 Forage and Pasture Management 4 cr**

(Lab required) This course covers for forage crops and the continuum of improved and unimproved pasture land a discussion of production practices including: choice of species and cultivars of forage crops, cultural management including tillage practices, pest control, forage harvesting, grazing management and seed production.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 0410 or the former DAGR 0420.

**PLNT 0770 Weed Management 4 cr**

General principles of weed management and pesticide use safety as they relate to weed control. Topics will include weed biology and identification, economic importance, principles of chemical, cultural, mechanical and biological weed management, introduction to herbicides including modes of action and factors influencing their use, selectivity, risks for development of herbicide-resistant weeds and how to mitigate this risk.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 0410 or the former DAGR 0420.

**PLNT 0780 Plant Disease Management 4 cr**

(Lab required) General principles of pest management and pesticide use safety as they relate to plant disease control. Discussion of diseases attacking field and horticultural crops in the Prairies including disease symptoms, cycles, prevention and control. May not be held with PLNT 4270.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 0410 or the former DAGR 0420 (D).

**Mutually Exclusive:** PLNT 4270

**PLNT 0810 Special Topics in Crop Management 3 cr**

Selected topics of current interest in Crop Management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Director of the School of Agriculture.

**PLNT 0820 Organic Crop Production on the Prairies 3 cr**

Management principles and practices involved in the production of organic field and forage crops with a focus on the Canadian Prairie region. May not be held with PLNT 3560.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [PLNT 0410 and SOIL 0420] or [the former DAGR 0420 (D)].

**Mutually Exclusive:** PLNT 3560

**PLNT 1000 Urban Agriculture 3 cr**

Urban environments and their importance for food production, increasing biodiversity, and reducing pollution are presented. Topics include principles of vegetable, fruit and herb production, landscape plants, and utilization of natural systems for composting, water management and reduced pesticide use. Benefits to environment, community development, and human health are discussed.

**PLNT 2500 Crop Production 3 cr**

(Lab required) An introduction to the principles and practices of crop production in Canada. Topics will include physiological processes and factors affecting plant yield, plant improvement, seed production, and production of the major cereal, oilseed, forage and special crops.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: AGRI 1600 (or the former AGRI 1500) (D).

**PLNT 2510 Fundamentals of Horticulture 3 cr**

(Lab required) Principles of the culture, marketing, and utilization of fruits, vegetables, and ornamentals, their contribution to the economy and well-being of consumers, and impact of horticultural activities on the environment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 1030 (D) and [AGRI 1600 (or the former AGRI 1500) (D) or PLNT 1000 (D)] or consent of instructor.

**PLNT 2520 Genetics 3 cr**

Basic principles of genetics and their practical application in the areas of DNA structure and function, genome organization and genetic analysis. Laboratory sessions provide practical experience in solving genetic problems and conducting genetic investigations. Not to be held with BIOL 2500 or the former BOTN 2460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1020 and BIOL 1030.

**Equiv To:** BIOL 2500, BOTN 2460, BOTN 2461

**PLNT 2530 Plant Biotechnology 3 cr**

(Lab required) An introduction to current biotechnological techniques, including recombinant DNA, plant tissue culture, plant transformation and regeneration. A background to the techniques as well as a discussion of their applications in current biology and crop production will be examined. A laboratory will provide first hand experience with many of the techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [(CHEM/MBIO 2730 and CHEM 2740) or the former CHEM/MBIO 2770; or (CHEM/MBIO 2700 (CHEM/MBIO 2701) and CHEM 2720 (CHEM 2721)) or the former CHEM/MBIO 2360 (the former CHEM/MBIO 2361)] and [PLNT 2520 or BIOL 2500].

**PLNT 3140 Introductory Cytogenetics 3 cr**

An introduction to the structure and function of eukaryotic genomes, from the gene to the chromosome. Topics include the cell cycle, meiosis, chromatin, chromosome and genome organization, karyotyping, changes in chromosome number and structure, physical mapping and chromosome evolution. Labs cover use of the microscope, meiosis, chromosome staining and banding, and bioinformatic analysis of chromosomes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PLNT 2520 or BIOL 2500 or the former BOTN 2460.

**PLNT 3400 Plant Physiology 3 cr**

(Lab required) An integrative view of major physiological processes in plants, spanning the biochemical, cellular, tissue, organ and whole plant levels of organization. The focus will be on photosynthesis, respiration, plant water relations, plant mineral nutrition, and the role of hormonal and extrinsic factors in the regulation of plant growth. Also offered as BIOL 3400. May not be held with BIOL 3400, the former BIOL 3450 or the former PLNT 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 2242 and [(CHEM/MBIO 2730 and CHEM/MBIO 2740) or the former CHEM/MBIO 2770; or (CHEM/MBIO 2700 (CHEM/MBIO 2701) and CHEM/MBIO 2720 (CHEM 2721)) or the former CHEM/MBIO 2360 (the former CHEM/MBIO 2361)]; or consent of the instructor.

**Equiv To:** BIOL 3400

**Mutually Exclusive:** BIOL 3450, BOTN 2020, PLNT 3500

**PLNT 3520 Principles of Plant Improvement 3 cr**

Basic objectives, principles, and methods of plant genetic improvement. Traditional and modern plant breeding, genetic resources, selection, and applications of tissue culture, genetic engineering and molecular markers to plant improvement.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 2520 or BIOL 2500 or the former BOTN 2460.

**PLNT 3540 Weed Science 3 cr**

(Lab required) Identification, biology and ecology of weeds of agricultural importance in western Canada, including principles of cultural, mechanical, biological and chemical control. Topics include weed interference, effects of rotational and management practices on weed species composition, herbicide selectivity and mechanism of action, and emerging control technologies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: BIOL 1030 (D) and [AGRI 1600 (D) or the former AGRI 1500 (D)] or consent of instructor.

**PLNT 3560 Organic Crop Production on the Prairies 3 cr**

Management principles and practices involved in the production of organic field and forage crops with a focus on the Canadian Prairie region. May not be held with PLNT 0820.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PLNT 2500 (D) and SOIL 3600 (D) or consent of instructor.

**Mutually Exclusive:** PLNT 0820

**PLNT 3570 Fundamentals of Plant Pathology 3 cr**

(Lab required) An introduction to the science of plant pathology. Topics include causal agents of diseases, symptoms and diagnoses, modes of infections and spread, mechanisms in disease and control, effects of the environment on disease development, and methods of disease control. This course is a prerequisite for more advanced courses in plant pathology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 1030 (D).

**PLNT 4270 Plant Disease Control 3 cr**

(Lab required) Diseases attacking field crops and horticultural plants: recognition of symptoms, methods of prevention, alleviation, and control. May not be held with PLNT 0780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 2500 (D) or consent of instructor.

**Mutually Exclusive:** PLNT 0780

**PLNT 4310 Introductory Plant Genomics 3 cr**

An introduction to basic technologies in plant genomics. Topics include DNA sequencing, molecular marker detection, genome sequencing, gene expression analysis, gene mapping and functional analysis. A laboratory will provide hands-on experience with several genomic techniques. Not to be held with the former PLNT 4540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PLNT 2520 OR BIOL 2500 or the former BOTN 2460 or consent of instructor.

**Equiv To:** PLNT 4540

**PLNT 4330 Intermediate Plant Genetics 3 cr**

A study of gene behaviour as related to genetic analyses of data from plant populations; multiple allelic systems and polygenic inheritance of quantitative traits; extra-chromosomal inheritance and the significance of cytoplasmic influence. Examples will be drawn from experimental data where available.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 2520 or BIOL 2500 or the former BOTN 2460.

**PLNT 4380 Plant Science Thesis 6 cr**

An independent research project under the supervision of a staff member. A thesis including a literature review, methods, results and discussion is required. Enrollment limited. Open only to students in their 4th year. Not to be held with SOIL 4080.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of department head.

**PLNT 4410 Grassland Agriculture: Plant, Animal and Environment 3 cr**

Inter-relationships between the biological components of grassland agriculture as they relate to forage production on the Canadian Prairies. Topics include utilization by wild and domestic animals, plant community relationships and role of forages in multiple land use planning. This course also offered in Animal Science as ANSC 4410.

**Equiv To:** ANSC 4410

**PLNT 4510 Advanced Cropping Systems 3 cr**

Examination and analysis of sustainable Prairie cropping systems. Emphasis will be placed on systems that optimize the benefits of crop rotation, integrate crops and livestock, conserve soil and water resources, and enhance biodiversity. Current, historical, and emerging crop production systems from the Prairies and other regions of the world will be discussed. Includes experiential learning through farm interviews and/or field tours and/or guest speakers. May not be held with PLNT 3510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 2500 (D).

**Mutually Exclusive:** PLNT 3510

**PLNT 4550 Developmental Plant Biology 3 cr**

An introduction to mechanisms regulating morphogenesis and plant growth and development. Emphasis will be on experimental approaches used to investigate pattern formation at sub cellular, cellular, tissue and organ levels. A heavy tissue culture component in the lab will implement the lecture topics and will provide new insights into ways to study plant development in vitro.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 3400 or BIOL 3400 or the former PLNT 3500.

**PLNT 4570 Research Methods in Plant Pathology 3 cr**

Course will provide practical training in plant pathology and will cover plant disease diagnosis, pathogen isolation, identification, inoculation, and storage. Molecular techniques currently used in the study of plant pathogens will be covered. The laboratory component aims at preparing students for a professional career in plant protection and research in plant pathology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 3570 or consent of instructor.

**PLNT 4580 Molecular Plant-Microbe Interactions 3 cr**

Course will cover general principles and mechanisms related to plant-pathogen interactions, such as in gene-to-gene and toxin models. Emphasis will be on biochemical/molecular mechanisms of plant-microbe recognition, pathogenesis, and plant reactions to infections. Both beneficial and deleterious associations will be covered. This course is offered in alternate years.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 3570.

**PLNT 4590 Physiology of Crop Plants 3 cr**

(Lab required) Concepts dealing with the physiological response of crop plants to the environment from the time of seed germination through to reproduction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2242 (D) or consent of instructor.

**PLNT 4610 Bioinformatics 3 cr**

An introduction to the theory, strategies, and practice of data management and analysis in molecular biology. Topics include DNA and protein sequence analysis, biological databases, genomic mapping, and analysis of gene expression data. The course will include problem-solving exercises using Unix server-based software.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PLNT 2530 or PLNT 3140 or MBIOL 3410 or PLNT 4310 or the former PLNT 4540 or consent of instructor.

**Equiv To:** PLNT 7690

## Polish (Slavic Studies) (POL)

**POL 1890 Introductory Polish 6 cr**

Basic grammar, conversation, composition, readings, language laboratory sessions.

**Attributes:** Humanities, Recommended Intro Courses

**POL 1900 Love, Heroes and Patriotism in Contemporary Poland 3 cr**

A study of the impact of Romanticism on contemporary Polish national consciousness, images of love, and the role of art and the artist in society. The course explores diverse written and visual sources representing Polish and European Romanticism and its mutual influences. Lectures and readings in English.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**POL 2600 Polish Culture until 1918 3 cr**

An introductory survey from the beginnings of the Polish state to 1918. This is a lecture style course devoted to studying the achievements of Polish culture and their impact on world culture. Students will observe the creation of Polish national identity through the examination of documents from literature and culture. Lectures and readings in English. Students may not hold credit for both POL 2600 and the former POL 2530.

**Mutually Exclusive:** POL 2530

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**POL 2610 Polish Culture 1918 to the Present 3 cr**

An introductory survey from 1918 to the present. This is a lecture style course devoted to studying the achievements of Polish culture and their impact on shaping of the contemporary Polish society. Students will observe the cultural changes that defined Poland following one hundred years of non-existence as a nation. The re-examining of the Polish national identity will be studied through documents from literature, art, mythology and music. Lectures and readings in English. Students may not hold credit for both POL 2610 and the former POL 2530.

**Mutually Exclusive:** POL 2530

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**POL 2660 Special Topics in Polish Literature and Culture 3 cr**

Topics dealing with Polish literature and culture. Content of this course will vary from year to year, depending on the needs and interests of instructors and students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Humanities, Written English Requirement

**POL 2690 Polish Language and Culture 6 cr**

Offered as part of the Summer Session, this course is a study experience in Poland. The program features practical language training and an exploration of the Polish culture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Humanities

**POL 2890 Intermediate Polish 6 cr**

Grammar review, composition, translation, readings of selected prose and poetry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [POL 1890] or written consent of department head.

**Attributes:** Humanities, Recommended Intro Courses

**POL 3892 Advanced Polish: Conversational Practice 3 cr**

Development of skills in spoken and written Polish, within the context of contemporary Polish culture, via a variety of sources, such as: news articles, comics, music. Students may not hold credit for both POL 3892 and the former POL 3890.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POL 2890 or written consent of department head.

**Mutually Exclusive:** POL 3890

**Attributes:** Humanities

**POL 3894 Advanced Polish Through Short Stories 3 cr**

Development of advanced language skills: writing, reading, listening comprehension, and speaking. Exploration and analysis of Polish cultural tropes within the context of short stories. Students may not hold credit for both POL 3894 and the former POL 3890.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POL 2890 or written consent of department head.

**Mutually Exclusive:** POL 3890

**Attributes:** Humanities

## Political Studies (POLS)

**POLS 1502 Introduction to Political Studies 3 cr**

(Lab required) This course introduces students to fundamental concepts in the analysis of political phenomena, as well as problems and issues associated with the exercise of authority and the construction of political legitimacy. Students may not hold credit for POLS 1502 and any of: POLS 1503 or the former POLS 1500 or the former POLS 1501.

**Mutually Exclusive:** POLS 1500, POLS 1501, POLS 1503

**Attributes:** Social Science, Recommended Intro Courses, Written English Requirement

**POLS 1506 Survey of Political Studies 3 cr**

(Lab required) This class introduces students to the academic study of politics. A primary objective of the course is that students will learn to differentiate among the various fields of Political Science including Political Theory, Canadian Politics, Global Politics, Public Administration and International Relations. The course thus prepares students to select coursework within the Political Studies major appropriate to their interests and career goals. Students may not hold credit for POLS 1506 and any of: the former POLS 1500 or the former POLS 1501.

**Mutually Exclusive:** POLS 1500, POLS 1501

**Attributes:** Social Science, Recommended Intro Courses

**POLS 2302 Introduction to Political Theory 3 cr**

An Introduction to the oldest sub-discipline in political science. We examine key ideas such as justice, democracy, authority, sovereignty, and punishment as well as their applications in political theory and practice. Students may not hold credit for POLS 2302 and any of: POLS 1010 or the former POLS 2510.

**Mutually Exclusive:** POLS 1010, POLS 2510, POLS 2511

**Attributes:** Social Science

**POLS 2502 Introduction to World Affairs 3 cr**

An introduction to the analysis of events, actors and conflicts in world affairs. The course examines the constituent parts (or units of analysis) of the wider academic discipline of international relations. Examples are drawn mainly from international events since 1919, with appropriate references to earlier periods. Students may not hold credit for POLS 2502 and any of: POLS 2043, the former POLS 2040, or the former POLS 2041.

**Mutually Exclusive:** POLS 2040, POLS 2041, POLS 2043

**Attributes:** Social Science

**POLS 2504 Introduction to International Relations 3 cr**

An introduction to the theories of the academic discipline called international relations. The course examines how different theories treat conflict, competition and cooperation among states and other actors. Examples are drawn mainly from international events since 1919, with appropriate references to earlier periods. Students may not hold credit for POLS 2504 and any of: POLS 2045, the former POLS 2040, or the former POLS 2410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisite: POLS 2502 or POLS 2403.

**Mutually Exclusive:** POLS 2040, POLS 2041, POLS 2045

**Attributes:** Social Science

**POLS 2602 Introduction to Comparative Politics 3 cr**

An introduction to the study of comparative politics, examining political processes and public policies in a variety of political systems including liberal democracies as well as post-Communist, newly industrializing, and developing nations. Students may not hold credit for POLS 2602 and any of: POLS 2003, POLS 2005 or the former POLS 2000.

**Mutually Exclusive:** POLS 2000, POLS 2003, POLS 2005

**Attributes:** Social Science

**POLS 2702 Introduction to Canadian Politics 3 cr**

A survey of contemporary Canadian political institutions and processes, including federalism, Parliament, political parties, and treaties. Students may not hold credit for POLS 2702 and any of POLS 2073, POLS 2075 or the former POLS 2070.

**Mutually Exclusive:** POLS 2070, POLS 2071, POLS 2073, POLS 2075

**Attributes:** Social Science

**POLS 2802 Introduction to Indigenous Politics 3 cr**

An introduction to the the complex issues associated with Indigenous peoples and their politics. The central issues of this course include the history and context of Indigenous government and political movements, and the political goals of Indigenous peoples today.

**Attributes:** Social Science

**POLS 2902 How Government Works 3 cr**

An introduction to key actors, institutions and processes in Canada's governmental system. Topics include fundamental principles; constitution; accountability; tribunals, legislation, and relationships with Indigenous Peoples. Students may not hold credit for POLS 2902 and POLS 2571 .

**Mutually Exclusive:** POLS 2051, POLS 2570, POLS 2571

**Attributes:** Social Science

**POLS 3100 Gender and Politics in Canada 3 cr**

This course introduces the principal themes in the study of gender and politics in Canada. Topics may include women's political organizing and activism, representation in political institutions, the gendered division of labour in the private and public spheres, gender and public policy, and the gendered nature of political behaviour.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [POLS 2702 or the former POLS 2070 or the former POLS 2071] or [POLS 2073 and POLS 2075] or written consent of instructor or department head.

**Attributes:** Social Science

**POLS 3140 Selected Topics in Politics 1 3 cr**

The content of this course will vary. Contact the department for a course description. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Mutually Exclusive:** POLS 3340, POLS 3360, POLS 3530, POLS 3540, POLS 3872

**Attributes:** Social Science

**POLS 3150 Selected Topics in Politics 2 3 cr**

The content of this course will vary. Contact department for a course description. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Attributes:** Social Science

**POLS 3250 International Political Economy 3 cr**

A survey of the relationship between political authority and the production and distribution of global wealth. Emphasis is placed on the historical development of international political economy, its fundamentals, as well as major theoretical perspectives. Students may not hold credit for both POLS 3250 and POLS 3251.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [POLS 2502, or (POLS 2043 and POLS 2045), or the former POLS 2040, or the former POLS 2041] or written consent of instructor or department head.

**Equip To:** POLS 3251

**Attributes:** Social Science

**POLS 3270 Theories of the Capitalist World Order 3 cr**

A critical survey of major theories that have successively dominated understandings of the modern capitalist world order including mercantilism, free trade, imperialism, hegemonic stability theory, globalization, regionalism, empire and multipolarity, paying particular attention to the political economy underlying each.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [POLS 2502, or (POLS 2043 and POLS 2045), or the former POLS 2040, or the former POLS 2041] or written consent of instructor or department head.

**Attributes:** Social Science

**POLS 3310 Pre-Modern Political Theory 3 cr**

A survey and evaluation of early canonical texts and ideas in the history of Western political theory. Thinkers may include, but are not limited to: Plato, Aristotle, and Machiavelli. Students may not hold credit for POLS 3310 and the former POLS 2513.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: a grade of C or better in POLS 2302 or the former POLS 2510.

**Mutually Exclusive:** POLS 2513

**Attributes:** Social Science

**POLS 3320 Social Contract Theory 3 cr**

A survey and evaluation of canonical texts and ideas in the history of the social contract tradition. Thinkers may include, but are not limited to: Hobbes, Locke, Hume, and Rousseau.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of C or better in POLS 2302 or the former POLS 2510.

**Attributes:** Social Science

**POLS 3340 Middle East Politics 3 cr**

An examination of the Middle East as a region of global strategic significance, with an emphasis on the major issues related to war and peace in selected Middle Eastern conflicts. Students may not hold credit for both POLS 3340 and POLS 3140 when titled "Middle East Politics."

**Mutually Exclusive:** POLS 3140

**Attributes:** Social Science

**POLS 3342 Arab-Israeli Conflict 3 cr**

An examination of the history and politics of the longstanding conflict between Israel and the Arab world with particular focus on the Israel-Palestinian context. Students may not hold credit for both POLS 3342 and POLS 3140 when offered with the topic "Arab-Israeli Conflict."

**Attributes:** Social Science

**POLS 3350 Liberty 3 cr**

A survey and analysis of the concept of liberty, its rival interpretations, and applications in political theory and practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: A grade of C or better in POLS 2302 or the former POLS 2510.

**Attributes:** Social Science

**POLS 3360 Rights 3 cr**

A survey and analysis of the concept of rights, their rival interpretations, and applications in political theory and practice. Students may not hold credit for both POLS 3360 and POLS 3140 when titled "Rights".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2302 or the former POLS 2510.

**Mutually Exclusive:** POLS 3140

**Attributes:** Social Science

**POLS 3370 Equality 3 cr**

A survey and analysis of the concept of equality, its rival interpretations, and applications in political theory and practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: A grade of C or better in POLS 2302 or the former POLS 2510.

**Attributes:** Social Science

**POLS 3380 Contemporary Political Theory 3 cr**

A survey and evaluation of key texts and ideas in contemporary political theory. Students may not hold credit for both POLS 3380 and POLS 2515.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2302 or the former POLS 2510.

**Mutually Exclusive:** POLS 2515

**Attributes:** Social Science

**POLS 3390 Military Ethics 3 cr**

An examination of major ethical theories and their applications to current moral issues in warfare and the military.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: A grade of C or better in POLS 2302 or the former POLS 2510.

**Attributes:** Social Science

**POLS 3470 Canadian Public Management 3 cr**

An introduction to the internal and external factors affecting contemporary public sector management in Canada. The course will examine the primary values, policies, processes, and structures within the civil service.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2902 or written consent of instructor or department head.

**Attributes:** Social Science

**POLS 3512 Canadian Foreign and Defence Policy 1 3 cr**

An examination of Canadian foreign and defence policy, with attention to contemporary events and issues. The course is designed to examine both foreign and defence policies as interdependent issues for Canadian interests. Students may not hold credit for POLS 3512 and any of POLS 3563, the former POLS 3520, or the former POLS 3561.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: A grade of C or better in one of: POLS 2504, or POLS 2045, or the former POLS 2040.

**Mutually Exclusive:** POLS 3520, POLS 3561, POLS 3563

**Attributes:** Social Science

**POLS 3514 Canadian Foreign and Defence Policy 2 3 cr**

A continued examination of Canadian foreign and defence policy. The course will assess the evolution and changing priorities of Canadian foreign and defence issues, with particular attention to Canada's relations with the United States, Europe, Asia and the Third World. Students may not hold credit for POLS 3514 and any of POLS 3563, the former POLS 3520, or the former POLS 3561.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: a grade of C or better in POLS 3512.

**Mutually Exclusive:** POLS 3520, POLS 3561, POLS 3563

**Attributes:** Social Science

**POLS 3530 War, Politics and Culture 3 cr**

This course employs the medium of film to explore the way in which war is communicated to society, and how the evolution of warfare as a social activity is understood. Students may not hold credit for both POLS 3530 and POLS 3140 when titled "War, Politics and Popular Culture."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2504, or POLS 2045, or the former POLS 2040, or the former POLS 2041.

**Mutually Exclusive:** POLS 3140

**Attributes:** Social Science

**POLS 3540 Terrorism and Political Violence 3 cr**

This course offers students a comprehensive and critical approach to the central features of domestic and international terrorism, with an emphasis on Canada. Students will be encouraged to look at the different ways in which terrorist issues have been framed by different authors and national contexts. Students may not hold credit for POLS 3540 and any of either POLS 3621 or POLS 3140 when titled "Terrorism and Political Violence."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2504, or POLS 2045, or the former POLS 2040, or the former POLS 2041.

**Mutually Exclusive:** POLS 3140, POLS 3621

**Attributes:** Social Science

**POLS 3550 International Organizations 3 cr**

This course explores the origins, theory and practice of international organizations, with a focus on organizations of particular interest to Canada. Students may not hold credit for both POLS 3550 and POLS 3771.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2504, or POLS 2045, or the former POLS 2040, or the former POLS 2041.

**Mutually Exclusive:** POLS 3771

**Attributes:** Social Science

**POLS 3560 Politics of International Law 3 cr**

An introduction to international law including sources of international law, the use of force and international human rights.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: A grade of C or better in one of: POLS 2504, or POLS 2045, or the former POLS 2040, or the former POLS 2041.

**Attributes:** Social Science



**POLS 3630 Russian Politics, Government, and Society 3 cr**

Survey of contemporary Russia that explores the social, cultural and economic factors shaping its domestic politics and foreign policy. Analyzes Russia's transformation after the collapse of the Soviet Union, citizenship and social agency, Russian identity formation in a multi-ethnic and multi-confessional state, and Russia's complex relationships with its neighbors and former Cold War foes. Students may not hold credit for both POLS 3630 and RUSN 3630.

**Equiv To:** RUSN 3630

**Attributes:** Social Science

**POLS 3640 Comparative Defence Policy 3 cr**

The examination within a comparative framework of the factors determining the making and implementation of the defence policies of a number of representative and significant countries.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [POLS 2504, or POLS 2045, or the former POLS 2040 or the former POLS 2041] or written consent of instructor or department head.

**Attributes:** Social Science

**POLS 3650 American Politics 3 cr**

A survey of the institutions and processes of the contemporary American political system, including the constitutional system, federalism, the presidency, Congress, the Supreme Court, political parties, voting behavior, and civil rights. Students may not hold credit for both POLS 3650 and the former POLS 3920.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2602, or POLS 2005, or the former POLS 2000.

**Mutually Exclusive:** POLS 3920

**Attributes:** Social Science

**POLS 3670 Canadian Political Parties 3 cr**

This course provides students with an understanding of the origins, evolution, operation and programmes of Canadian political parties. Topics addressed include party types, party systems, party organization and financing, electoral activities and party leadership.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [POLS 2702 or the former POLS 2070 or the former POLS 2071] or [POLS 2073 and POLS 2075] or written consent of instructor or department head.

**Attributes:** Social Science

**POLS 3720 Politics, Government and Society in Ukraine 3 cr**

An analysis of political transition and development in Ukraine. Ukraine's international relations will also be examined. Students may not hold credit for both POLS 3720 and POLS 3140 when titled "Government Politics in Ukraine" or the former POLS 2920.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [POLS 2504, or POLS 2602, or POLS 2005, or POLS 2045, or the former POLS 2000, or the former POLS 2040, or the former POLS 2041] or written consent of the instructor or department head.

**Mutually Exclusive:** POLS 2920, POLS 3140

**Attributes:** Social Science

**POLS 3730 Canadian Constitutional Politics 3 cr**

An in-depth examination of the constitutional foundations of the Canadian regime as well as the politics of the constitution and of constitutional reform.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2702, or POLS 2073, or the former POLS 2070.

**Attributes:** Social Science

**POLS 3740 Provincial Politics 3 cr**

A survey of the politics of the Canadian provinces. Emphasis is on comparison of political cultures, governing institutions, political parties, elections and contemporary controversies. Students may not hold cred for both POLS 3740 and the former POLS 4180.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2702, or POLS 2073, or the former POLS 2070.

**Mutually Exclusive:** POLS 4180

**Attributes:** Social Science

**POLS 3750 City Politics 3 cr**

An examination of both institutions and political processes related to city politics in Canada.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: a grade of C or better in one of: POLS 2702, or POLS 2073, or the former POLS 2070.

**Attributes:** Social Science

**POLS 3760 Media and Politics 3 cr**

An introduction to the role of media in politics. Topics include political communication, political marketing and media discourse.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: a grade of C or better in one of: POLS 2702, or POLS 2073, or the former POLS 2070.

**Attributes:** Social Science

**POLS 3810 Introduction to Marxism 3 cr**

An overview of the thought of Karl Marx and Fredrick Engels, focusing on its philosophical origins, key concepts and ideas of their historical materialism, critique of political economy, political theory and philosophy. The development of Marxism after Marx and Engels, particularly in the tradition of Western Marxism, will be traced in the case of each concept and idea. Students may not hold credit for both POLS 3810 and the former POLS 4810.

**Mutually Exclusive:** POLS 4810

**Attributes:** Social Science

**POLS 3860 Canadian Federalism 3 cr**

An examination of Canadian federal structures and processes with emphasis on constitutional influences, the evolution of jurisdictions, province-building and contemporary federal issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 2702 or [both of POLS 2073 and POLS 2075] or the former POLS 2070.

**Attributes:** Social Science

**POLS 3870 Politics of Indigenous-Settler Relations 3 cr**

A disciplinary assessment of the theories, histories, development, and contemporary reality of settler-colonialism in Canada.

**Attributes:** Social Science

**POLS 3872 Indigenous Governance 3 cr**

This course examines theories, debates and controversies related to the study and practices of Indigenous governance both inside and outside the state-centric system. The objective is to engage students in critical thinking about these issues with a view to advancing their own ideas about the future of Indigenous governance in Canada. Students may not hold credit for both POLS 3872 and POLS 3140 when titled "Indigenous Governance," the former POLS 4150 or POLS 4160 when titled "Indigenous Governance."

**Mutually Exclusive:** POLS 3140, POLS 4150, POLS 4160

**Attributes:** Social Science

**POLS 3880 Comparative Foreign Policy 3 cr**

A comparative study of the factors affecting foreign policy in selected countries including, but not limited to, Canada, the United States, Russia, China, Japan, Great Britain, France, and Germany. The course also includes an examination of international, regional, and domestic factors affecting the creation of foreign policy by states. Students may not hold credit for both POLS 3880 and POLS 3881.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [POLS 2504, or POLS 2041, or the former POLS 2040] or written consent of instructor or department head.

**Equiv To:** POLS 3881

**Attributes:** Social Science

**POLS 3940 Canadian Public Policy 3 cr**

This course reviews the dominant theories that explain the origins and process of public policy development in Canada. Primary focus is on Canadian governmental actors and institutions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of C or better in POLS 2902 or POLS 2571.

**Attributes:** Social Science

**POLS 3950 Research Methods in the Study of Politics 3 cr**

An introduction to the major quantitative and qualitative research strategies employed in the study of politics. The topics addressed include interviewing, content analysis, comparative studies, survey design, sampling, research ethics and basic statistical analysis. Students may not hold credit for both POLS 3950 and POLS 3951.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours of Political Studies at the 2000 level] or written consent of instructor or department head.

**Equiv To:** POLS 3951

**Attributes:** Social Science

**POLS 4010 U.N. Security Council 3 cr**

This course explores one of the most powerful but maligned organs of the UN - the Security Council. Drawing on legal texts, resolutions and case studies, this course explores the history and evolution of this organ. Particular attention is paid to its decision-making processes and contributions to international peace and security and international law. Students may not hold credit for both POLS 4010 and the former POLS 3580. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 3580

**Attributes:** Social Science

**POLS 4070 Advanced Seminar: Canadian Government 3 cr**

Examines the core institutions of Canadian government and politics including parliamentary government, federalism, the Constitution and the Charter of Rights and Freedoms. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4080 Advanced Seminar: Canadian Democracy 3 cr**

Examines the core institutions and processes of Canadian democracy including political parties, elections, social movements and interest groups, representation and public opinion. Students may not hold credit for both POLS 4080 and POLS 4160 when offered with the topic "Canadian Democracy." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4090 Political Representation 3 cr**

An exploration of the theories of, debates about, and empirical research into political representation and the institutional and behavioural elements that affect it. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4140 Canadian Political Ideas 3 cr**

An examination of the ideas that underlie Canadian politics. What are the values at the centre of political movements in Canada and where do they come from? How have these values changed over time and why? We will attempt to answer these questions by exploring the development of Canadian political ideas as well as our current ideological context in Canada. Effort will be made to reflect on ideological debate on contemporary issues of the day. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4160 Selected Topics in Politics 3 3 cr**

The content of this course will vary. Contact department for a course description. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Mutually Exclusive:** POLS 3872, POLS 4620

**Attributes:** Social Science

**POLS 4170 Selected Topics in Politics 4 3 cr**

The content of this course will vary. Contact department for a course description. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Mutually Exclusive:** POLS 4560, POLS 4580, POLS 4640, POLS 4920, POLS 4930, POLS 4950, POLS 4960, POLS 4970, POLS 4980

**Attributes:** Social Science

**POLS 4190 Manitoba Politics and Government 3 cr**

An examination of politics and government in modern Manitoba. Topics addressed include federal-provincial relations, parties and elections, political culture, the legislative process and public policy. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4200 Politics of Development 3 cr**

A survey of the problems and prospects facing developing countries with a particular focus on the changes in international economic governance in the aftermath of the financial crisis and the Great Recession, the role of the state in development and the political economy of emerging economies. Students may not hold credit for both POLS 4200 and POLS 4160 when titled "Politics of Development." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4310 Advanced Seminar in Political Theory 3 cr**

Topics may include, but are not limited to: advanced history of political theory, advanced contemporary political theory, political theory and the family, liberalism and critics, toleration, political theory and gender, and conservative political theory. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4370 Comparative Public Administration 3 cr**

A study of the systems, processes, and values of public administration in an international comparative context. Topics include public sector organization and reform, international standards of policy and practice, and the role of international institutions in promoting public sector modernization. The course covers countries from several geographic zones and places domestic issues in the larger, global political economy. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4470 Managing Modern Government 3 cr**

A study of the skills required to effectively manage in the public sector. Topics covered include: managerial effectiveness, written and interpersonal communication, gaining power and influence, working with political staff and politicians, conflict management, risk management, performance management, creating and working through teams, decision-making, motivation, and empowerment. Students may not hold credit for both POLS 4470 and the former POLS 4570. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4570

**Attributes:** Social Science

**POLS 4520 American Foreign and Defense Policy 3 cr**

Examines American foreign policy with an emphasis upon the post-Cold War period. Students may not hold credit for both POLS 4520 and the former POLS 4940. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4940

**Attributes:** Social Science

**POLS 4540 Strategic Studies 1 3 cr**

An in-depth examination of the politics surrounding the nature, role, and utility of armed force in international politics, with particular focus upon the dominant theories, concepts and ideas that have governed or driven the development and employment of armed force. Students may not hold credit for both POLS 4540 and the former POLS 4730. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4730

**Attributes:** Social Science

**POLS 4550 Strategic Studies 2 3 cr**

An analysis of various post-Cold War dimensions of strategy. Topics covered include nuclear deterrence and proliferation, the evolution of warfare, counterinsurgency, terrorism, the use of robots on future battlefield, or cyberwarfare. Students may not hold credit for both POLS 4550 and the former POLS 4730. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: POLS 4540.

**Mutually Exclusive:** POLS 4730

**Attributes:** Social Science

**POLS 4560 Canada and the Arctic 3 cr**

An examination of the nature of domestic and international relations in the Arctic with an emphasis on the Canadian perspective. Students may not hold credit for both POLS 4560 and POLS 4170 when titled, "Canada and the Arctic: Issues of Governance and Security". Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4170

**Attributes:** Social Science

**POLS 4580 International Relations Theory 3 cr**

An overview of the dominant and alternative analytical perspectives and debates in the study of International Relations. Students may not hold credit for POLS 4580 and any of: POLS 3841 or POLS 4170 when titled "International Relations Theory." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 3840, POLS 3841, POLS 4170

**Attributes:** Social Science

**POLS 4620 Politics of Advanced Industrial States 3 cr**

A survey of major themes in the politics of advanced industrial countries to give a rounded picture of the principal issues – political, economic, social and policy-related – facing these societies and an overview of the sub-discipline of comparative politics, its methods and substance. Students may not hold credit for both POLS 4620 and POLS 4160 when titled "Comparative Politics of Advanced Industrial Countries." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4160

**Attributes:** Social Science

**POLS 4630 Indigenous Political Movements and Activism 3 cr**

Indigenous peoples have a long history of confronting the state. This course offers an examination of theories of political activism and Indigenous political movements. The course addresses questions such as: what are the unique characteristics of Indigenous political activism, why have these movements occurred, what change have these movements supported, and have these movements been successful. Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Attributes:** Social Science

**POLS 4640 Comparative Indigenous Politics 3 cr**

An examination of Indigenous law and politics in a comparative perspective. The course introduces students to key themes, debates, ideas, trends and controversies pertaining to Indigenous law and politics and its study. Students may not hold credit for both POLS 4640 and POLS 4170 when titled "Comparative Indigenous Politics." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4170

**Attributes:** Social Science

**POLS 4920 Theories and Issues in Public Administration 3 cr**

Integrating theory and practice helps to better understand the challenges facing public administration. Topics covered include changing approaches to management, human resource and financial management, reporting, accountability, citizen engagement, and network governance. Students may not hold credit for both POLS 4920 and POLS 4170 when titled "Theories and Issues in Public Administration." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4170

**Attributes:** Social Science

**POLS 4930 Public Policy Process and Issues 3 cr**

An introduction to the idea of policy analysis, including key foundational concepts and significant theories, models, and approaches; how and why the policy process operates as it does (empirical) and how and why some think it should (normative); and specific policy issues. Students may not hold credit for both POLS 4930 and POLS 4170 when titled "Public Policy Process and Issues." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4170

**Attributes:** Social Science

**POLS 4950 Qualitative Methods and Communication 3 cr**

Communication coupled with an understanding of qualitative research approaches are key to success in public administration. Topics include research design, policy research, referencing, evaluating writing and research, and presenting for results. Students may not hold credit for both POLS 4950 and POLS 4170 when titled "Qualitative Methods and Communications for the Public Sector." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4170

**Attributes:** Social Science

**POLS 4960 Governance and Administration 3 cr**

An introduction to theories of organization and bureaucracy linked to administrative practices in the public sector. Governance models (Traditional Public Administration, New Public Management, Multi-level Governance) in the Canadian, provincial, and local context will be explored. Students may not hold credit for both POLS 4960 and POLS 4170 when titled "Governance and Administration." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4170

**Attributes:** Social Science

**POLS 4970 State-Civil Society Relations 3 cr**

An examination of how the state relates to civil society actors, notably the voluntary sector in Canada. Students will critically assess the role voluntary organizations play - and should play - in governing process. Students may not hold credit for both POLS 4970 and POLS 4170 when titled "State-Civil Society Relations." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head.

**Mutually Exclusive:** POLS 4170

**Attributes:** Social Science

**POLS 4980 Public Opinion and Public Policy 3 cr**

An exploration of the nature, expression, and measurement of public opinion; how governments use public opinion; and the benefits and challenges associated with the use of public opinion in governance. Students may not hold credit for both POLS 4980 and the POLS 4170 when titled "Public Opinion and Public Policy." Restricted to students enrolled in the Honours program in Political Studies or with written consent of the instructor or department head..

**Mutually Exclusive:** POLS 4170

**Attributes:** Social Science

## Portuguese (PORT)

**PORT 1170 Introductory Portuguese 6 cr**

(Lab required) A course designed for those with little or no previous knowledge of Portuguese. The course includes grammar, reading and oral practice, with language laboratory exercises. An oral approach is utilized. The student is given glimpses of cultural aspects of Portugal and Brazil. Students with high school Portuguese or its equivalent may not normally take the course for credit. Not open to students who have previously obtained credit in PORT 1282.

**Attributes:** Humanities, Recommended Intro Courses

**PORT 1282 Intermediate Portuguese Grammar and Conversation 1 3 cr**

(Lab required) This course is the first of the intermediate Portuguese language sequence. Focus is on developing intermediate skills in reading, writing, speaking and listening. The primary goals are to build communicative competence and enhance social and cultural awareness of Portugal and Brazil. Not open to students with native oral fluency.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PORT 1170] or written consent of instructor or department head.

**Attributes:** Humanities, Recommended Intro Courses

## Preventive Dental Science (PDS)

**PDS 2410 Pediatric Dentistry- 1 3 cr**

A series of lectures and laboratories to introduce the student to: the fundamental principles of dental growth and development of children, introduction to operative dentistry and preventative techniques commonly used in dentistry for children. May not be held with PDS 2070.

**Mutually Exclusive:** PDS 2070

**PDS 2420 Dental Public Health 1 cr**

This course introduces students to healthcare concepts from a systems-level viewpoint. Topics include the methods used in Dental Public Health, history and structure of Canadian Medicare, a parallel view of Canadian dental care, social determinants of health, health promotion, measurement methods for dental health and disease, epidemiology of dental disease in Canada, and access to dental care. May not be held with the former PDS 2130.

**Mutually Exclusive:** PDS 2130

**PDS 2430 Introduction to Orthodontics 1 cr**

This course provides students with an introduction to growth and development, orthodontic records, diagnosis of malocclusion, modalities of treatment using removable appliances, basic biomechanics and simple wire bending. May not be held with the former PDS 1020 or the former PDS 1400 or the former PDS 2020 or the former PDS 2400.

**Mutually Exclusive:** PDS 1020, PDS 1400, PDS 2020, PDS 2400

**PDS 3402 Orthodontics 3 2 cr**

A series of seminars covering the analysis, diagnosis, treatment planning, and mechanotherapy using records of selected cases. The clinical component consists of the diagnosis and treatment planning for individuals seeking orthodontic treatment. The clinical experience includes exposure to removable and fixed mechanotherapy, screening of patients seeking orthodontic care and follow-up of retention of completed cases. May not be held with PDS 3040.

**Mutually Exclusive:** PDS 3040

**PDS 3404 Dental Public Health 2 3 cr**

This course uses on-line self-study, classroom discussion, a formal debate, and clinical externships to introduce students to historical and contemporary public health topics. Topics covered include the history of fluoride use to prevent dental caries, the theory and methods for oral disease prevention in populations, the principles and methods for evidence-based practice, and geriatric and sports dentistry. May not be held with the former PDS 3140 or the former PDS 3422.

**Mutually Exclusive:** PDS 3140, PDS 3422

**PDS 3412 Pediatric Dentistry 2 3 cr**

A series of seminars and clinics to give the student a basic understanding and some clinical experience with: clinical procedures, emergency treatment, psychological management, preventative medical considerations and the provision of total dental care to pediatric patients. May not be held with PDS 3050.

**Mutually Exclusive:** PDS 3050

**PDS 4402 Orthodontics 4 2 cr**

(Formerly PDS 4060) This course consists of seminars on special topics related to the provision of orthodontic therapy. In addition, the clinical component including the diagnosis and treatment planning for individuals seeking orthodontic treatment as well as the continuation of treatment commenced in PDS 3040. Clinical seminars cover the analysis, diagnosis, treatment planning, mechanotherapy and post-treatment evaluation of previously treated cases. May not be held with PDS 4060.

**Mutually Exclusive:** PDS 4060

**PDS 4412 Pediatric Dentistry 3 2 cr**

(Formerly PDS 4050) This course consists of clinical experience including exposure to common pediatric dentistry problems, caries preventive and control procedures, routine conservative procedures and the dental treatment of children in community-based clinics. May not be held with PDS 4050.

**Mutually Exclusive:** PDS 4050

**PDS 4422 Community Dentistry Externship 4 cr**

The clinical portion of the program is centered in community outreach clinics in the City of Winnipeg. The students spend time at a pediatric community clinic, a low income community clinic, and at geriatric clinic. The clinics serve the elderly, children, Indigenous, or patients from low income families. The didactic portion of the program focuses mainly on geriatric dentistry. May not be held with the former PDS 4080. Course evaluated on a pass/fail basis.

**Mutually Exclusive:** PDS 4080

## Psychology (PSYC)

**PSYC 1200 Introduction to Psychology 6 cr**

Basic concepts and principles of individual behaviour are examined, particularly those of human development, normal and abnormal behaviour, social psychology, learning, perception, and psychological measurement. Students may not hold credit for PSYC 1200 and any of: PSYC 1211 or PSYC 1221 or the former PSYC 1201. Prerequisite for all other courses in Psychology.

**Equiv To:** PSYC 1201

**Mutually Exclusive:** PSYC 1211, PSYC 1221

**Attributes:** Social Science, Recommended Intro Courses

**PSYC 2250 Introduction to Psychological Research 3 cr**

Examines psychology as a scientific discipline and describes methods of collecting and interpreting psychological data. Required of all Majors and normally taken in the second year. Students may not hold credit for both PSYC 2250 and PSYC 2251.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 2251

**Attributes:** Social Science

**PSYC 2260 Introduction to Research Methods in Psychology 3 cr**

Discusses concepts of inductive inference and explanation. The nature of research designs is emphasized. Required of all Majors and normally taken in the second year. Students may not hold credit for both PSYC 2260 and PSYC 2261.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 2250 or PSYC 2251.

**Equiv To:** PSYC 2261

**Attributes:** Mathematics Requirement, Social Science

**PSYC 2290 Child Development 3 cr**

The course deals with normal psychological development from prenatal life until puberty. The scientific approach to child study is emphasized. Students may not hold credit for PSYC 2290 and any of: PSYC 2291 or FMLY 2600.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 2291

**Mutually Exclusive:** FMLY 2600

**Attributes:** Social Science

**PSYC 2360 Brain and Behaviour 3 cr**

This course explores the relationship between brain and behaviour. The student will first learn about the fundamental elements of the nervous system. Lectures will integrate these elements into discussions of systems responsible for sensation, motor control, emotion, sleep, learning and memory. Clinical scenarios will be used to illuminate function. Students may not hold credit for PSYC 2360 and any of: PSYC 2361, or PSYC 3530 or PSYC 3531 or PSYC 3540 or the former PSYC 3541 when titled Brain and Behaviour.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 2361

**Attributes:** Social Science

**PSYC 2380 Psychology of Gender 3 cr**

A critical examination of the similarities and differences between women and men with a particular emphasis on gender roles and gender identity. Students may not hold credit for both PSYC 2380 and the former PSYC 2400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Mutually Exclusive:** PSYC 2400

**Attributes:** Social Science

**PSYC 2430 Humanistic and Transpersonal Psychology 3 cr**

A survey of such topics as search for meaning, personal growth, self-actualization, electric stimulation of the brain, meditation, and extra-sensory perception.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Attributes:** Social Science

**PSYC 2440 Behaviour Modification Principles 3 cr**

The fundamental assumptions, principles, and procedures of behaviour modification are described and illustrated by applications to normal and abnormal human behaviour. Students may also conduct supervised projects in applied areas or in basic behavioural research. Students may not hold credit for both PSYC 2440 and PSYC 2441.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 2441

**Attributes:** Social Science

**PSYC 2470 Learning Foundations of Psychology 3 cr**

Examines basic learning processes, along with examples of how psychologists study them. Emphasis is placed on how knowledge of basic learning processes can help us understand complex human behaviour.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Attributes:** Social Science

**PSYC 2480 Cognitive Processes 3 cr**

An introduction to the higher mental processes from an information processing perspective. Topics include attention, cognitive development, imagery, language, memory and problem-solving. Extensive reference will be made to recent experimental findings. Students may not hold credit for both PSYC 2480 and PSYC 2481.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 2481

**Attributes:** Social Science

**PSYC 2490 Abnormal Psychology 3 cr**

The study of theory and research on abnormal human behaviour. The major forms of psychological disturbance are discussed. An introduction to the prevention and treatment of psychological disturbances is given. Students may not hold credit for PSYC 2490 and any of: PSYC 2491 or the former PSYC 3460 or the former PSYC 3461.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 2491, PSYC 3460, PSYC 3461

**Attributes:** Social Science

**PSYC 2500 Elements of Ethology 3 cr**

This course involves one three-hour lecture meeting and one laboratory per week and concerns the study of animal behaviour through lectures, films, and field trips. Parakeets, flies, and/or ducklings plus one animal of the student's choice will be observed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Attributes:** Social Science, Written English Requirement

**PSYC 2510 Comparative Psychology 3 cr**

This course examines the viability of comparative psychology today, the type of subjects used in comparative psychology research, its history and background, some applications and contemporary viewpoints, and its current status.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Attributes:** Social Science

**PSYC 2520 Orientations to Psychological Systems 3 cr**

Examines and contrasts humanistic, psychodynamic, cognitive, and behavioural psychology with regard to consciousness vs. the unconscious, free-will vs. determinism, holism vs. analysis, purpose vs. past influences, transcendentalism vs. physicalism, and focus on the person vs. focus on problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Attributes:** Social Science

**PSYC 2530 Psychology of Personality 3 cr**

The study of theory and research on the principles affecting personality development and structure. Students may not hold credit for PSYC 2530 and any of: PSYC 2531 or the former PSYC 3450 or the former PSYC 3451.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 2531, PSYC 3450, PSYC 3451

**Attributes:** Social Science

**PSYC 2540 Social Psychology 3 cr**

This course provides a basic introduction to the ways in which we affect and are affected by the behaviour of others. Topics typically include: attitudes and attitude change, social beliefs and judgements, conformity, persuasion, social norms and roles, group dynamics, prejudice, aggression, altruism, attraction and close relationships, and intergroup conflict. Students may not hold credit for PSYC 2540 and any of: PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 2541

**Mutually Exclusive:** PSYC 2410, PSYC 2411, PSYC 2420, PSYC 2421

**Attributes:** Social Science

**PSYC 2660 Sport Psychology 3 cr**

This course examines the use of psychological knowledge to enhance the development of performance and satisfaction of athletes and others associated with sports. Topics include improving skills of athletes, motivating practice performance, increasing the effectiveness of coaches, and mental preparation for competition. Students may not hold credit for both PSYC 2660 and the former PSYC 3660.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Equiv To:** PSYC 3660

**Attributes:** Social Science

**PSYC 3070 Adult Development 3 cr**

This course deals with psychological changes during young adulthood, middle age, and old age. Students may not hold credit for both PSYC 3070 and the former PSYC 2370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2290 or PSYC 2291] or written consent of department head.

**Equiv To:** PSYC 2370

**Attributes:** Social Science

**PSYC 3110 Research in Social Psychology 3 cr**

This course will provide an introduction to conducting research in social psychology. Students will gain experience in all facets of the research process including experimental design and preparation, human ethical review, data collection and analysis, and report writing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2260 or PSYC 2261] and [PSYC 2540 or PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421].

**Attributes:** Social Science

**PSYC 3130 Introduction to Health Psychology 3 cr**

This course offers a survey of psychological issues in health and illness. Major topics will include the biopsychosocial approach, mental models of illness, pain, stress and coping, health-damaging and health-promoting behaviours, and psychological issues in medical care. Students may not hold credit for PSYC 3130 and any of: PSYC 3131 or PSYC 3530 when titled "Health Psychology."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2540 or PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421] or written consent of department head.

**Equiv To:** PSYC 3131

**Mutually Exclusive:** PSYC 3530, PSYC 3531

**Attributes:** Social Science

**PSYC 3150 Behaviour Modification Applications 3 cr**

Guidelines for designing, implementing, and evaluating behaviour modification applications are described in detail. Students may also conduct supervised projects in applied areas or in basic behavioural research. Students may not hold credit for PSYC 3150 and any of: PSYC 3151 or the former PSYC 2450 or the former PSYC 2451.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2440 or PSYC 2441] or written consent of department head.

**Equiv To:** PSYC 3151

**Mutually Exclusive:** PSYC 2450, PSYC 2451

**Attributes:** Social Science

**PSYC 3160 Perception and Attention 3 cr**

This lecture course will provide you with a basic introduction to the characteristics and processes of human perception. A scientific approach will be used with specific emphasis on exploring the relation between experimental evidence and theory. Topics to be covered include transmission of information through the visual and auditory systems, visual and auditory pattern recognition, selective and divided attention, and the role of attention and interpretation in perception. Students may not hold credit for both PSYC 3160 and PSYC 3441.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2480 or PSYC 2481] or written consent of department head.

**Equiv To:** PSYC 3441

**Attributes:** Social Science

**PSYC 3170 Research in Cognitive Psychology 3 cr**

This course will provide an introduction to conducting research in human perception and cognition. Students will gain experience in all facets of the research process including: critical reading of relevant literature, experimental design and preparation, data collection and analysis, and report writing. Activities may include critiques of published research, research proposals, individual and/or group projects, research reports, and individual and/or group presentations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2480 or PSYC 2481] or written consent of department head.

**Attributes:** Social Science

**PSYC 3200 Thinking Critically About Psychological Research 3 cr**

This course will teach students to apply critical thinking skills in the evaluation of psychological research. Core components will include the logic of research design, analysis and interpretation, the description of psychological studies, and the critical reading of published research. Activities will include the preparation of critiques of research claims published in both academic journals and in the main-stream press, sample research proposals, individual and/or group projects, and individual and/or group presentations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2260 (B) or PSYC 2261 (B) or the former PSYC 2300] and written consent of department head.

**Attributes:** Social Science, Written English Requirement

**PSYC 3310 Adolescent Development 3 cr**

This course deals with normal psychological development from puberty until adulthood. Results of scientific research are emphasized. Students may not hold credit for PSYC 3310 and any of: PSYC 3311 or the former PSYC 2310 or the former PSYC 2311.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2290 or PSYC 2291] or written consent of department head.

**Equiv To:** PSYC 2310, PSYC 2311, PSYC 3311

**Attributes:** Social Science

**PSYC 3340 Design and Analysis for Psychological Experiments 3 cr**

Methods for controlling sources of internal validity in psychological experiments, such as randomization, blocking, factorial configuration, and repeated measurements, will be discussed. Descriptive and multivariate methods of analysis will also be introduced. The use of statistical packages will be illustrated. Students may not hold credit for PSYC 3340 and any of: PSYC 3341 or the former PSYC 4570.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2260 (B) or PSYC 2261 (B) or the former PSYC 2300] and written consent of department head.

**Equiv To:** PSYC 3341, PSYC 4570

**Attributes:** Social Science

**PSYC 3350 Behavioural Neuroscience 3 cr**

This course presents the fundamentals of the neurobiology of behaviour. Special importance is placed on the information-processing properties of the nervous system in order to provide a uniform framework for the understanding of such topics as perception, attention, sleep and wakefulness, motivation, and learning. Students may not hold credit for PSYC 3350 and any of: PSYC 3351 or the former PSYC 3330 or the former PSYC 3331.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2360 or PSYC 2361] or written consent of department head.

**Equiv To:** PSYC 3330, PSYC 3331, PSYC 3351

**Attributes:** Social Science

**PSYC 3360 Experimental Child Psychology 3 cr**

Research methods for developmental psychology are reviewed: ethics, conducting experiments with child participants in a group project, research design, data analysis, writing research papers in APA format, and creating a poster presentation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 2290 or PSYC 2291.

**Attributes:** Social Science

**PSYC 3380 Nature, Nurture and Behaviour 3 cr**

This course provides an overview of behavioural genetics. It will introduce students to the basic principles of Mendelian, population, and quantitative genetics, as well as how they are used for the study of neuro-behavioural phenotypes, characteristics and traits in human, animal and insect systems, and how genes contribute to behaviour. Societal and ethical implications of the results of behavioural genetics are considered. Students may not hold credit for both PSYC 3380 and PSYC 3530 when titled "Nature, Nurture, and Behaviour."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2360 or PSYC 2361] or written consent of department head.

**Attributes:** Social Science, Written English Requirement

**PSYC 3390 Thinking 3 cr**

The class surveys work in cognitive science. Topics include probabilistic reasoning, heuristics and biases, artificial neural networks, mental representation of number, and the cognitive unconscious.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2480 or PSYC 2481] or written consent of department head.

**Attributes:** Social Science

**PSYC 3430 Sensory Processes 3 cr**

A review of the structure and function of biological receptor systems and how they mediate information about the environment. It includes such topics as receptor transduction, neural correlates of sensation, and neural models of sensory discrimination.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2360 or PSYC 2361] or written consent of department head.

**Attributes:** Social Science

**PSYC 3470 Dyadic Relations 3 cr**

This course covers friendship formation and dyadic relations – linking, liking, loving, and leaving – from an empirically oriented psychological perspective. Students may not hold credit for both PSYC 3470 and the former PSYC 2460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2540 or PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421] or written consent of department head.

**Equiv To:** PSYC 2460

**Attributes:** Social Science

**PSYC 3490 Individual Differences 3 cr**

This course is concerned with the systematic way in which individuals vary. Topics include individual differences as a function of sex, age, race, and socioeconomic status. Specific behaviours to be studied include reaction-time differences, differences in intelligence, differences in aptitudes and interests, and differences in motor abilities. The reasons for some of these differences will also be delineated. Hence genetic and physiological factors, as well as psychological explanations for individual differences, will be studied.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] or written consent of department head.

**Attributes:** Social Science

**PSYC 3520 Independent Research in Psychology 1 3 cr**

Students carry out a research project and write a paper. Research may include historical, theoretical or experimental analyses of psychological problems. Normally available only to third and fourth year students who are in Honours Psychology or who are Psychology Majors and have completed one of: both PSYC 2250 and PSYC 2260, or both PSYC 2251 and PSYC 2261, or the former PSYC 2300. A student may not hold credit for more than two of PSYC 3520 or PSYC 3560 or PSYC 3590.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: prearranged written consent of an individual instructor and written consent of department head.

**Attributes:** Social Science



**PSYC 3530 Contemporary Issues 1 3 cr**

The content of this course will vary from year to year, but in general it will entail either some specific topic of prominent interest in psychology or a psychological analysis of some problem of current public interest. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both PSYC 3530 and PSYC 3531.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] and written consent of department head.

**Equiv To:** PSYC 3531

**Mutually Exclusive:** PSYC 3130, PSYC 3131

**Attributes:** Social Science

**PSYC 3540 Contemporary Issues 2 3 cr**

The content of this course will vary from year to year, but in general it will entail either some specific topic of prominent interest in psychology or a psychological analysis of some problem of current public interest. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both PSYC 3540 and the former PSYC 3541.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 1200 or the former PSYC 1201] or [PSYC 1211 and PSYC 1221] and written consent of department head.

**Attributes:** Social Science

**PSYC 3560 Supervised Field Study in Psychology 3 cr**

Students usually do supervised field work in a community setting and write a paper. Normally available only to third and fourth year students who are in Honours Psychology or who are Psychology Majors. A student may not hold credit for more than two of: PSYC 3520, PSYC 3560, PSYC 3590.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: prearranged written consent of an individual instructor and written consent of department head.

**Attributes:** Social Science

**PSYC 3570 Psychology of Women 3 cr**

Examines the unique experiences of women from a psychological perspective. Psychological theory and empirical research will inform course content. Students may not hold credit for both PSYC 3570 and the former PSYC 2390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2380 or the former PSYC 2400] or written consent of department head.

**Mutually Exclusive:** PSYC 2390

**Attributes:** Social Science

**PSYC 3580 Language and Thought 3 cr**

An examination of recent investigations of human language behaviour. Emphasis will be placed on natural language phenomena, which will be examined within the framework of modern theories of thought. Some of the topics considered include communication, the development of language, and natural language comprehension.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2480 or PSYC 2481] or written consent of department head.

**Attributes:** Social Science

**PSYC 3590 Independent Research in Psychology 2 3 cr**

Students carry out a research project and write a paper. Research may include historical, theoretical or experimental analysis of psychological problems. Normally available only to third and fourth year students who are in Honours Psychology or who are Psychology Majors and have completed one of: both PSYC 2250 and PSYC 2260, or both PSYC 2251 and PSYC 2261, or the former PSYC 2300. A student may not hold credit for more than two of: PSYC 3520, PSYC 3560, PSYC 3590.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: prearranged written consent of an individual instructor and written consent of department head.

**Attributes:** Social Science

**PSYC 3610 Memory 3 cr**

Selected topics in human memory are reviewed, including the physiological and chemical bases for learning and memory, primary determinants of forgetting, memory models, nonverbal memory, organization in memory, and the use of mnemonic schemes to improve memory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2480 or PSYC 2481] or written consent of department head.

**Attributes:** Social Science

**PSYC 3630 Psychological Measurement and Assessment 3 cr**

A study of the basic concepts of measurement in psychology and the application of these concepts in selected areas of psychology. The principal topics of the course will be historical foundations, basic concepts such as reliability, validity, and invariance, the use of different tests and instruments, scaling, and the unique aspects of measurement encountered in different areas of psychology. Students may not hold credit for both PSYC 3630 and PSYC 3631.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2260 (B) or PSYC 2261 (B) or the former PSYC 2300] and written consent of department head.

**Equiv To:** PSYC 3631

**Attributes:** Social Science

**PSYC 3650 Introduction to Clinical Psychology 3 cr**

Clinical psychology is presented as both a scientific and an applied discipline. Such topics as assessment, intervention, research, and professional issues are covered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2490 or PSYC 2491 or the former PSYC 3460 or PSYC 3461] or written consent of department head.

**Attributes:** Social Science

**PSYC 3860 Child Language Development 3 cr**

The study of first language acquisition from infancy through childhood. Aspects of phonology, morphology, pragmatics and syntax acquisition are discussed, as well as formal theories of acquisition, second language and bilingual acquisition, atypical development and the relationship of language acquisition with literacy. Also offered as LING 3860. Students may not hold credit for PSYC 3860 and any of: LING 3860 or the former PSYC 2860 or the former LING 2860.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2290 or PSYC 2291] or [9 credit hours of Linguistics courses] or written consent of department head.

**Equiv To:** LING 2860, LING 3860, PSYC 2860

**Attributes:** Social Science

**PSYC 4370 Brain Plasticity 3 cr**

The course will feature the relationship between the brain and experience. Brain plasticity refers to the ability of the brain to change its structure and function. Experience, which includes development, learning, and damage, is a major cause of plasticity in all organisms. Students will be exposed to theories on how much plasticity is possible, how it can be measured, how it can be used, and whether it can be enhanced. Students may not hold credit for both PSYC 4370 and PSYC 4540 when titled "Brain Plasticity."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2360 or PSYC 2361] and written consent of department head.

**Attributes:** Social Science

**PSYC 4400 Theories of Close Relationships 3 cr**

Students will be exposed to theories that apply to the initiation, development, maintenance, and dissolution of relationships. The primary focus will be on evolutionary theory, attachment styles, communal and exchange relationships, equity theory, interdependence theory and the investment model, attributional theories, and theories of love. Students may not hold credit for both PSYC 4400 and PSYC 4540 with the topic "Theories of Close Relationships."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2540 or PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421] and written consent of department head.

**Mutually Exclusive:** PSYC 4540

**Attributes:** Social Science

**PSYC 4410 Cross-cultural Social Psychology 3 cr**

Cross-cultural psychology is the critical and comparative study of the linkages between cultural norms and thoughts, feeling and behaviour. This course focuses on Cross-cultural Social Psychology. Therefore the assigned readings deal with topics that Social Psychology, in general, examines. Students may not hold credit for both PSYC 4410 and PSYC 4540 with the topic "Cross-cultural Social Psychology."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2540 or PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421] and written consent of department head.

**Mutually Exclusive:** PSYC 4540

**Attributes:** Social Science

**PSYC 4420 Neuroimaging: Imaging Thoughts 3 cr**

This course will explore how neuroimaging can illuminate our models of various aspects of cognition, including attention, vision, language, memory and learning, executive functions, emotion and various neuropathologies. Students may not hold credit for both PSYC 4420 and PSYC 4540 with the topic "Imaging Thoughts."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4430 Vision: Perception and Action 3 cr**

An intensive review of current research and theories in visual processes. Both behavioural and physiological aspects of vision will be considered. Course goals are directed at offering a better understanding of visual perception and the visual control of action. Students may not hold credit for both PSYC 4430 and PSYC 4540 with the topic "Vision Science."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4440 Readings in Autism Spectrum Disorders 3 cr**

Students will read recent research in Autism Spectrum Disorders, acquire skills to critically evaluate empirical evidence, and examine implications for practice. Among the topics covered will be assessment, diagnosis, epidemiology, and applied behaviour analysis early intervention. Students may not hold credit for both PSYC 4440 and PSYC 4540 with the topic "Autism Spectrum Disorders."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4450 Animal Behaviour 1 3 cr**

The nature-nurture controversy will be discussed, followed by a survey of the diverse behaviours relating to the physical environment (e.g., food storage); predation (e.g. trapping); defence (e.g., camouflage); and migration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4460 Animal Behaviour 2 3 cr**

A more detailed analysis of selected topics including communication, animal populations, and the social use of space in humans and infrahumans.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4490 Comparative Psychology 3 cr**

A survey of similarities and differences of behaviour at various phylogenetic levels. Topics include evolution, genetics, sensory processes, neuropsychology, learning processes, and social behaviour.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4492 Psychology of Addiction 3 cr**

This course will introduce the psychology of addictive disorders, including their history, prevalence and incidence, and basic drug actions. It will also survey research on biological, psychological, and social factors that contribute to the development and maintenance of addictive disorders. Students may not hold credit for both PSYC 4492 and PSYC 4540 when titled "Introduction to the Psychology of Addiction."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4510 Applied Behaviour Analysis in Developmental Disabilities 3 cr**

Students will read recent applied behaviour analytic research in behavioural assessments and interventions for people with developmental disabilities, acquire skills to critically evaluate empirical evidence, and examine implications for practice. Students may not hold credit for both PSYC 4510 and PSYC 4540 with the topic "Research in Developmental Disabilities."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4520 Honours Research Seminar 6 cr**

In first term there will be an examination of important experimental issues, and several experimental assignments. In addition, each student will propose a research project of greater scope to be conducted under the supervision of a Psychology staff member. In second term, students will carry out their projects and report their findings.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [90 credit hours towards honours program, including PSYC 3200, and three credit hours in PSYC 3340 or PSYC 3341 or the former PSYC 4570, and three credit hours in PSYC 3630 or PSYC 3631 or the former PSYC 4500] and written consent of department head.

**Attributes:** Social Science, Written English Requirement

**PSYC 4540 Contemporary Issues 1 3 cr**

Course content may vary from year to year, but in general it will entail either some specific topic of prominent interest in psychology or a psychological analysis of some problem of current public interest. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Mutually Exclusive:** PSYC 4400, PSYC 4410, PSYC 4562, PSYC 4660

**Attributes:** Social Science

**PSYC 4560 Health Psychology 3 cr**

This course focuses on understanding how psychological factors contribute to the promotion and maintenance of good health, to the prevention and treatment of illness, and to recovery from or adjustment to existing illness.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4562 Social Psychology and Health 3 cr**

This course uses theories and concepts from social/personality psychology to gain a better appreciation of what health is and how to achieve it, at the individual and population levels. Students may not hold credit for both PSYC 4562 and PSYC 4540 with the topic "Social Psychology and Health."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2530 or PSYC 2531 or PSYC 2540 or PSYC 2541 or PSYC 3130 or PSYC 3131 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421 or the former PSYC 3450 or the former PSYC 3451] and written consent of department head.

**Mutually Exclusive:** PSYC 4540

**Attributes:** Social Science

**PSYC 4564 Self-regulation and Health 3 cr**

This course examines how self-regulatory processes such as goal-setting and self-awareness can affect behaviours that promote or undermine human health. A wide range of health-related behaviours is considered such as smoking, exercise, safe-sex practices, and eating. Students may not hold credit for both PSYC 4564 and PSYC 4540 with the topic "Self-regulation and Health."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4566 Psychology of Health and Aging 3 cr**

This course considers how adults adapt to the challenges of aging and the accompanying health problems. Seminar discussions will focus on selected psychological theories and related empirical literature regarding belief systems that operate in the face of health- and age-related challenges. Students may not hold credit for both PSYC 4566 and PSYC 4540 with the topic "Health and Aging."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4580 Elements of Behavioural Pharmacology 3 cr**

Data and theories related to psychoactive agents are introduced, with emphasis on therapeutic drug classes, drugs of abuse, and methodological issues in drug research. The focus is on the behavioural analysis of drug action, but a neuropharmacological analysis is developed where it has a firm relationship to the behavioural analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4600 Selected Topics in Developmental Psychology 3 cr**

The specific content of this course will vary from year to year. A description of the course is available in advance at the Psychology general office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4610 Social Cognition 3 cr**

Focus on the processes determining how people perceive themselves and others in their social world. From topics such as causal attribution, psychological control, person memory, and social inference, the course will address selected issues from theoretical and empirical perspectives.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2540 or PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421] and written consent of department head.

**Attributes:** Social Science

**PSYC 4620 Community Mental Health 3 cr**

A seminar covering contemporary issues in community mental health and their relation to psychological services. Topics include the history of the community mental health movement, de-institutionalization as a social policy, the etiology and epidemiology of mental disorders, recognition of and response to mental disorders, mental health systems, community-based mental health services, and prevention of mental disorders. Students may not hold credit for both PSYC 4620 and PSYC 4540 offered as Community Mental Health.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4630 Behavioural Endocrinology 3 cr**

A comparative approach is adopted to examine how hormones influence a diversity of behaviours through their actions on brain function, the physiological substrates of the behaviours, and their development as evolutionary adaptations. Techniques used by behavioural neuroscientists to study the behavioural and neuroendocrine interactions are surveyed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 3350 or PSYC 3351 or the former PSYC 3330 or the former PSYC 3331] and written consent of department head.

**Attributes:** Social Science

**PSYC 4640 Person X Situation Interactionism 3 cr**

We will first explore research demonstrating the impact of personality and situations, separately, on behaviour. We then examine the debate that arose about whether understanding the person or situation would have the most scientific merit. We spend the remainder (and the majority) of the course discussing the theories and research that arose from that debate. The majority of this research has an interactionist perspective, taking both the person and his/her situation into account. Students may not hold credit for both PSYC 4640 and PSYC 4540 with the topic "Person X Situation Interactionism."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**PSYC 4650 The Self and Social Perception 3 cr**

This course examines: 1) bases of self-knowledge such as social comparison, feedback from others, and introspection, 2) recent perspectives on the nature of the self-concept and self-presentation, and 3) motivational and cognitive mechanisms guiding self-relevant information processing. Students may not hold credit for both PSYC 4650 and the former PSYC 4590 when titled "Self and Social Perception."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2540 or PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421] and written consent of department head.

**Mutually Exclusive:** PSYC 4590

**Attributes:** Social Science

**PSYC 4660 Intergroup Relations 3 cr**

This course examines intergroup relations from a social psychological perspective. Key topics include sources of prejudice and discrimination, the "target's" perspective, and strategies for reducing prejudice and discrimination. Students may not hold credit for both PSYC 4660 and PSYC 4540 when titled "Intergroup Relations."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [PSYC 2540 or PSYC 2541 or the former PSYC 2410 or the former PSYC 2411 or the former PSYC 2420 or the former PSYC 2421] and written consent of department head.

**Mutually Exclusive:** PSYC 4540

**Attributes:** Social Science

## Recreation Studies (REC)

**REC 2100 Introduction to Leisure Travel 3 cr**

To provide an introduction to tourist behaviour and the tourism system through an overview of: why people travel; the components of tourism; the scope and organization of tourism in Canada; and the interrelationship between recreation and tourism. May not be held with the former PERS 1300 or the former REC 1200.

**Equiv To:** PERS 1300, REC 1200

**Attributes:** Recommended Intro Courses

**REC 2130 Introduction to Outdoor and Land-Based Recreation 3 cr**

This course examines human relationships to the outdoors. Through the exploration of historical and contemporary philosophies and theories about the outdoors, the course will introduce Indigenous ways of knowing and being in relation to the multiple conceptualizations of outdoor recreation, environmental education and outdoor experiential education. Special attention will be given to issues of social and environmental justice within outdoor practices within Canadian and global contexts.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of KPER 1400 (or the former PERS 1400, or the former REC 1400), NATV 1000, NATV 1200, NATV 1220, NATV 1240, or permission of instructor.

**REC 2150 Introduction to Therapeutic Recreation 3 cr**

An examination of the current principles of therapeutic recreation in relation to their practical application to individuals in clinical settings such as nursing homes, hospitals and other long-term care facilities. May not be held with the former REC 4150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 1400 (or the former PERS 1400 or the former REC 1400).

**Equiv To:** REC 4150

**REC 2170 Introduction to Sport Management 3 cr**

This course provides an introduction to sport management focusing primarily on North American sport. This course gives students an introduction to basic management functions and how they relate to sport management at the community, interscholastic, intercollegiate and professional levels. May not be held with the former REC 4170.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 1400 (or the former PERS 1400 or the former REC 1400).

**Equiv To:** REC 4170

**REC 2400 Management and Marketing of Leisure Services 3 cr**

Basic management, and marketing principles and practices and their applicability to delivery of leisure services. Topics include financial resources, budgeting, people-centred management, and marketing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 1400 (or the former PERS 1400 or the former REC 1400).

**REC 2650 The Social Aspects of Aging 3 cr**

An examination of the social aspects of aging. Emphasis on understanding the aging process as a life transition involving adaptation through interaction with social and physical environments. This is an Option in Aging course and may not be held for credit with FMLY 2650 (the former HMEC 2650, SWRK 2650).

**Equiv To:** FMLY 2650, HMEC 2650, IDES 2650, SWRK 2650

**REC 3072 Community Development Principles 3 cr**

An introduction to community development principles and the role recreation and leisure play in developing healthy and vibrant communities. This course emphasizes connections between community, recreation, and leisure.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 2200 (or the former PERS 2200 or the former PHED 3080), or the former REC 2530.

**REC 3090 Sustainable Nature-Based Tourism 3 cr**

Analysis of the growth and development of sustain-able nature-based tourism as a global and regional phenomenon. Particular emphasis will be placed upon the fundamental principles of sustainability, natural resource and visitor management for recreation, and the role of outdoor recreation and education in Sustainable Tourism Planning and Management. Note: A fieldwork fee is attached to the course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [KPER 1400 (or the former PERS 1400 or the former REC 1400)] and [REC 2100 (or the former PERS 1300 or the former REC 1200)].

**REC 3170 Sport and Development in Community 3 cr**

An examination of the multiple uses of sport across communities for the purposes of development broadly defined. Emphasis is placed on exploring both theoretical and practical aspects of development in the leisure, sport and physical activity experiences of a multitude of communities at the local and national levels. This course aims to unpack, explore and describe the diverse lived experiences with sport, physical activity and leisure.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: REC 2170 or the former REC 4170.

**REC 3180 Social Psychology of Leisure 3 cr**

This course explores the leisure behaviour of individuals in social contexts and examines current social psychological thinking about leisure experiences. Application of leisure behaviour concepts, theories and research in the delivery of leisure programs and services will be emphasized.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PSYC 1200, or (PSYC 1211 and PSYC 1221) or permission on instructor.

**REC 3220 Program Planning and Evaluation 3 cr**

(Lab required) Consideration and application of program planning principles as they relate to specialized contexts and diverse populations. Foundations of interpersonal communication for effective and successful program implementation with emphasis on program evaluation. May not be held with the former REC 3200, the former REC 2540 or the former REC 3870.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: KPER 2200 (or the former PERS 2200).

**Equiv To:** REC 3200

**Mutually Exclusive:** REC 2540, REC 3870

**REC 3310 Cultural Tourism 3 cr**

This course will provide students with an understanding of various stakeholder perspectives related to visiting and operating cultural tourism attractions. The following topics will be discussed: tourists' motivations and experiences, cultural resource managers' perspectives on tourism, tourism industry leaders' viewpoint on cultural resources and the relationship between cultural producers and consumers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: REC 2100 (or the former PERS 1300 or the former REC 1200).

**Mutually Exclusive:** PERS 4200

**REC 3400 Advanced Marketing of Leisure Services 3 cr**

This course integrates the theory and practice of marketing leisure services. Strategies for marketing services and experiences within private, public sector and not-for-profit recreation agency programs and services are examined.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: REC 2400 or equivalent, or permission of instructor.

**REC 3770 Indigenous Perspectives on Land-Based Education 3 cr**

This course explores the history and potential of Indigenous land-based education within the Winnipeg metropolitan region and surrounding areas. Three facets of Indigenous land-based education will be emphasized: nature, culture, and history. Course content and experiential learning activities will examine First Nations and Métis perspectives on the unique history, culture, and natural environment of the area, including the University of Manitoba wetlands, forested, and agricultural lands.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: One of REC 2130, NATV 1000, NATV 1200, NATV 1220, NATV 1240, or permission of instructor.

**REC 3850 The Planning of Recreation Areas and Facilities 3 cr**

The process used to plan both recreational open spaces and facilities. Special consideration is given to the role of the recreation professional in relationship to other planners.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: REC 3220 or the former REC 3200.

**REC 4060 Person Centred Leisure Education 3 cr**

A detailed examination of person-centred leisure education with an emphasis on both theoretical and practice models and their application to the recreation service delivery system.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 3100 (or the former PERS 3100, or the former REC 3060, or the former PHED 3390).

**REC 4072 Advanced Community Development 3 cr**

This course examines the nature of community and the unique role that leisure service organizations play in the complex process of community development. May not be held with the former REC 4070.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: REC 3072.

**Equiv To:** REC 4070

**REC 4120 Recreational Travel and Tourism 3 cr**

The purpose of this course is to provide students with a better understanding of the travel and tourism industry through an examination of its history, service systems and issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: REC 2100 (or the former PERS 1300 or the former REC 1200).

**REC 4250 Leisure and Aging 3 cr**

The nature of the aging process and its impact on leisure behaviour. The factors influencing leisure among older adults, policy issues, and program and service methods and implications will be examined. May not be held with the former REC 4130.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: KPER 3100 (or the former PERS 3100, or the former REC 3060, or the former PHED 3390) or REC/SWRK/HMEC 2650 or permission of instructor.

**Equiv To:** REC 4130

**REC 4350 Parks and Protected Areas Planning and Management: Field Studies 6 cr**

The course is taught in two segments, an on-campus component and field study component taking place in Banff National Park. The on-campus component examines the historical development of the concept of parks and protected areas, the role of interpretation, management and research in the parks and emerging issues in the management of parks and protected areas. In addition, during the on-campus component planning for the field will take place. The field segment will focus on a wide variety of management issues with particular attention to Banff National Park. Emerging issues and trends will be examined and past management responses evaluated. There will be opportunities for students to investigate specific management issues of interest to them and to participate in current research being conducted in the park. Offered with GEOG 4350.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written permission of the instructor required.

**Equiv To:** GEOG 4350

**REC 4400 The Administration of Special Events 3 cr**

This course examines the theory and practice of special event management. Students will engage in a multi-disciplinary exploration of concepts and issues unique to special event contexts. Students will be given the opportunity to apply knowledge gained. May not be held for credit with the former REC 4310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: REC 2400.

**Equiv To:** REC 4310

**REC 4720 Wilderness Adventures 1-3 cr**

Student will learn how to plan and participate in one or more wilderness adventure activities such as canoe tripping, sailing, kayaking, climbing, winter camping, etc. Students will also concentrate on conducting these activities safely with clients. It is hoped that this experience will positively affect future life sport and recreation activities. May not be held for credit with KIN 4720 or PHED 4720. A fieldwork fee is attached to the course.

**Equiv To:** KIN 4720, PHED 4720

**REC 4770 Indigenous Recreation and Well-Being 3 cr**

This course examines historical and contemporary Indigenous perspectives of well-being. Indigenous responses to the political landscape of health and well-being will be examined through community and grassroots movements, physical cultural practices, and physical, emotional, mental and spiritual ways of knowing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: REC 2130 or permission of instructor.

## Religion (RLGN)

**RLGN 1120 Biblical Hebrew 6 cr**

An introductory course with emphasis on basic grammar and syntax. Students will learn to read simple biblical narratives. (Not acceptable for credit towards a Major or Minor in Religion.) Students may not hold credit for RLGN 1120 and any of: HEB 1120 or the former SEM 1120.

**Equiv To:** HEB 1120, SEM 1120

**Attributes:** Humanities, Recommended Intro Courses

**RLGN 1322 Introduction to Eastern Religions 3 cr**

This course provides a general introduction to the origins, central teachings and practice, key developments and contemporary expressions of Hinduism, Buddhism, Taoism, and Confucianism. Students may not hold credit for RLGN 1322 and any of: RLGN 1323 or the former RLGN 1320 or the former RLGN 1321.

**Equiv To:** RLGN 1323

**Mutually Exclusive:** RLGN 1320, RLGN 1321

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**RLGN 1324 Introduction to Western Religions 3 cr**

This course provides a general introduction to the origins, central teachings and practice, key developments and contemporary expressions of Judaism, Christianity, and Islam. Students may not hold credit for RLGN 1324 and any of: RLGN 1325 or the former RLGN 1320 or the former RLGN 1321.

**Equiv To:** RLGN 1325

**Mutually Exclusive:** RLGN 1320, RLGN 1321

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**RLGN 1350 The History of Eastern Christianity 6 cr**

This course examines the general history of Eastern Christianity. It studies the doctrines and organization of the churches, their spirit and attitude to church unity.

**Attributes:** Humanities, Recommended Intro Courses

**RLGN 1390 Readings in Biblical Hebrew 1 3 cr**

Reading and translation of selected prose portions of the Hebrew Bible. Vocabulary building and review of basic Hebrew grammar.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RLGN 1120 or HEB 1120 or the former SEM 1120] or written consent of instructor or department head.

**Attributes:** Humanities, Recommended Intro Courses

**RLGN 1400 Readings in Biblical Hebrew 2 3 cr**

Reading and translation of selected poetic portions of the Hebrew Bible. Vocabulary building and advanced grammar.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RLGN 1390] or written consent of instructor or department head.

**Attributes:** Humanities, Recommended Intro Courses

**RLGN 1410 Death and Concepts of the Future 3 cr**

The course investigates theories, images, and rituals of death, dying and the afterlife in selected world religions.

**Attributes:** Humanities, Recommended Intro Courses

**RLGN 1420 Ethics in World Religions 3 cr**

Examination of the ethical teachings of world religious traditions. Attention will be given to such questions as the nature of the good or virtue, the place of law or commandments, the relationship between religion and morality, the concepts of moral community and the moral self. Students may not hold credit for both RLGN 1420 and RLGN 1421.

**Equiv To:** RLGN 1421

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**RLGN 1424 Religion and Sexuality 3 cr**

An introduction to world religions through the lens of sexuality, exploring how sexual desires and practices are celebrated, regulated, imagined and constructed in different religions. Topics may include pleasure, procreation, sexual and gender identities, marriage, asceticism, erotic imagery of divine beings and divine-human relations.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**RLGN 1430 Food: Religious Concepts and Practices 3 cr**

This course explores the cultural (communal and social) dimensions of the major world religions through examination of food concepts and practices. Topics studied include: food symbols and rituals in the theory of religion; food proscription and endorsements ("dietary laws"); food in ritual time and space ("menus" and "liturgies"); concepts of plenty and concepts of dearth (ethics of food distribution); food and communication; food and gender/food and the body; feasting and fasting; food, religion and "consumer culture."

**Attributes:** Humanities, Recommended Intro Courses

**RLGN 1440 Evil in World Religions 3 cr**

The course introduces students to perspectives on evil in selected world religions.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**RLGN 1450 Religion and the Media 3 cr**

This course investigates representations of religion in popular media. Through study of a range of media, from newspapers to the internet, the course explores cultural stereotypes about religion, asking how religions are represented, and how they represent themselves, in popular culture.

**Attributes:** Humanities, Recommended Intro Courses

**RLGN 2010 Introduction to Hinduism 3 cr**

An overview of the rich and multi-faceted tradition of Hinduism, dealing with its history and development from ancient to modern times. Students may not hold credit for both RLG 2010 and the former RLG 2860.

**Mutually Exclusive:** RLG 2860

**Attributes:** Humanities

**RLGN 2020 Introduction to Buddhism 3 cr**

A general introduction to the beliefs, practices, and history of the main forms of Buddhism, including Indian Buddhism, Tibetan Buddhism, and Zen. Students may not hold credit for both RLG 2020 and the former RLG 2830.

**Mutually Exclusive:** RLG 2830

**Attributes:** Humanities

**RLGN 2030 Psychology and Religion 3 cr**

An examination of the late nineteenth century emergence of psychoanalysis in conjunction with the discovery of the unconscious. The course approaches psychoanalytic theories of the unconscious in the work of major theorists such as Sigmund Freud, Carl Jung, Jacques Lacan, Melanie Klein, and Julia Kristeva, considering the implications the unconscious has for our understanding of the self, embodiment, life death relations, language, writing, and the study of religion. Students may not hold credit for both RLG 2030 and the former RLG 2211.

**Mutually Exclusive:** RLG 2211

**Attributes:** Humanities

**RLGN 2032 Introduction to the Study of Religion 3 cr**

This course is an introduction to the academic study of religion, its history and theoretical approaches. Topics addressed may include texts, myths, rituals, symbols, and institutions. Several methodological approaches associated with religious studies, comparative religion, and the history of religion will also be discussed.

**Attributes:** Humanities, Written English Requirement

**RLGN 2036 Introduction to Christianity 3 cr**

This course provides an introduction to the history of Christianity from its earliest beginnings to the present. It will also focus on Christianity's main ideas and practices. Students will also be introduced to key concepts and debates in the study of religion using Christianity as a test case.

**Attributes:** Humanities, Written English Requirement

**RLGN 2040 Early Modern Christianity in a Global Context 3 cr**

This course explores the globalization of Christianity through the study of the historical events, teachings, and practices that shaped Western Christianity from the late Middle Ages to the 20th century, through the reformations of the sixteenth century, the Enlightenment, and the subsequent colonial enterprises. We explore the tumultuous events that led to the division of the Western Church into Protestant and Catholic and engendered a redefinition of "Christendom" which continued to evolve as missionaries and others travelled to new territories. The second part of the course focuses on the expansion of Christianity in Asia, Africa and the Americas and its effects on local populations.

**Attributes:** Humanities

**RLGN 2052 Conservative Christianity in the United States 3 cr**

An introductory study of 20th and 21st century trends in conservative Christianity in the United States with an emphasis on the gospel of prosperity, the moral majority, and dominion theology. Themes include attitudes and practices concerning health, politics, capitalism, race, and sex/gender. Students may not hold credit for both RLG 2052 and the former RLG 2050.

**Equiv To:** RLG 2050

**Attributes:** Humanities, Written English Requirement

**RLGN 2060 Religion and Violence 3 cr**

Violence of many kinds - physical and non-physical, by and against individuals, within and amongst religious groups - plays an integral role in all religious traditions and systems. This course explores this role within the framework of an historical approach to world religions. Themes covered may include: theories of religion and violence; sacrifice; martyrdom; symbolic violence; iconoclasm; blasphemy; heterodoxy and discipline; religious toleration; religious warfare; religion and cultural resistance; religion and domestic violence; religion and non-violence.

**Attributes:** Humanities

**RLGN 2072 Storytelling and Religion 3 cr**

Storytelling is a way of making sense of, and transforming, the world: so is religion. This course explores story, imagination, and performance in the context of religion and spirituality. Course work may involve textual study, writing, and the practice of storytelling. Students may not hold credit for both RLG 2072 and the former RLG 3850.

**Equiv To:** RLG 3850

**Attributes:** Humanities

**RLGN 2090 Issues in Science and Religion 3 cr**

A consideration of some of the major issues arising from the intersection of the concepts and interests of the natural sciences with those of the religions of the world.

**Attributes:** Humanities

**RLGN 2100 Approaches to the Qur'an 3 cr**

An introduction to the main features, structure, and contents of the Qur'an as a text and to the manifold ways it has been received, understood, and interpreted by Muslims for over 1400 years.

**Attributes:** Humanities

**RLGN 2110 Religion and Healing 3 cr**

A study of concepts of illness, health and healing, of therapeutic rituals, and of healing figures, in selected world religions.

**Attributes:** Humanities

**RLGN 2112 Medicine, Magic, and Miracle in the Ancient World 3 cr**

This course introduces students to the world of healing in antiquity. It explores the full range of healing options available to people in the ancient world from approximately 500 BCE to 500CE, focusing in particular in the Greek and Roman Mediterranean. This range includes professional medicine and its many kinds of practitioners and sub-specialists, religious forms of healing, popular or folk remedies, and more "magical" approaches to healing such as spells, amulets, and other forms of ad hoc rituals. Furthermore, it presents students with evidence for the practices and social settings of ancient healthcare. This evidence includes medical and pharmacological texts, accounts of miraculous healing, manuals of natural science, ancient "magical" texts, as well as archaeological evidence such as site maps of healing shrines, votives, amulets, medical instrumentation, human remains, and inscriptions.

**Attributes:** Humanities, Written English Requirement

**RLGN 2114 Monks, Mystics and Manuscripts in Medieval Christianity 3 cr**

This course is an introduction to how people in the Middle Ages experienced and shaped Christianity in the Latin West. We examine the thoughts and actions of individuals profoundly affected by their understanding of the divine as manifested through Scripture, art and community. Through primary sources, we explore topics such as monasticism, university teaching, medicine, preaching and pilgrimage, while paying close attention to questions of authority, knowledge, and gender relations.

**Attributes:** Humanities

**RLGN 2116 Cognitive Science and Religion 3 cr**

Survey of recent developments in the cognitive science of religion (including evolutionary and biocultural approaches). Topics include religion and cognition, supernatural concepts, the evolution of religion, religious ritual, mental time travel, and cognition and culture. Responses and rejoinders to the cognitive science of religion will also be examined.

**Attributes:** Humanities, Written English Requirement

**RLGN 2120 Faith and Reason 3 cr**

Can faith and reason coexist? This course examines religious and philosophical understandings of faith and reason, both historical and contemporary, giving students the tools to engage with contemporary debates on faith and reason in an informed way. Topics explored include proofs for God, science and reason, scripture and language, belief, agnosticism and atheism drawing on authors such as Aristotle, Maimonides, Aquinas, Kierkegaard, Marx, Freud, A.J. Ayer, and Steven Cahn. Students may not hold credit for both RLG 2120 and the former RLG 2630.

**Mutually Exclusive:** RLG 2630

**Attributes:** Humanities

**RLGN 2130 Religion and Dance 3 cr**

An examination of the role of movement and dance in world religions and of attempts to establish a theoretical framework for the study of movement within the discipline.

**Attributes:** Humanities

**RLGN 2140 Introduction to Judaism 3 cr**

An exploration of Jewish religious experience: the rhythms of time, the sensory life, sacred texts, collective memory, rules and resistance to rules. The course will introduce Jewish ways of learning, and consider Judaism as a test case for concepts in religious studies, including "religion" itself.

**Attributes:** Humanities, Written English Requirement

**RLGN 2160 Hebrew Bible (Tanakh/"Old Testament") 3 cr**

An introduction to the ancient books known to the Jews as the Bible or Tanakh (Torah, Nevi'im and Ketuvim) and to Christians as the Old Testament. The course will explore traditional and modern ways of studying these texts, including midrashic and literary approaches. A previous introductory course in Judaism is recommended but not required. Students may not hold credit for both RLG 2160 and RLG 2161.

**Equip To:** RLG 2161

**Attributes:** Humanities, Written English Requirement

**RLGN 2162 Great Jewish Books 3 cr**

From bestselling authors of today back to the books of the Bible, Jews have been a people of writers and readers. This course is a survey of the kinds of literature that have shaped Jewish culture, highlighting the conversations of Jews with each other across the centuries. Students may not hold credit for RLG 2162 and the former RLG 2760.

**Equip To:** RLG 2760

**Attributes:** Humanities, Written English Requirement

**RLGN 2170 Introduction to the New Testament 3 cr**

An introduction to the historical and critical study of the Christian "New Testament." Students may not hold credit for both RLG 2170 and RLG 2171.

**Equip To:** RLG 2171

**Attributes:** Humanities, Written English Requirement

**RLGN 2180 Theory of Nature 3 cr**

While the content of this course will vary year-to-year, its constant purpose will be to introduce students to some of the many ways in which "nature" has been theorized. The course will explore historical and cultural contexts in which selected theories of nature have developed. It will also explore implications of different theories of nature for environmental ethics.

**Attributes:** Humanities

**RLGN 2200 Atheism 3 cr**

An introduction to historical and contemporary varieties of atheism. The course may draw on textual, sociological, historical, philosophical, and psychological perspectives on atheisms as world-views, ideologies, and social movements.

**Attributes:** Humanities

**RLGN 2222 The Supernatural in Popular Culture 3 cr**

This course provides a survey of the supernatural, superhuman, and paranormal in popular culture, focusing on non-institutionalized forms of religious thought and practice as well as in the popular media (comic books, movies, music, fantasy and science fiction novels, television). Topics may include phenomena such as divination, ghosts, and speaking with the dead as well as fascination with apocalypses, superheroes, time travel, vampires, and zombies. Emphasis will be given to religious expressions not usually recognized as "religious."

**Attributes:** Humanities, Written English Requirement



**RLGN 2520 Eastern Christianity in North America 3 cr**

A survey of the history and institutions of the major Eastern Christian bodies in North America. Particular reference will be made to the sociological and economic problems, the question of identity and survival, the problem of unity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RLGN 1350] or written consent of department head.

**Attributes:** Humanities

**RLGN 2530 Eastern Christianity in the Contemporary World 3 cr**

A study of some modern-day problems such as: politics, nationalism, geography, culture, secularization, and the question of unity. Particular reference will be made to the problem of the church in Eastern Europe.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RLGN 1350] or written consent of department head.

**Attributes:** Humanities

**RLGN 2570 Indian Religious Art and Architecture 3 cr**

A survey of Major periods and themes in Indian art and architecture (Buddhist, Jain, Hindu); iconography, temples, canons of Indian art; life of Buddha, Rama-cycle and Krsna-complex; socioeconomic background.

**Attributes:** Humanities

**RLGN 2590 Religion and Social Issues 3 cr**

The course examines selected ethical-social issues such as abortion, euthanasia, new genetic and reproductive technologies, and environmental and ecological issues, with reference to one or more of the world's religious traditions. Students may not hold credit for both RLG 2590 and RLG 2591.

**Equiv To:** RLG 2591

**Attributes:** Humanities, Written English Requirement

**RLGN 2610 Animals and Ethics 3 cr**

This course surveys the emerging field of "critical animal studies." The course centers on questions of human and nonhuman animal difference as these have been debated in a number of religious and cultural traditions. It also engages traditional and contemporary approaches to animal ethics. Discussions will also focus on such pressing issues as global warming, species extinction, loss of biodiversity, pollution, and threats to population health – all of which can be traced to multinational industrialized breeding and marketing of animals and/or of experimentally developed animal "biocapital." Students may not hold credit for both RLG 2610 and the former RLG 2600.

**Mutually Exclusive:** RLG 2600

**Attributes:** Humanities

**RLGN 2680 Women and Religion 1 3 cr**

Content of this course may vary from year to year. It will address, through contemporary interpretive models, topics of current and ongoing interest in relation to the understanding and role of women in the world's religious traditions. Students may not hold credit for both RLG 2680 and RLG 2681.

**Equiv To:** RLG 2681

**Attributes:** Humanities

**RLGN 2690 Women and Religion 2 3 cr**

Content of this course may vary from year to year. It will address, through contemporary interpretive models, topics of current and ongoing interest in relation to the understanding and role of women in the world's religious traditions.

**Attributes:** Humanities

**RLGN 2700 Religions of China and Japan 6 cr**

A study of the history, teachings and developments of Confucianism, Taoism, Shinto and Buddhism in China and Japan from their beginning to the present.

**Attributes:** Humanities

**RLGN 2770 Contemporary Judaism 3 cr**

How does an ancient tradition work in today's world? Where is the energy of creativity, the energy of conflict, in contemporary Judaism? What approaches are scholars using as they try to understand current issues in Jewish life and thought? This course will respond to these questions in light of recent and current developments in various streams of Judaism, especially in the United States and Israel, centres of large Jewish populations. A previous introductory course in Judaism is recommended but not required.

**Attributes:** Humanities, Written English Requirement

**RLGN 2778 Introduction to Islam 3 cr**

This course explores the question, "What is Islam?" It situates the study of Islam in the broader academic discipline of Religious Studies and provides an introduction to Islam's central beliefs, institutions, and practices. Topics to be examined include: the life of the Prophet Muhammad, the Qur'an, law, Shi'ism, gender, mysticism, art, and science in medieval, modern, and contemporary Muslim societies.

**Attributes:** Humanities

**RLGN 2790 Contemporary Islam 3 cr**

A study of the responses of Islamic communities to the pressures of the modern world. Special note will be taken of the relation between Islam and power.

**Attributes:** Humanities

**RLGN 2840 The Second Vatican Council 3 cr**

An historical and theological analysis of the Second Vatican Council, beginning with the situation of the Roman Catholic Church subsequent to the French Revolution. The course will include study of major Vatican II documents. Particular attention will be given to the legacy of Vatican II and to assessment of the Council's impact on the life of the Roman Catholic Church.

**Attributes:** Humanities

**RLGN 2850 Contemporary Issues in Roman Catholicism 3 cr**

A survey of major movements, thinkers, debates and issues in twentieth-century post-Vatican II Roman Catholicism. Particular attention will be given to the following: magisterium and dissent, social justice, women in the church, ecumenical and inter-religious dialogue, and emergent theologies.

**Attributes:** Humanities

**RLGN 3102 Myth and Mythmaking: Narrative, Ideology, Scholarship 3 cr**

An intensive study of popular, scholarly, and critical conceptions of myth and mythmaking. Three approaches to myth will be examined: myth as universal estate of humanity, myth as object of scientific discourse, and myth as ideology in narrative form. Throughout, students will be encouraged to think about scholars studying myth as mythmakers themselves, thus opening the field to a more critical appraisal of the entwinement of narrative, ideology, and scholarship. Students may not hold credit for both RLG 3102 and the former RLG 3110.

**Equiv To:** RLG 3110

**Attributes:** Humanities, Written English Requirement

**RLGN 3112 Religion and the Imagination 3 cr**

This course examines role of the imagination in the creation and transmission of social institutions. Students will learn about the evolutionary development of the imagination, its role in creating shared social identities through cooperation, and its generative power to assign status functions. Emphasis will be given to the role of the imagination in ritualization and mythmaking.

**Attributes:** Humanities

**RLGN 3120 Religion and Bioethics 3 cr**

An examination of theoretical and practical bioethical issues and how these are engaged by various religious traditions.

**Attributes:** Humanities

**RLGN 3130 Religion and Modern Thought 3 cr**

The idea that religion is a distinct and unique aspect of human activity is a defining feature of modern thought. This course explores aspects of this understanding of religion in various modern intellectual movements from the sixteenth century to the nineteenth century, considering these movements in their particular historical contexts. Topics covered may include: skepticism, northern humanism, religion and European expansion, atheism, religion and the nation state, religion and early modern science, enlightenment, religion and bourgeoisie, imperialism, religion and revolution, religion and evolution. Students may not hold credit for RLGN 3130 and any of: RLGN 3131 or RLGN 3251.

**Equip To:** RLGN 3131

**Mutually Exclusive:** RLGN 3251

**Attributes:** Humanities

**RLGN 3150 Buddhism in East Asia 3 cr**

An examination of the history and teachings of Buddhism in China and Japan, giving particular attention to processes of adaptation and transformation within the East Asian context.

**Attributes:** Humanities

**RLGN 3152 Buddhism in the West 3 cr**

This course examines the development of Buddhism in the West, a process that began with Westerners encountering Buddhism in Asia, led to Asian Buddhists coming to propagate Buddhism in the West, and is now resulting in the development of new forms of Buddhism that are distinctly Western, so much so, in fact, that whether they continue to qualify as Buddhist is an open question. A key focus of the course will be specific teacher-student lineages spanning generations, which will help to throw some of the key factors in the historical development of Western Buddhism into relief. The course will also focus on some of the seminal texts of Western Buddhism. Here our concern will be the dynamic intellectual culture at work behind and with Western Buddhism, which has been highly influential even outside of Buddhist circles.

**Attributes:** Humanities

**RLGN 3160 Tibetan Religious Traditions 3 cr**

A study of the religious traditions, particularly Buddhism, that have developed from antiquity in Tibet. Students may not hold credit for both RLGN 3160 and the former 020.374.

**Attributes:** Humanities

**RLGN 3162 Buddhist Philosophy 3 cr**

This course surveys Buddhist philosophy and its development from roughly the mid-second millennium to the present day. We will focus primarily on early Buddhist philosophy, abhidharma, Mahayana philosophy, including Madhyamaka and Yogacara, Tibetan Buddhist philosophy, and Zen.

**Attributes:** Humanities

**RLGN 3190 Images of the Prophet Muhammad: Classical and Contemporary Perspectives 3 cr**

This course addresses the central place of the Prophet Muhammad in Muslim life and religious practice. It examines sources for the life of Muhammad, considers the Prophet as a model of piety, and gives careful attention to methodological approaches to the study of Islam.

**Attributes:** Humanities

**RLGN 3194 Islamic Philosophy 3 cr**

This course explores the history of Islamic philosophy (falsafa) from the translation movement of Greek philosophical, scientific and medical texts under the Abbasid dynasty (8-9th Centuries), until the golden age of interdisciplinary intellectual, scientific and theological debates in the post-classical period of Islamic intellectual history.

**Attributes:** Humanities

**RLGN 3210 Indian Philosophy 3 cr**

This course introduces some of the main philosophical schools of Hindu and Buddhist thought, emphasizing the living history of interaction and debate between the various traditions.

**Attributes:** Humanities

**RLGN 3220 Indian Religion and Society 3 cr**

This course investigates selected topics in religion and society in the region of the Indian sub-continent. Topics will vary from year to year, ranging from a focus on marriage to a study of Buddhist monks and the politics of civil war in Sri Lanka.

**Attributes:** Humanities

**RLGN 3230 Gender, the Body, and Sexuality in Early Christianity 3 cr**

This course focuses on the way in which gender, the body, and sexuality were culturally constructed in early Christian texts and practices. The first five centuries CE were a time in which new understandings of the body, sexual difference, and gender roles came into prominence among large portions of the ancient Mediterranean population. This course will explore these uniquely Christian understandings as well as it will investigate continuities between Christian constructions and those found in Greco-Roman and Jewish society at the time. In particular, the course will explore trends within early Christianity, such as the emphasis on extreme ascetic practices and sexual renunciation.

**Attributes:** Humanities

**RLGN 3260 Indian Buddhism 3 cr**

A thematic and historical study of Indian Buddhism from its origin to its disappearance. Topics covered include early Buddhism, Buddhist doctrine and philosophy, and the development of Mahāyāna and Vajrayāna.

**Attributes:** Humanities

**RLGN 3266 Readings in Buddhist Texts 3 cr**

This is a course intended for students who have completed RLGN 2020 Introduction to Buddhism, and are interested in pursuing a more in-depth study of Buddhism. Following a discussion format, we will investigate Buddhist texts and ethnographic case studies and material from a range of traditions and historical periods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RLGN 2020] or written consent of instructor.

**Attributes:** Humanities

**RLGN 3270 Guru and Disciple 3 cr**

A study of the role of the guru in India, and of the dynamic of guru and disciple, utilizing traditional Hindu sources as well as contemporary writings.

**Attributes:** Humanities

**RLGN 3280 Hasidism 3 cr**

Hasidic Jews, known for their tales, melodies, distinctive garb and strict traditionalism, belong to one of the most successful modern Jewish religious movements. This course explores Hasidism, from its origins in eighteenth-century Ukraine to the present, through its own stories and spiritual teachings as well as scholarly perspectives.

**Attributes:** Humanities, Written English Requirement

**RLGN 3290 Self-Transformation in Religion and Philosophy 3 cr**

This course examines contemporary expressions of spiritual exercises by tracing their traditions across an array of western religious and philosophical schools. The course explores themes of death, asceticism, aestheticism, everydayness and community. In particular, it explores how dialogue, reading, and writing have constituted tools for the cultivation of mental, physical and emotional states leading to self-transformation. Also offered as PHIL 3290. May not be held with PHIL 3290.

**Equiv To:** PHIL 3290

**Attributes:** Humanities

**RLGN 3400 Zionism: Religious Perspectives 3 cr**

Zionism is a modern political and social movement which has a close but ambivalent relationship with the Jewish religious tradition. This course will explore topics such as secular adaptations of religious motifs; religious critiques of Zionism; religious Zionism as a new form of Judaism; and Christian approaches to Zionism and the State of Israel.

**Attributes:** Humanities

**RLGN 3530 Contemporary Issues 1 3 cr**

Content of this course will vary from year to year but it will deal with some specific topic of current interest in religion, some aspect of methodology in the study of religion, or an analysis from a religious perspective of some problem of current public interest. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both RLGN 3530 and RLGN 3531.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 3540 Contemporary Issues 2 3 cr**

Content of this course will vary from year to year but it will deal with some specific topic of current interest in religion, some aspect of methodology in the study of religion, or an analysis from a religious perspective of some problem of current public interest. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for RLGN 3540 and RLGN 3541.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 3560 Texts in Original Languages 3 cr**

The subject matter of this course will vary from year to year. It will give students the opportunity to study texts in languages other than English and to develop reading skills in those languages. The emphasis may be on language learning or on working with texts in a language already studied. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Attributes:** Humanities

**RLGN 3640 Religion in the Hellenistic and Roman Mediterranean 3 cr**

This course explores the wide variety of religious traditions, practices, and beliefs of the Mediterranean region in the Hellenistic and Roman period (c. 300 BCE to 300 CE). This period is exemplified by a great deal of continuity, but it was also a time of experimentation, innovation, and cultural entrepreneurship. Also offered by Classics as CLAS 3670. Students may not hold credit for both RLGN 3640 and CLAS 3670.

**Equiv To:** CLAS 3670

**Attributes:** Humanities

**RLGN 3750 Topics in Indian Religious Art and Architecture 3 cr**

The course will focus on one or more of the religious dimensions of the following: selected motifs in Indian art, the art and architecture of a particular region or epoch, the theoretical assumptions underlying Indian art.

**Attributes:** Humanities

**RLGN 3800 Selected Old Testament Literature and Themes 6 cr**

An intensive study of selected writings or themes of the Old Testament (the Tanach).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RLGN 2160 or RLGN 2161] and [RLGN 2170 or RLGN 2171] or written consent of instructor or department head.

**Attributes:** Humanities

**RLGN 3810 The Talmud 3 cr**

The Talmud is as important as the Bible in Jewish life and thought. It is not simply a book to read; it has to be studied with other people. Students will learn the skills of studying this polyvocal text, and engage with scholarship on the Talmud's literary techniques, laws, folklore, gender politics, and theology. Students may not hold credit for both RLGN 3810 and the former RLGN 2150.

**Equiv To:** RLGN 2150

**Attributes:** Humanities

**RLGN 3824 Kabbalah 3 cr**

Kabbalah is a centuries-old stream of Jewish thought and practice which encompasses mysticism, ethics, spiritual practice and magic. Students will come away from this course with a working knowledge of the Zohar, the central text of Kabbalah, its radical theology and its mythical-symbolic mode of expression. The course also explores the influence of the Zohar within Judaism and beyond and related scholarly debates. Students may not hold credit for both RLGN 3824 and the former JUD 3390.

**Mutually Exclusive:** JUD 3390

**Attributes:** Humanities

**RLGN 3830 The Bible as Story 3 cr**

A study of the manner in which biblical storytellers present their tales and the ways in which these narratives have been retold ever since. Particular attention will be paid to Midrash, the tradition of creative retelling of biblical tales. Students may not hold credit for both RLGN 3830 and the former RLGN 3840.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Mutually Exclusive:** RLGN 3840

**Attributes:** Humanities

**RLGN 3870 The Thought of Bernard Lonergan 3 cr**

A study of the thought of the twentieth-century Canadian Jesuit, Bernard Lonergan, including his work on method in theology, on ways of knowing and on ethics.

**Attributes:** Humanities

**RLGN 4040 Religion and Democracy 3 cr**

This course focuses on role of religion in democratic societies. Topics covered may include secular and post-secular, secularism; democracy, religion, and human rights; religion and the law; nationalism and religion, and so on. Disciplinary approaches to religion and democracy will be discussed: historical, political, feminist, sociological, and philosophical. Key thinkers may include Jurgen Habermas, John Rawls, Charles Taylor, Seyla Benhabib, Nancy Fraser.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written consent of department head.

**Attributes:** Humanities

**RLGN 4060 The Yoga Tradition 3 cr**

This course explores the rich, diverse, and highly complex Yoga tradition, emphasizing classical and medieval forms of Yoga philosophy and practice within Hinduism. As well as tracing historical development of the Yoga tradition, the course highlights the meaning and purpose of Yoga in its classical expression and considers the growing popularity and relevance of Yoga in the modern world.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4080 Critical Theory and Religion 3 cr**

A selective study of the vast and varied field of theoretical and critical approaches that have come to play a central role in the study of religion since World War II, this course focuses on one or more of the following, its context and precursors: African American theory and criticism, colonialism and post-colonialism, cultural studies, deconstruction, feminist criticisms, Frankfurt School, hermeneutics, semiotics, psychoanalytic theory and criticism, structuralism and post-structuralism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4100 Advanced Studies in Buddhism 3 cr**

An in-depth study of selected topics from the wide cultural and historical range of Buddhist traditions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4110 Studies in Religion and Cultural Memory 3 cr**

An examination of selected cultural memory and religion topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4160 Religion and Philosophy 3 cr**

An examination of the relation between philosophical and religious thought through in-depth study of a selected thinker or thinkers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4180 Advanced Studies in Islam 3 cr**

An in-depth study of selected topics in Islamic philosophy and tradition.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4190 Advanced Studies in Hinduism 3 cr**

An in-depth study of selected topics in the philosophy, history, literature, and practices of Hinduism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4230 Studies in Body History 3 cr**

A study in the religious-cultural history of the body, this course explores the multiple meanings given to the body, sexuality and sexual difference in historical and contemporary religious traditions. The course gives particular attention to theories of representation of body, and includes study of both written and performative sources.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the department head.

**Attributes:** Humanities

**RLGN 4280 Advanced Studies in Early Christianity 3 cr**

This course will focus on topics pertaining to the first 500 years of Christianity, with content varying from year to year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Attributes:** Humanities

**RLGN 4282 Advanced Studies in Medieval Christianity 3 cr**

This course will focus on topics pertaining to Medieval Christianity (c. 500 to c. 1500CE). As the course content will vary from year to year, students may take this course more than once for credit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Attributes:** Humanities

**RLGN 4290 Advanced Studies in Mysticism 3 cr**

With religious traditions of focus varying year to year, this course considers current scholarly approaches to the understanding of mysticism and sainthood. It includes study of mystic texts and treatises; the mystic body; mystic communities; ascetic ritual and practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Attributes:** Humanities

**RLGN 4300 Advanced Topics in Judaism 3 cr**

An in-depth study of selected Jewish texts from the fields of halakhah, aggadah or spirituality, drawing on various theoretical perspectives. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4310 Method and Theory: History of the Study of Religion 3 cr**

An intensive overview of the history of the study of religion, with an emphasis on developments starting in the 18th and the 19th centuries. The contributions of numerous disciplines will be discussed in relation to the political and historical contexts that shape and give rise to the "world religions" paradigm. In any given year, emphasis may be given to developments in a particular field (e.g., Buddhism, Christianity, Islam, Judaism, Hinduism, etc.).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4320 Theoretical Approaches to the Study of Religion 3 cr**

This course will engage theoretical approaches to the study of religion in its historical and contemporary cultural contexts. The course will follow a seminar format. Content of this course may vary from year to year, depending on the tradition(s) on which the course is focused (e.g., Buddhism, Islam, Hinduism, Judaism, Christianity).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4430 Selected Topics in Religion 3 cr**

An intensive study of specially selected topics in the field of religion. The subject matter of the course will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

**RLGN 4440 Selected Topics in Religion 2 3 cr**

An intensive study of specially selected topics in the field of religion. The subject matter of the course will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

## Respiratory Therapy (RESP)

**RESP 1400 Introduction to Professional Practice 3 cr**

This course provides an introduction to the profession of Respiratory Therapy and the roles and responsibilities of a Respiratory Therapist as a member of the health care team. Emphasis is placed on professional conduct, communication and decision-making around issues affecting client-centered care. The course also introduces the safety aspects of delivering respiratory therapy according to the Canadian Standards Association, as well as workplace health and safety. This course is restricted to students in year one of the Bachelor Respiratory Therapy program.

**RESP 1410 Health Systems and Respiratory Care 3 cr**

Building on RESP 1400, Introduction to Professional Practice, this course further explores the role of the Respiratory Therapist as a regulated health care professional in Canada and the function of regulatory and professional advocacy organizations. Students will learn concepts of patient safety and quality and how human, material, and financial resource management is accomplished in the Canadian health care system. Emphasis is placed on the integration of professional practice knowledge, skills and attitudes. This course is restricted to students in year one of the Bachelor of Respiratory Therapy program.

**RESP 1420 Applied Physiology for Respiratory Therapy 6 cr**

The course is designed to provide students with a basic understanding of the function and regulation of the systems and major organs of the human body as they relate to clinical respiratory sciences. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

**RESP 1430 Respiratory Therapeutics 1 6 cr**

A lecture and laboratory course which introduces basic therapeutic concepts, technologies and techniques employed in respiratory therapy including medical gases, humidity and aerosol therapy, and bronchopulmonary hygiene. It introduces the principles of gas physics, and the physical and chemical properties of medical gases used in respiratory care. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

**RESP 1440 Pharmacology 3 cr**

This course will introduce the principles of pharmacology, those factors modifying drug effects, and individual pharmacologic agents including: ANS drugs, CNC drugs, cardiovascular medications, respiratory medications, antibiotics, and other drugs relevant to Respiratory Therapy. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

**RESP 1450 Principles of Mechanical Ventilation 6 cr**

The course will focus on the fundamental physical and physiologic principles involved with mechanical ventilation under normal and abnormal respiratory conditions. Various forms and application strategies of positive pressure ventilation will be introduced and explained as to their effects on the physiological systems. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

**RESP 1460 Basic Fieldwork 1 4 cr**

This course is comprised of 160 hours of clinical fieldwork experiences in respiratory therapy, provided under the supervision of registered respiratory therapists at one or more approved clinical sites. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

**RESP 2200 Primary Care in Respiratory Therapy 3 cr**

This course provides an understanding of primary care in Respiratory Therapy practice as a method of supporting individuals and populations with respiratory disease. Students will learn the principles of health promotion and disease prevention, as well as chronic disease management and self-management strategies. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all of the required courses for year one of the program.

**RESP 2210 Pathophysiology 6 cr**

This course will introduce the pathogenesis of primary diseases of the cardio-respiratory, peripheral vascular, central and peripheral nervous systems. Specific disorders of the renal, metabolic, and immune systems, as well as infectious diseases with particular relevance to respiratory therapy will be introduced. The course will also introduce the differential diagnosis and current strategies employed in the management of these diseases. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

**RESP 2220 Physical Examination and Health Assessment 3 cr**

This course focuses on the development of the patient/client history and physical examination skills essential to health assessment. Students will apply the findings of health assessments in the determination of differential diagnoses and in the development of respiratory care plans. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

**RESP 2230 Respiratory Therapeutics 2 6 cr**

This lecture and laboratory based course introduces advanced respiratory therapeutics including airway management, anaesthesia, invasive hemodynamic techniques, blood sample procurement and analysis, and others commonly employed in respiratory therapy. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

**RESP 2240 Clinical Mechanical Ventilation 3 cr**

This course will discuss the initiation and management of all types of mechanical ventilation, both conventional and advanced, with intra and inter-facility patient transport. Interpretation of detailed pulmonary mechanics will be discussed to allow for assessment of ventilated patients. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

**RESP 2250 Ventilator Instrumentation 3 cr**

This is a comprehensive course in the function, operation, and application of specified neonatal, pediatric and adult ventilators. Illustration of the necessary skills to setup, monitor and troubleshoot the ventilator will be examined in the classroom as well as in simulated patient case scenarios. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

**RESP 2260 Cardiopulmonary Diagnostics 3 cr**

This course will introduce the principles of cardiac and pulmonary function diagnostics including: static and dynamic measures, determination of volumes and capacities, exercise physiology. Cardiopulmonary function changes relative to common diseases and abnormal physiologic states will be evaluated. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

**RESP 2380 Basic Fieldwork 2 4 cr**

Building on RESP 1460 (Basic Fieldwork1) and RESP 2390 (Clinical Integration and Simulation), this course is comprised of fieldwork experiences which provide the student the opportunity to apply the integrated concepts learned in the first two years of the Respiratory Therapy program in a clinical setting. This course will prepare students for advanced clinical education coursework.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: RESP 1460, RESP 2390.

**RESP 2390 Clinical Integration and Simulation 6 cr**

This course provides the student an opportunity to integrate concepts learned in the first two years of the Respiratory Therapy program, and to learn life support protocols prior to participation in advanced clinical education coursework. The course will be delivered through a variety of formats including classroom, seminar, and clinical simulation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all required courses for year one of the program.

**RESP 3320 Clinical Education in Pediatric Respiratory Care 3 cr**

Three weeks of clinical experience in the Pediatric Intensive Care Unit at Children's Hospital. Shiftwork and extended shifts may be required. Course evaluated on a pass/fail basis. 144 hours.

**RESP 3350 Clinical Education in Pulmonary Diagnostics 3 cr**

Three weeks of clinical experience in the pulmonary diagnostic laboratory of an approved clinical site. Course evaluated on a pass/fail basis. 144 hours.

**RESP 3360 Clinical Education in Anesthesia 3 cr**

Three weeks of clinical experience designed to acquaint the student with actual clinical techniques and procedures used in the operating and recovery room. Course evaluated on a pass/fail basis. 144 hours.

**RESP 3370 Clinical Education in Community Care 4 cr**

Four weeks of clinical experience in community care settings including: pre-hospital care, health and wellness promotion, interfacility transport, chronic care, home care and community outreach. Course evaluated on a pass/fail basis. 180 hours.

**RESP 3410 Clinical Education in Critical Care 8 cr**

This course enables students to critically apply skills and concepts in the care of adult patients requiring critical respiratory care. The focus is on attainment of essential Respiratory Therapy competencies for practice. This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not be held with the former RESP 3310.

**Mutually Exclusive:** RESP 3310

**RESP 3420 Clinical Education in Neonatal Care 5 cr**

This course enables students to critically apply skills and concepts in the care of infants requiring critical respiratory care in the Labor & Delivery, and Neonatal units of the hospitals. The focus is on attainment of essential Respiratory Therapy competencies for practice. This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not hold with the former RESP 3330.

**Mutually Exclusive:** RESP 3330

**RESP 3430 Clinical Education in General Therapeutics 6 cr**

This course enables students to critically apply skills and concepts in the care of adult patients requiring general respiratory care (non-critical care) in the hospital setting. The focus is on attainment of essential Respiratory Therapy competencies for practice. This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not hold with the former RESP 3380.

**Mutually Exclusive:** RESP 3380

**RESP 3440 Current Topics in Respiratory Therapy 6 cr**

Focuses on current issues in health and healthcare, in particular as they relate to respiratory therapy. Students complete a thorough review of the current evidence for practice and ongoing research relating to a topic of interest, and present their findings in a professional forum. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. Not to be held with the former RESP 3300.

**Mutually Exclusive:** RESP 3300

## Restorative Dentistry (RSTD)

### RSTD 1500 Dental Materials 1 2 cr

This course introduces the materials commonly used in dental practice. Composition, chemistry, properties, manipulation and manipulative variables are covered by lecture, laboratory exercises and demonstrations. May not be held with RSTD 1070.

**Mutually Exclusive:** RSTD 1070

### RSTD 1512 Operative Dentistry 1 6 cr

A lecture and laboratory course introducing the fundamentals of operative dentistry. Lectures and laboratory exercises in the principles of cavity preparation, utilization of rotary and hand instruments and manipulation, placement and finishing of restorative materials are presented. May not be held with RSTD 1100.

**Equiv To:** RSTD 1100

### RSTD 1520 Dental Anatomy 3 cr

A lecture and laboratory/seminar course introducing dental terminology, tooth identification, dental morphology and concepts of dental anatomy as it relates to the intraoral functional relationship. May not be held with RSTD 1110.

**Mutually Exclusive:** RSTD 1110

### RSTD 1530 Occlusion 2 cr

A lecture and laboratory course designed to introduce the student to the concepts of dental occlusion and the relationship between the anatomy of the teeth and the TMJ. May not be held with RSTD 1110.

**Mutually Exclusive:** RSTD 1110

### RSTD 1550 Introduction to Dentistry 2 cr

A series of lectures and seminars which introduce the student to the profession, its structure and governance. Professionalism, dental ethics and communication skills are also introduced. May not be held with RSTD 1120 or RSTD 1540. Course evaluated on a pass/fail basis.

**Equiv To:** RSTD 1120

**Mutually Exclusive:** RSTD 1120, RSTD 1540

### RSTD 2502 Dental Materials-2 2 cr

This course develops a scientific basis for the selection, application, manipulation and clinical performance of dental materials. The relationship between the properties of a material and its manipulation, application and clinical behaviour is developed. May not be held with RSTD 2020.

**Mutually Exclusive:** RSTD 2020

### RSTD 2510 Operative Dentistry-2 3 cr

A lecture and laboratory course presenting modern and advanced techniques in tooth restoration. Composite resins, adhesion to tooth structure, esthetic restorations and protection of tooth vitality. Introduction to clinical treatment modalities and treatment priorities. May not be held with RSTD 2050.

**Mutually Exclusive:** RSTD 2050

### RSTD 2520 Endodontology-1 2 cr

Introduction to root canal therapy as a clinical practice, pulp and periapical pathology. The majority of the teaching is directed at the understanding and actual performance of practical endodontic techniques, performed in the laboratory setting on mannequins using extracted human teeth. May not be held with RSTD 2060.

**Mutually Exclusive:** RSTD 2060

### RSTD 2532 Fixed Prosthodontics 1 6 cr

This course is designed to review the fundamentals of fixed prosthodontic restorative techniques in conjunction with laboratory exercises involving tooth preparation, waxing, and fabrication of metal and ceramic restorations. Both conventional laboratory techniques and contemporary digital technology are introduced to closely reflect contemporary dental practice. May not be held with the former RSTD 2140.

**Equiv To:** RSTD 2140

### RSTD 2540 Removable Partial Denture Prosthodontics 3 cr

The didactic portion of this course presents the principles for the treatment of partially edentulous patients. The procedures and techniques founded on the basic principles make up the laboratory exposure. May not be held with RSTD 2220.

**Mutually Exclusive:** RSTD 2220

### RSTD 2552 Complete Denture Prosthodontics 4 cr

The didactic portion of this course presents the principles for the treatment of edentulous patients. Emphasis is placed on techniques of treatment in the laboratory component. May not be held with RSTD 2230.

**Mutually Exclusive:** RSTD 2230

### RSTD 3512 Operative Dentistry 3 5 cr

A lecture and clinical course emphasizing diagnosis, treatment planning and the application of fundamental principles of operative and esthetic dentistry. Lectures and clinical treatments dealing with current restorative materials and techniques. My not be held with RSTD 3020.

**Mutually Exclusive:** RSTD 3020

### RSTD 3522 Endodontology 2 3 cr

This course emphasizes the rationale and biologic basis for the practical technique previously taught. Techniques are discussed in greater detail and are applied to treatment of patients. The second part of the course deals with pulp biology and periapical pathology to prepare the student for understanding the rationale behind pulpal protection, prevention and treatment of pulpal disease. Laboratory exercises are performed on more complex root canal systems in preparation for General Practice Clinic. May not be held with RSTD 3050.

**Mutually Exclusive:** RSTD 3050

### RSTD 3532 Fixed Prosthodontics 2 5 cr

An introduction to the clinical practice of fixed prosthodontic techniques. An emphasis is placed on diagnosis and treatment-planning. Clinical exposure is supplemented by lecture materials. May not be held with RSTD 3040.

**Mutually Exclusive:** RSTD 3040

### RSTD 3542 Complete and Removable Partial Denture Prosthodontics 3 cr

This course consists of a series of lectures and clinics. Theories of applied prosthodontics are discussed and applications of this knowledge are made concurrently through the clinical treatment of patients. May not be held with RSTD 3090.

**Mutually Exclusive:** RSTD 3090

## RRC/UM American Sign Language (ASL)

ASL 1100 RRC (AER-2001) ADV SL 3 cr

ASL 1200 RRC (AER-1001) LP ENG 3 cr

ASL 1210 RRC (AER-1003) Lp ASL 3 cr

ASL 1300 RRC (AER-1005) ENGC & E 3 cr

ASL 2100 RRC (AER-2006) INTRP 1 6 cr

ASL 2200 RRC (AER-1002) X - LP 3 cr

ASL 2300 RRC (AER-2003) ETHIC 1 3 cr

ASL 2310 RRC (AER-2005) ETHIC 2 3 cr

ASL 3100 RRC (AER-2005) Intrap 2 3 cr

## Russian (Slavic Studies) (RUSN)

### RUSN 1300 Introductory Russian 6 cr

(Lab required) Three hours of lectures plus one hour of lab per week. Basic grammar, conversation and reading with emphasis on communication skills. Cultural content is introduced through a range of audio-visual materials. Not open to native speakers and students with high school Russian 41G credit. Students may not hold credit for both RUSN 1300 and RUSN 1330.

**Mutually Exclusive:** RUSN 1330

**Attributes:** Humanities, Recommended Intro Courses

### RUSN 1330 Introductory Russian 2 3 cr

(Lab required) Three hours of lectures plus one hour of lab per week. Intended for students who have already a knowledge of the alphabet and the sound system, as well as elementary comprehension, communication and writing skills equivalent to those that would be achieved in the first term of RUSN 1300. Students may not hold credit for both RUSN 1330 and RUSN 1300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: successful completion of a placement test administered by the department.

**Mutually Exclusive:** RUSN 1300

**Attributes:** Humanities, Recommended Intro Courses

### RUSN 1400 Masterpieces of Russian Literature in Translation 3 cr

An introduction to representative works by major Russian writers, with emphasis on key paradigms in literary and socio-political thinking in Russia. Early 19th century to the present. The course is designed for students who have little or no prior knowledge of Russian literature. Lectures and readings in English. Students may not hold credit for both RUSN 1400 and the former RUSN 2770.

**Equiv To:** RUSN 2770

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

### RUSN 1410 Love in Russian Culture in English Translation 3 cr

An introduction to the discourse of love in Russian culture from the Middle Ages to the present. The course explores different meanings of love (spiritual, erotic, romantic, same-sex, familial) in Russian culture by means of examining a variety of portrayals of the interactions of love, sex, religion, and politics in literature and other cultural forms. The course is designed for students who have little or no prior knowledge of Russian culture. Language of instruction: English.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

### RUSN 2280 Russian Culture until 1900 3 cr

A survey of the Russian cultural heritage from the pre-Christian era to the end of the nineteenth century. Mythology, the arts and literature. Lectures in English. Readings are available in both English translation and in the original.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

### RUSN 2290 Russian Culture from 1900 to the Present 3 cr

Russian culture from the end of the 19th century to the present day. Major developments in Russian art, film and literature. Readings are available in both English translation and in the original.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

### RUSN 2310 Exploring Russia through Film 3 cr

A survey of Russian cinema from its origins to the present. The course focuses on the role of film in Russian culture, ideological uses of film, and cinema as a medium of cultural dissent and witness to social change.

Lectures in English; all films are in Russian with English subtitles; no prior knowledge of Russian language or culture is required.

**Attributes:** Humanities, Written English Requirement

### RUSN 2410 Russian Literature after Stalin 3 cr

A survey of Russian literature from the period of High Stalinism to the present. The course examines effects of ideological and political change on literary production. Lectures in English. Readings in English or in the original.

**Attributes:** Humanities, Written English Requirement

### RUSN 2600 Special Topics in Russian Culture in English Translation 3 cr

Language of Instruction: English. Topics dealing with Russian culture. The course content may vary. Students may earn multiple credits for this course only when the course subtitle is different.

**Attributes:** Humanities, Written English Requirement

### RUSN 2630 Russian Language Seminar Abroad 3 cr

The study of Russian language, literature and culture at an intensive language school in Eastern Europe. Designed for students aiming at near-native fluency.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RUSN 1300 or RUSN 1330] and written consent of department head.

**Attributes:** Humanities

### RUSN 2740 Literature and Revolution 3 cr

Responses to the 1917 Revolution, focusing on writers of the twenties. Mayakovsky, Kollontai, Babel, Olesha, Zamyatin, Pilnyak, Bulgakov. References to art, cinema and cultural politics of the period. Lectures in English.

**Attributes:** Humanities, Written English Requirement

### RUSN 2810 Intermediate Russian 6 cr

Grammar review, conversation, translation and reading of selected texts. Development of communication skills through practical exercises. Cultural content is introduced through use of audio-visual and internet materials. Students may not hold credit for both RUSN 2810 and RUSN 2820.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RUSN 1300 or RUSN 1330] or [Russian 41G] or written consent of department head.

**Mutually Exclusive:** RUSN 2820

**Attributes:** Humanities, Recommended Intro Courses



**RUSN 2820 Intermediate Russian 2 3 cr**

Intended for students who already have basic comprehension, communication and writing skills equivalent to those that would be achieved in the first term of RUSN 2810. Students may not hold credit for both RUSN 2820 and RUSN 2810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: successful completion of a placement test administered by the department.

**Mutually Exclusive:** RUSN 2810

**Attributes:** Humanities, Recommended Intro Courses

**RUSN 2830 Special Topics in Russian 3 cr**

A study of the Russian language through listening, reading, writing, and conversation, with a strong cultural component. The content of this course will vary from year to year, depending on the needs and interests of the students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [RUSN 1300 or RUSN 1330 or RUSN 2810 or RUSN 2820] or written consent of department head.

**Attributes:** Humanities

**RUSN 3100 Advanced Russian Grammar and Conversation 3 cr**

Advanced speaking, composition, translation, and reading through a study of selected literary and other texts. Development of overall communication skills. Students may not hold credit for both RUSN 3100 and the former RUSN 3200 or the former RUSN 3930.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: RUSN 2810 or RUSN 2820 or written consent of department head.

**Equiv To:** RUSN 3200, RUSN 3930

**Attributes:** Humanities

**RUSN 3110 Advanced Russian Through Film 3 cr**

Advanced composition, translation, reading, and speaking through a study of selected films. Development of overall communication skills. Students may not hold credit for both RUSN 3110 and any of: the former RUSN 3210, the former RUSN 3930, or the former RUSN 3940.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: RUSN 2810 or RUSN 2820 or written consent of department head.

**Equiv To:** RUSN 3210, RUSN 3940

**Mutually Exclusive:** RUSN 3930

**Attributes:** Humanities

**RUSN 3220 Selected Topics in Russian 3 cr**

Language of instruction: Russian. Advanced study of the Russian language through reading and analysis of literary or/and non-fictional texts including academic writing. The content of this course will vary from year to year, depending on the needs and interests of instructors and students. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: RUSN 2810 or RUSN 2820 or written consent of department head.

**Attributes:** Humanities

**RUSN 3330 Chekhov 3 cr**

The study of selected short stories and plays. Lectures in English. Readings are available in both Russian and English translation.

**Attributes:** Humanities

**RUSN 3580 Russian Poetry 3 cr**

Language of instruction: Russian. A study of major Russian poetry from the 19th to 21st century, including works by Pushkin, Lermontov, Tiutchev, Fet, Blok, Mayakovsky, Akhmatova, Esenin, Evtushenko, Gandlevsky, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: RUSN 2810 or RUSN 2820 or written consent of department head.

**Attributes:** Humanities

**RUSN 3630 Russian Politics, Government, and Society 3 cr**

Language of instruction: English. Survey of contemporary Russia that explores the social, cultural and economic factors shaping its domestic politics and foreign policy. Analyses Russia's transformation after the collapse of the Soviet Union, citizenship and social agency, Russian identity formation in a multi-ethnic and multi-confessional state, and Russia's complex relationships with its neighbours and former Cold War foes. Students may not hold credit for both RUSN 3630 and POLS 3630.

**Equiv To:** POLS 3630

**Attributes:** Humanities

**RUSN 3770 Tolstoy 3 cr**

A study of the novelist that focuses on the development of the aesthetic views and intellectual biography. Representative works from his early, middle and late period will be selected for analysis. Lectures in English. Readings in the original or in English.

**Attributes:** Humanities, Written English Requirement

**RUSN 3780 Dostoevsky 3 cr**

A study that focuses on the writer's art, in particular on his development of the polyphonic novel. Lectures in English. Readings in the original or in English.

**Attributes:** Humanities

**RUSN 3790 Special Studies 3 cr**

The content of this course will vary from year to year, depending on the needs and interests of instructors and students. A description of the course is available in advance at the department office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 21 credit hours of courses at the 1000-level or above] or written consent of department head.

**Attributes:** Humanities

**RUSN 3900 Tolstoy's War and Peace 3 cr**

This writer's art, view of history and human nature. References to film versions. Lectures in English. Readings in the original or in English.

**Attributes:** Humanities

**RUSN 4620 Selected Topics 1 3 cr**

A program of independent reading and/or research on selected topics to 1900, undertaken by a student in consultation with his or her prospective instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

## Science Interdisciplinary (SCI)

### SCI 1000 Topics in Science 1 3 cr

Topics of current interest in the Faculty of Science. Offerings will be based on the interests and requirements of students and faculty and will include interdisciplinary topics not available in regular course offerings. This course may be used to satisfy a Science elective. This course is a Topics course and may be completed multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the instructor.

**Attributes:** Science

### SCI 1002 Topics in Science 1 with Laboratories 3 cr

(Lab required) Topics of current interest in the Faculty of Science. Offerings will be based on the interests and requirements of students and faculty, and will include interdisciplinary topics not available in regular course offerings. This course may be used to satisfy a Science elective. This course is a Topics course and may be completed multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the instructor.

**Attributes:** Science

### SCI 2000 Topics in Science 2 3 cr

Topics of current interest in the Faculty of Science. Offerings will be based on the interests and requirements of students and faculty and will include interdisciplinary topics not available in regular course offerings. This course may be used to satisfy a Science elective. This course is a Topics course and may be completed multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the instructor.

**Attributes:** Science

### SCI 2002 Topics in Science 2 with Laboratories 3 cr

(Lab required) Topics of current interest in the Faculty of Science. Offerings will be based on the interests and requirements of students and faculty, and will include interdisciplinary topics not available in regular course offerings. This course may be used to satisfy a Science elective. This course is a Topics course and may be completed multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the instructor.

**Attributes:** Science

### SCI 3000 Topics in Science 3 3 cr

Topics of current interest in the Faculty of Science. Offerings will be based on the interests and requirements of students and faculty and will include interdisciplinary topics not available in regular course offerings. This course may be used to satisfy a Science elective. This course is a Topics course and may be completed multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the instructor.

**Attributes:** Science

### SCI 3002 Topics in Science 3 with Laboratories 3 cr

(Lab required) Topics of current interest in the Faculty of Science. Offerings will be based on the interests and requirements of students and faculty, and will include interdisciplinary topics not available in regular course offerings. This course may be used to satisfy a Science elective. This course is a Topics course and may be completed multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the instructor.

**Attributes:** Science

### SCI 3980 Co-operative Education Work Term 1 0 cr

Supervised work experience with an approved employer for a minimum of 12 weeks full-time. Restricted to students admitted to the Honours or Major Co-operative Education Option in the Faculty of Science. Completion of co-op pre-employment workshops required. Final work term report required. (Pass/Fail grade only).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written permission from the Faculty of Science Co-operative Education Office.

**Attributes:** Science

### SCI 3990 Co-operative Education Work Term 2 0 cr

Supervised work experience with an approved employer for a minimum of 12 weeks full-time. Restricted to students admitted to the Honours or Major Co-operative Education Option in the Faculty of Science. Final work term report required. (Pass/Fail grade only).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SCI 3980 (P) or equivalent and written permission from the Faculty of Science Co-operative Education Office.

**Attributes:** Science

### SCI 4000 Topics in Science 4 3 cr

Topics of current interest in the Faculty of Science. Offerings will be based on the interests and requirements of students and faculty and will include interdisciplinary topics not available in regular course offerings. This course may be used to satisfy a Science elective. This course is a Topics course and may be completed multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the instructor.

**Attributes:** Science

### SCI 4100 The Art of Scientific Visualization 3 cr

This interdisciplinary course encourages students from disciplines across the University to use techniques from the visual arts to create high-impact visualizations of research data. Topics include data representations and visual analytics; human perception, composition, colour theory and practice; communicating with the public; and science's current impact in the art realm. A hands-on workshop format will be the main mode of learning how to incorporate perception-based design principles into static digital images and dynamic computer interactives. This course is intended for upper year undergraduates interested in scientific visualization. May not be held with SCI 4000 when the topic was The Art of Scientific Visualization.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Completion of 90 credit hours of university-level coursework or permission from the instructor.

**Attributes:** Science

### SCI 4980 Co-operative Education Work Term 3 0 cr

Supervised work experience with an approved employer for a minimum of 12 weeks full-time. Restricted to students admitted to the Honours or Major Co-operative Education Option in the Faculty of Science. Final work term report required. (Pass/Fail grade only).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SCI 3990 (P) or equivalent and written permission from the Faculty of Science Co-operative Education Office.

**Attributes:** Science

**SCI 4990 Co-operative Education Work Term 4 0 cr**

Supervised work experience with an approved employer for a minimum of 12 weeks full-time. Restricted to students admitted to the Honours or Major Co-operative Education Option in the Faculty of Science. Final work term report required. (Pass/Fail grade only.)

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SCI 4980 (P) or equivalent and written permission from the Faculty of Science Co-operative Education Office.

**Attributes:** Science

## Slavic Studies (Pol,Rusn,Ukrn) (SLAV)

**SLAV 3530 Special Topics in Comparative German and Slavic Studies 3 cr**

Language of instruction: English. Topics comparing German and Slavic – Ukrainian, Russian, Polish – literatures and cultures. Course is co-taught by a member from the German and one from the Slavic Section. Course content will vary from year to year depending on interests and needs of students and staff. Possible Topics include Memory of World War II, Cold War and Post-Cold War, and Modernism. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Students may not hold credit for both SLAV 3530 and GRMN 3530 when topic is the same.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of university level coursework] or written consent of department head.

**Attributes:** Humanities, Written English Requirement

**SLAV 3920 Gogol 3 cr**

A study of the author's major fiction and his influence on Russian and Ukrainian cultures and identity politics.

**Attributes:** Humanities

## Social Work (SWRK)

**SWRK 1310 Introduction to Social Welfare Policy Analysis 3 cr**

Examination of social welfare policy as the end product of ideologies. Introduction of elements of ideology and the comparison of competing ideological systems. The relationship of economic, political and ethical views of society and their manifestations in societal responses to human need and social services.

**Equiv To:** SWRK 1311

**Mutually Exclusive:** SWRK 2113

**Attributes:** Recommended Intro Courses

**SWRK 2050 Community and Organizational Theory 3 cr**

Deals with concepts such as conflict and power which relate social work practice to the nature of secondary human relationships. These are applied to the dynamics within and between communities and organizations.

**Mutually Exclusive:** SWRK 2053

**SWRK 2070 Small Group Dynamics 3 cr**

Group norms, values, and goal as they relate to decision-making and communication patterns in groups. Membership roles and leadership styles are related to group development and group functioning.

**Mutually Exclusive:** SWRK 2073

**SWRK 2080 Interpersonal Communication Skills 3 cr**

A basic core of interpersonal skills for communicating effectively and for establishing and maintaining relationships in one-to-one and group situations. Emphasis is on experiential learning using a variety of techniques.

**Equiv To:** SWRK 2081

**Attributes:** Recommended Intro Courses

**SWRK 2090 Human Behaviour and Social Work Practice 6 cr**

Students are introduced to a broad range of theories and will develop an understanding of how people and environments reciprocally affect each other. Particular emphasis is placed on understanding how gender, race, ethnicity, socioeconomic factors, age, ability, and sexual orientation contribute to and influence human behaviour throughout the lifespan.

**Mutually Exclusive:** SWRK 2093

**SWRK 2110 Emergence of the Canadian Social Welfare State 3 cr**

An examination of the emergence of the Canadian welfare state from its various colonial inheritances to the Canada Assistance Plan. Social, political, economic, religious, geographical, demographic and cataclysmic factors influencing the development of the welfare state are examined and analyzed. Students may not hold credit for both SWRK 2110.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SWRK 1310.

**Equiv To:** SWRK 2111

**Mutually Exclusive:** SWRK 1313

**SWRK 2130 Comparative Social Welfare Systems 3 cr**

The welfare systems of three modern societies are examined and compared. Economic, political, social, religious, geographical, demographic and cataclysmic factors influencing the development of the various models of social provision are analyzed for their significance to the Canadian welfare system. Students may not hold credit for both SWRK 2130.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SWRK 1310.

**SWRK 2650 The Social Aspects of Aging 3 cr**

An examination of the social aspects of aging. Emphasis on understanding the aging process as a life transition involving adaptation through interaction with social and physical environments. May not be held with FMLY 2650 or the former HMEC 2650 or REC 2650 or SWRK 2651. (A required Option in Aging course.)

**Equiv To:** FMLY 2650, HMEC 2650, IDES 2650, REC 2650, SWRK 2651

**SWRK 3100 Systematic Inquiry in Social Work 3 cr**

Relates systematic methods of scientific inquiry to social work practice; theory building for practice; information collection; descriptive data for decision-making, understanding technical research material, introduction to issues of research design.

**Mutually Exclusive:** SWRK 3103

**SWRK 3130 Contemporary Canadian Social Welfare 3 cr**

An examination of social welfare in Canadian society, leading to an evaluation of present approaches in the light of changing economic and social conditions and changing needs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SWRK 1310. Students may not hold credit for both SWRK 3130.

**Equiv To:** SWRK 3131

**SWRK 3140 Introduction to Social Work Practice 3 cr**

Introduces students to ecological and other generalist based practice frameworks and the role of professional social workers. Course emphasizes values and knowledge in context of a rational approach to problem solving which includes problem definition, assessment, contracting, intervention and evaluation. Pre- or corequisite SWRK 1310, SWRK 2080 and SWRK 2090.

**Equiv To:** SWRK 3141

**SWRK 3150 Field Instruction 1 12 cr**

(Seminar Required) A first educationally directed field experience in which the student will have the opportunity to assume responsibility for social work engagement, assessment, planning, intervention and evaluation, integrating theory from class. As well as scheduled integrative seminar activities led by university instructors that facilitate the integration of knowledge, values and skills gained from other SWRK courses, past experiences, and field placements. The course includes involvement with the agency in planning for, and engaging in, practice activity, and evaluation of performance, Graded as pass/fail. May not be held with SWRK 3151, SWRK 3152, SWRK 3220, SWRK 3240, or SWRK 3250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SWRK 1240 (or the former SWRK 3140), SWRK 1310, SWRK 2030 (or the former SWRK 2080), SWRK 2090, and consent of course instructor (Field Coordinator).

**Equiv To:** SWRK 3151

**SWRK 3152 Prior Learning Assessment and Recognition of Field Practice 12 cr**

PLAR is a self-study course in which the student (upon acceptance) will have the opportunity to demonstrate basic knowledge as required of all students in first field placement. Students will be required to demonstrate learning in social work engagement, assessment, planning, intervention and evaluation, as well as integration of values and ethics and theoretical frameworks as attained in prerequisite foundation courses. Applicants who have been accepted and register in SWRK 3152 in lieu of first field placement, SWRK 3150, will be required to complete workbook assignments on or before designated due dates and to contact the PLAR Assessor when additional classification or support is required. Graded as pass/fail. May not be held with SWRK 3152, SWRK 3220, SWRK 3240, or SWRK 3250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SWRK 1240 (or the former SWRK 3140), SWRK 1310, SWRK 2030 (or the former SWRK 2080), SWRK 2090, and consent of course instructor (Field Coordinator).

**Equiv To:** SWRK 3150

**SWRK 4050 Selected Topics in Social Work 3 cr**

Directed readings or concentrated study in some aspect of social service which is of interest to the student. Students must contract with an instructor prior to registration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**SWRK 4070 Social Problem and Social Work Practice Seminar 3 cr**

In-depth study of the problem area, exploration of the ways other disciplines relate to the problem, and strengthening of interventive abilities of the student.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SWRK 3040 / SWRK 3120, SWRK 4200 / SWRK 3150 or written consent of instructor.

**Equiv To:** SWRK 4071

**SWRK 4080 Current Issues in Social Welfare 3 cr**

Study of a particular area of social welfare to improve policies and practices. Students may select one seminar from several which are offered. These may vary from year to year.

**SWRK 4120 Field Instruction 2 12 cr**

A second educationally directed practice experience building on SWRK 3150 in which the student will have the opportunity to carry a sustained professional role in situations which require the integration of values, knowledge, and skill at the level of a beginning professional practitioner. While Access Programs may require additional field hours, 420 hours is the minimum required for all BSW students. This time commitment includes involvement with the agency in planning for, and engaging in, practice activity, and evaluation of performance. It also includes educational contact time with the field instructor in individual and/or group sessions. Subject to satisfactory completion and reports, students will be graded on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: 6 credit hours of SWRK 4200, and SWRK 3150, and consent by course instructor (Field Coordinator). Corequisite: 6 credit hours or SWRK 4300.

**Equiv To:** SWRK 4121

**SWRK 4130 Advanced Interpersonal Communication Skills 3 cr**

An experiential course for self-understanding and self-awareness to produce a disciplined and conscious use of self in professional communication and relationships.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SWRK 2080 and written consent of instructor.

**SWRK 4200 Field Focus of Social Work Practice 6 cr**

A seminar for the critical examination of social work theory, values, policy and skills in the context of a field or focus of practice. The course integrates policy with practice at micro, meso and macro levels. Course seminar topics may vary from year to year and are organized to cover various fields or focus of practice. Students cannot hold credit for both SWRK 4150 and SWRK 4200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SWRK 1310, SWRK 2080, SWRK 2090, and SWRK 3140. Co-requisite: SWRK 3150.

**SWRK 4210 Feminist Perspectives on Social Work Practice and Social Welfare Policy 6 cr**

An analysis of social work practice and welfare policy from a feminist perspective. Course emphasizes the integration of social work intervention with policy in the social welfare context and overlays concepts such as empowerment, ecological practice, oppression, and practice in context of cultural diversity. Students may not hold credit for both SWRK 4210 and SWRK 4170 or SWRK 4210 and SWRK 4190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SWRK 1310, SWRK 2080, SWRK 2090, and SWRK 3140.

**Mutually Exclusive:** SWRK 4213

**SWRK 4220 Aboriginal People and Social Work Practice 6 cr**

An analysis of social work practice and welfare policy from an aboriginal perspective. The course emphasizes the linkage between practice and policy and overlays concepts such as colonization, decolonization, and approaches to practices which include cross culture, structure, and anti-oppression in the context of Aboriginal world views, experience and helping practices. Students may not hold credit for both SWRK 4220 and SWRK 4160 or SWRK 4220 and SWRK 4180.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SWRK 1310, SWRK 2080, SWRK 2090, and SWRK 3140.

**Equiv To:** SWRK 4221

**SWRK 4250 Family Group Conferences 3 cr**

This course provides an overview of the research, theory and application of Family Group Conferencing within the context of child and family services and the implications for intervention. Emphasis is on experiential learning of Family Group Conferencing process and techniques.

**SWRK 4260 Addiction and CFS Practice 3 cr**

The focus of this course is to increase the student's knowledge about addictions as well as to develop student's skills for intervention with families affected by addiction within the context of child and family services. Emphasis is on experiential learning of knowledge, process and techniques.

**SWRK 4270 Crisis Intervention 3 cr**

This course provides an overview of the research, theory and application of crisis intervention, methods and techniques within the context of child and family services. Emphasis will be on expanding existing knowledge through experiential learning of crisis intervention processes and techniques.

**SWRK 4300 Field Focus of Social Work Practice 2 1-6 cr**

A seminar for the critical examination of social work theory, values, policy and skills in the context of a field or focus of practice. The course integrates policy with practice at micro, meso and macro levels. Course seminar topics may vary from year to year and are organized to cover various fields or focus of practice. For students admitted after 1993-1994 and before 2023-2024. May not be held with SWRK 4303.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SWRK 3150.

**Mutually Exclusive:** SWRK 4303

## Sociology (SOC)

**SOC 1000 Introduction to Sociology 3 cr**

Sociology is the systematic study of society. It is the study of people and how they interact with each other and social groups. Topics include (but are not limited to): culture, socialization, race and ethnicity, social stratification, gender and sexuality, social inequality, globalization, the environment, crime and deviance, and health. Students may not hold credit for SOC 1000 and any of: SOC 1211 or SOC 1221 or the former SOC 1200 or the former SOC 1201.

**Mutually Exclusive:** SOC 1200, SOC 1201, SOC 1211, SOC 1221

**Attributes:** Social Science, Recommended Intro Courses

**SOC 2004 Contemporary Sociological Theory 3 cr****SOC 2010 Critical Issues in Sociology 3 cr**

A form-specific, content variable course especially designed for Honours students. The intent of this course is to develop critical thinking and improve students' oral, writing and research skills. It is also designed to facilitate the creation of a cohesive cohort of Honours students through the use of group work and assignments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**SOC 2200 Sociology Through Film 3 cr**

Using film as a method, this course will be organized around the broad themes of social inequality and social justice. It will engage in a critical sociological analysis of issues such as health and well-being, poverty, genocide and violence, globalization and consumer culture.

**Attributes:** Social Science

**SOC 2220 Sociological Theoretical Foundations 3 cr**

A review of classical sociological theory. The focus will be on the central figures and schools of thought in Sociology. Students may not hold credit for both SOC 2220 and SOC 2221.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 2221

**Attributes:** Social Science

**SOC 2240 Sociology of Globalization 3 cr**

Explores various sociological theories of globalization, stratification, local-global linkages, transnational social movements, and migration, in order to grasp what globalization is, its extent, its driving forces, and its effects. Students may not hold credit for both SOC 2240 and SOC 3460 when titled "Sociology of Globalization."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 2260 Cities and Urban Life 3 cr**

A consideration of the social, cultural and urban processes and their relationship to urban life, with an emphasis on urban experience, sociality, and social inequality. Students may not hold credit for SOC 2260 and any of: SOC 2261 or the former SOC 2270 or the former SOC 2271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 2261, SOC 2270, SOC 2271

**Attributes:** Social Science

**SOC 2292 Understanding Social Research 3 cr**

An overview of the tools social scientists employ to understand, interpret, critique, and conduct research in the social world. Topics include the production of knowledge, the research process, ethical considerations, conceptualization of research problems, measurement, and popular qualitative and quantitative methodologies. Students may not hold credit for SOC 2292 and any of: SOC 2013, ANTH 2013, the former SOC 2290, or the former SOC 2291.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** ANTH 2013, SOC 2013

**Mutually Exclusive:** SOC 2290, SOC 2291

**Attributes:** Social Science

**SOC 2294 Understanding Social Statistics 3 cr**

Focus is on the various statistical procedures sociologists use when analyzing quantitative data. The course introduces students to basic statistical computations and analyses in order to develop an awareness of statistics in social research. Concentration is on what, when and how to apply and interpret relevant statistical techniques in order to answer specific research questions. Students may not hold credit for SOC 2294 and any of: the former SOC 2290 or the former SOC 2291.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SOC 2292 or SOC 2013 or ANTH 2013.

**Mutually Exclusive:** SOC 2290, SOC 2291

**Attributes:** Mathematics Requirement, Social Science

**SOC 2304 The Sociology of Disability 3 cr**

**SOC 2310 Selected Social Problems 3 cr**

An examination of one or more contemporary social problems, other than crime and delinquency. Issues that might be addressed include poverty, war, environment, licit and illicit drugs, and death and dying. Consult the Registration Guide or contact the instructor for specific content in any particular academic year. Students may not hold credit for both SOC 2310 and SOC 2311.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [both SOC 1211 and SOC 1221]. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Equiv To:** SOC 2311

**Attributes:** Social Science

**SOC 2320 Canadian Society and Culture 3 cr**

A sociological analysis of Canadian institutions with reference to historical, cultural, economic, and political perspectives. Students may not hold credit for both SOC 2320 and SOC 2321.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 2321

**Attributes:** Social Science

**SOC 2330 Social Psychology in Sociological Perspective 3 cr**

The course examines the interrelations of the individual, the group, and society, with emphasis on interaction as the process that gives form, direction, and meaning to the everyday lives of people. Topics to be discussed may include: self-esteem, identity, impression management, motivation and emotion. Students may not hold credit for both SOC 2330 and SOC 2331.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 2331

**Attributes:** Social Science

**SOC 2350 Collective Behaviour 3 cr**

The analysis of various forms of collective behaviour, such as crowds, mobs, and social movements. The underlying social conditions, action processes, and consequences of such behaviour will be considered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 2360 Small Group Interaction 3 cr**

The basic sociological concepts and methods used in analyzing and designing small groups such as the family, children's groups, work groups, and friendship groups.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221]. SOC 2330 or SOC 2331 is recommended.

**Attributes:** Social Science

**SOC 2370 Ethnic Relations 3 cr**

Introduction to the social and social psychological aspects of ethnic relations in Canada. Students may not hold credit for both SOC 2370 and SOC 2371.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 2371

**Attributes:** Social Science

**SOC 2380 Sociology of Religion 3 cr**

A study of the nature and function of religion as a social institution with emphasis on early theorists, primitive religions, belief systems, and typologies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 2390 Social Organization 3 cr**

The process of ordering social life and the structures that result. Power, conflict, social control, bureaucracy, industrialization, urbanization, and centralization. Students may not hold credit for both SOC 2390 and SOC 2391.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 2391

**Attributes:** Social Science

**SOC 2450 Sociology of the Body 3 cr**

Despite its centrality in social life, the human body is too often taken for granted. This course explores a variety of sociological perspectives on the socially constructed nature of bodies to understand how society and social relations both shape and are shaped by the human body.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 2460 The Family 3 cr**

A sociological analysis of the various family arrangements and practices in contemporary societies and their historical roots. An examination of the relationships between family and other institutions in the context of widespread social changes. Students may not hold credit for both SOC 2460 and SOC 2461.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 2461

**Attributes:** Social Science

**SOC 2480 Population Problems 3 cr**

A survey of the impact of population growth, contraction, density and distribution on the social, political and economic institutions of developing and developed societies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 2490 Sociology of Health and Illness 3 cr**

A general introduction to health sociology. The course examines health and illness as social concepts by exploring the personal and structural determinants of health status, and everyday health care practices in which people engage to maintain their health and to manage illness.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 2510 Criminology 3 cr**

A general introduction to theories of deviant behaviour and criminology. The explanation of crime with reference to physical, psychological, and social factors. Students may not hold credit for both SOC 2510 and SOC 2511.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 2511

**Attributes:** Social Science

**SOC 2610 Sociology of Criminal Justice and Corrections 3 cr**

The sociological study of the criminal justice system, including the police, the courts, prisons and other correctional agencies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a grade of "C" or better in SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 2620 The Sociology of Aging 3 cr**

This course explores sociological approaches to the study of age-related phenomena and processes, and aging societies, with a focus on Canadian issues. Associations will be drawn between individual aging experiences and outcomes, and broader political, economic, sociocultural, demographic and historical contexts (including globalization). Strategies to promote the social inclusion of older adults and reduce age-based social inequalities will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 2630 Social Change 3 cr**

Major trends of social changes in society, revolutionary and evolutionary change; problems in the measurement and prediction of social change patterns, consequences and problems of future change.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 3100 Practicum in Criminological/Sociological Research 6 cr**

This course is designed to develop students' research skills and experience through placement in a criminal justice or other social service agency having a mandate relevant to the study of sociology or criminology. The course consists of supervised work within the agency and classroom instruction, culminating in the production of a research report. Enrolment is competitive and special advance permission is required to register. To be considered for admission, students must complete an application form (available from the Department of Sociology and Criminology website) by the last day of May preceding the Fall term in which the student intends to take the course. Students may not hold credit for both SOC 3100 and the former SOC 3760.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Equiv To:** SOC 3760

**Attributes:** Social Science, Written English Requirement

**SOC 3310 Theorizing Crime, Law, and Social Justice 3 cr**

Through investigation of a variety of theoretical approaches, this course fosters an appreciation of the relevance of theorizing for addressing contemporary issues related to crime, law, and social justice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 3330 Origins of Sociological Thought 3 cr**

A systematic introduction to sociological thought from ancient philosophy to the middle of the 19th century. Emphasis is placed on social thought that is to become the foundations of sociological theory. Students may not hold credit for both SOC 3330 and SOC 3331.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a grade of "C" or better in SOC 2220 or SOC 2221] or written consent of department head.

**Equiv To:** SOC 3331

**Attributes:** Social Science

**SOC 3350 Feminism and Sociological Theory 3 cr**

A critical examination of how gender has been addressed in classical and contemporary sociological theories, with consideration of how sociological inquiry is being transformed through feminist theory and practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2220 or SOC 2221] or written consent of department head.

**Attributes:** Social Science, Written English Requirement

**SOC 3360 Theories in Social Psychology 3 cr**

A review of the predominant theoretical perspectives currently utilized in social psychology in relation to contemporary sociological concerns.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2220 or SOC 2221] or written consent of department head.

**Attributes:** Social Science

**SOC 3370 Sociology of Work 3 cr**

An examination of work as a central aspect of human social life; its changing nature and content in response to technological, political, and social change; how work is organized and understood by employers and workers; its consequences for individuals, social institutions, and society. Students may not hold credit for SOC 3370 and either of SOC 3371 or LABR 3370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** LABR 3370, SOC 3371

**Mutually Exclusive:** LABR 3110

**Attributes:** Social Science

**SOC 3380 Power, Politics and the Welfare State 3 cr**

A critical evaluation of sociological theory and research focusing on power and politics in society. Topics covered include: the dimensions of power (economic, political, ideological), classes and class conflict, political socialization, the origin and nature of the state, and the welfare state. Students may not hold credit for SOC 3380 and any of: SOC 3471 or the former SOC 3470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221] or written consent of department head.

**Equiv To:** SOC 3470, SOC 3471

**Attributes:** Social Science

**SOC 3390 Contemporary Sociological Theory 3 cr**

A critical examination of contemporary theoretical perspectives and developments in sociology, highlighting the contributions of some major theorists. Course content may vary from year to year depending upon the instructor's interest. Students may not hold credit for both SOC 3390 and SOC 3391.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2220 or SOC 2221] or written consent of department head.

**Equiv To:** SOC 3391

**Attributes:** Social Science

**SOC 3400 Policing and Crime Prevention 3 cr**

The sociological study of the organization and operation of the police and the evidence-based prevention of crime. Topics include the history and role and functions of the police, police culture and socialization, strategies and tactics, police deviance and ethics, future policing trends, and methods of crime prevention. Students may not hold credit for both SOC 3400 and SOC 3740 with topic "Policing and Crime Prevention."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 3410 Critical Victimology 3 cr**

Through investigating a variety of theoretical perspectives, this course fosters an appreciation of forms of and factors leading to victimization and the experiences of victims in the criminal justice system. Students may not hold credit for both SOC 3410 and SOC 3740 when titled "Victims and the Criminal Justice System."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 3450 Sociological Perspectives on the Social Determinants of Health 3 cr**

This course will apply a sociological perspective to a critical and theoretically informed study of the social structures influencing personal and population health, including intersections of class, gender, ethnicity, and aging as sources of health inequities.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 3460 Selected Topics 3 cr**

The content of this course will vary from year to year, but will consist of a thorough sociological treatment of some topic of current interest. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 3540 The Sociology of Health Care Systems 3 cr**

An analysis of the social organization of formal and informal health care, including topics such as professionalism and health care, the nature of therapeutic relationships, institutional vs. community-based care, social reform and health care policy, medicine and the state, and emerging patterns of health care.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221]. SOC 2490 is recommended.

**Attributes:** Social Science

**SOC 3580 Media, Culture and Society 3 cr**

A consideration of the influence of media on contemporary society, analyzing the production, circulation and consumption of various media forms and their relationship to social life. Students may not hold credit for SOC 3580 and any of: SOC 3581 or the former SOC 3590 or the former SOC 3591.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221]. SOC 2330 or SOC 2331 is recommended.

**Equiv To:** SOC 3581, SOC 3590, SOC 3591

**Attributes:** Social Science

**SOC 3660 Sociology of Mental Disorder 3 cr**

A study of the social processes involved in becoming and being mentally ill. Topics such as the public imagery of madness, decision-making rules in psychiatry, life in the mental hospital, and community attitudes toward the mentally ill will be considered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221]. SOC 2490 is recommended.

**Attributes:** Social Science

**SOC 3700 Sociology of Law 3 cr**

The aim of this course is to gain an understanding of the law-society relationship. Different theoretical approaches will be used to investigate substantive issues that pertain to the role of law in (re)producing social inequalities and its potential for alleviating them.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 3710 Sociology of Criminal Careers 3 cr**

An examination of patterns of criminal behaviour focusing on the sociological aspects of selected offences, the criminal career of the offender, and on societal reaction and legal processing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 3720 The Criminal Law and Its Procedure 3 cr**

An introduction to the criminal law and an overview of the system by which the criminal law is administered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science



**SOC 3730 Society and Education 3 cr**

A critical examination of schools at all levels and the challenges they face. Issues such as, curriculum, classroom interaction, gender, race, class and equality of educational opportunities will be explored. The course should be useful to students interested in careers in education and counselling. Students may not hold credit for both SOC 3730 and SOC 3731.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 3731

**Attributes:** Social Science

**SOC 3740 Selected Topics in Criminology 3 cr**

The specific content of this course will vary, but in general it will consist of an examination of a specialized topics relevant to Criminology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Mutually Exclusive:** SOC 3762

**Attributes:** Social Science

**SOC 3750 Institutional Responses to Violence in Family and Intimate Relationships 3 cr**

This course will focus on the growing public awareness of the prevalence of interpersonal violence in Canada, examining studies of prevalence from victimization surveys and criminal justice statistics. We examine various criminological and sociological theories of the causes, dynamics and interventions in family and interpersonal violence, legislation and policy and assess these changes from the perspective of victims and accusers. Students may not hold credit for both SOC 3750 and SOC 3460 when titled "Interpersonal Violence and Institutional Responses."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOC 2510 or SOC 2511.

**Attributes:** Social Science

**SOC 3762 Law, Justice, and Indigenous Peoples 3 cr**

A critical examination of the complex and varied role that law has played, and continues to play, in regard to Indigenous peoples in the Canadian settler state context. The course straddles the divisions between criminal law, constitutional law, government legislation, transitional justice, as well as international legal norms. Students may not hold credit for both SOC 3762 and SOC 3740 when titled "Law, Justice and Indigenous Peoples".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Mutually Exclusive:** SOC 3740

**Attributes:** Social Science

**SOC 3770 Women, Health and Medicine 3 cr**

A systematic sociological analysis of women's participation in the health care system, as consumers as well as providers. Historical and contemporary health issues of women are explored, as are women's efforts to control their experiences and improve their well-being.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221]. SOC 2490 is recommended.

**Attributes:** Social Science

**SOC 3790 Women, Crime and Social Justice 3 cr**

The course examines gender differences in crime, theories of women's crime and the treatment of women offenders and victims by the criminal justice system.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 3810 Sociological Perspectives on Gender and Sexuality 3 cr**

An exploration of the relations between men and women in contemporary society. This course will use historical and cross-cultural standpoints to examine the social construction of gender and sexuality, and the ideological and material structures which (re)produce gender difference. Students may not hold credit for both SOC 3810 and SOC 3811.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 3811

**Attributes:** Social Science

**SOC 3820 Qualitative and Historical Methods in Sociology 3 cr**

An introduction to a variety of data gathering techniques such as participant observation, interviewing, life histories, archival research, document analysis, and the use of case studies. Emphasis will be placed on the use of inductive/deductive procedures in the transformation of raw data into theoretical interpretations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2292 or SOC 2291 or the former SOC 2290] or written consent of the department head.

**Attributes:** Social Science

**SOC 3830 Youth, Crime, and Society 3 cr**

An analysis of issues surrounding the treatment of children and youth in the Canadian criminal justice system. Topics include: historical changes in the role of children and youth; young offender legislation; young offenders and media; and current research on youth crime and its prevention in Canada and other countries.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 3838 Ecology and Society 3 cr**

Examines changing patterns of social organizations of civilizations, the resultant social constructions of the human/nature interface, the human social contribution to the global ecological crisis, and possible strategies to create sustainable societies. Consideration of topics such as population, consumption, capitalism, and agricultural practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 3840 Community and Social Reconstruction 3 cr**

An examination of the changing relationships between the global economic market, the declining resource base of the nation state, and the shift to local control within civil society. Topics may include: the central role of the household in civil society, the informal sector, local initiatives (e.g., co-housing, cooperative, land trusts), and community development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 3850 Restorative Justice 3 cr**

A general introduction to the social theory and practice of restorative justice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 2510 or SOC 2511] or written consent of department head.

**Attributes:** Social Science

**SOC 3860 Genocide, Crime and Society 3 cr**

A critical sociological and criminological examination of comparative genocide studies. Emphasis is placed on the utility of sociological and criminological theoretical frameworks for understanding and explaining genocide, as well as the conceptual and moral failings of criminology and sociology in the face of genocide. Students may not hold credit for both SOC 3860 and SOC 3740 when titled "Genocide."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Attributes:** Social Science

**SOC 3880 Global Criminology and Criminal Justice 3 cr**

This course examines current developments and issues in the field of global criminology and criminal justice. Topics include: crime and globalization; transnational policing and security; world criminal justice systems; global criminal justice policy transfer; and international criminal justice. Students may not hold credit for both SOC 3880 and the former SOC 3780.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a grade of "C" or better in SOC 2510 or SOC 2511] or written consent of department head. SOC 2610 is strongly recommended.

**Equiv To:** SOC 3780

**Attributes:** Social Science

**SOC 3890 Power and Inequality in Comparative Perspective 3 cr**

Engaging in a cross-temporal and cross-national investigation, this course critically surveys classical and contemporary debates around the inevitability of social inequality, and explores the ways that inequalities have been reproduced and rationalized, or attenuated and challenged, throughout human history. Key facets and indicators of inequality (such as poverty, homelessness, social exclusion and the distribution of income and wealth) and their relation to central axes of social inequality (class, gender, race/ethnicity and age) are considered. Put simply, this course is concerned with 'who gets what and why?' Students may not hold credit for SOC 3890 and any of: SOC 3871 or the former SOC 3870.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 1000 or the former SOC 1200 or the former SOC 1201] or [SOC 1211 and SOC 1221].

**Equiv To:** SOC 3870, SOC 3871

**Attributes:** Social Science

**SOC 4450 Honours Seminar 6 cr**

An intensive discussion of selected sociological problems, culminating in a major Honours thesis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**SOC 4460 Advanced Sociological Theory 3 cr**

A critical examination and analysis of sociological theories.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**SOC 4490 Advanced Seminar in Criminology 3 cr**

A critical examination of the field of criminology and the work of criminologists in shaping modern sensibilities about crime, law, and social justice. Topics include the origins of modern criminology, the development of competing knowledge frameworks in criminology (including the impact of feminist, post-modern, and post-colonial criminologies), and trajectories of 21st century criminology (including scientific, global, and public criminology).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**SOC 4530 Readings in Sociology 3 cr**

A reading course for undergraduates and pre-Master's in sociology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**SOC 4560 Advanced Sociological Theory 3 cr**

A critical examination and analysis of selected sociological theories. Course content may vary from year to year depending upon the instructor's interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Social Science

**SOC 4570 Quantitative Social Analysis 3 cr**

The application of quantitative data analysis in the social sciences, including the following procedures: multiple regression, dummy variable regression, simple analysis of variance and covariance, and an introduction to path analysis. Students may not hold credit for both SOC 4570 and the former SOC 4480.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Equiv To:** SOC 4480

**Attributes:** Social Science

**SOC 4580 Social Research Methods 3 cr**

An introduction to the philosophy of science and logic of scientific method, as well as a survey of research methods and issues. Students are expected to gain a working knowledge of the research process. Students may not hold credit for both SOC 4580 and the former SOC 4470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Equiv To:** SOC 4470

**Attributes:** Social Science

## Soil Science (SOIL)

**SOIL 0420 Soil Resources and Productivity 4 cr**

(Lab required) Soil formation; soil physical, chemical and biological properties; soil classification systems, maps and reports; soil fertility, crop nutrients, soil sampling and testing; agricultural productivity. A full-day field trip is required.

**SOIL 0620 Soil and Water Management 4 cr**

(Lab required) Soil, water and crop management techniques and considerations for: weather and climate risk; variability of soil properties and capability; saline, sodic and acidic soils; soil erosion risk; trace element toxicity; maintenance of soil organic matter.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 0420.

**SOIL 0630 Soil Fertility 4 cr**

(Lab required) Soil nutrients and their behaviour; evaluation of soil fertility including soil testing for precision agriculture; crop response to fertilizers; the manufacture, properties, reactions and application of fertilizer.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 0420.

**SOIL 3060 Introduction to Agrometeorology 3 cr**

Basic description and discussion of properties of the atmosphere, radiation, temperature, effect of temperature on plant growth, climate and animal response, water, evapotranspiration, insect adaptation, activity in relation to climate, climatic data.

**SOIL 3520 Pesticides: Environment, Economics and Ethics 3 cr**

A comprehensive examination of the benefits and risks of pesticide use. Topics include: Characteristics of pesticide products and formulations used in Western Canada; History, practice, successes and failures in the use of pesticides in agriculture; Pesticide use for protecting human health; Pesticide fate processes in air, soil and aquatic environments; Economical and environmental impact of pesticide application drift; Atmospheric pesticide contamination; Pesticide surface and groundwater contamination; Pesticide toxicity to organisms, including humans; Pesticide residues in food; Pesticide regulations; Pesticide risk indicators; Alternatives to pesticides.

**SOIL 3600 Soils and Landscapes in Our Environment 3 cr**

Discover why soil is an essential resource. Explore the roles of soils and landscapes within natural and agricultural ecosystems by learning the fundamental biological, chemical and physical properties and processes; soil and landscape classification and evaluation.

**SOIL 3610 Field Methods in Land Resource Science 3 cr**

This course provides students with training in field methods used in soil science and related sciences (hydrology, meteorology, ecology, geomorphology, and environmental science). Students participate in a biophysical survey of a field site and in a study of the management, assessment and monitoring of land resources.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 3600

**SOIL 4060 Physical Properties of Soils 3 cr**

Physical properties of soils and their relation to plant growth. Topics discussed include particle size distribution, soil water, soil structure, soil temperature, and soil aeration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 3600 or BIOE 2110 or consent of instructor.

**SOIL 4130 Soil Chemistry and Mineralogy 3 cr**

Composition of soil materials. Reactions of nutrients and contaminants with soil organic matter, silicate clays, oxides and other soil constituents which affect their mobility and bioavailability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 3600 or consent of instructor.

**SOIL 4400 SOIL ECOLOGY 3 cr**

Explore the application of soil biology to diversity in agro ecosystems, response of soil organisms to management, mediation of important environmental issues, and promotion of human health. Appreciate the vast array of soil organisms and their functions in soil ecosystems, understand cycling of nutrients by soil organisms, and discover quantitative methodology in determining soil biochemical processes. The laboratory provides hands-on experience in observing, quantifying and isolating soil organisms and the biochemical processes they conduct.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: AGECE 2370 or BIOL 2300 or SOIL 3600.

**SOIL 4500 Remediation of Contaminated Land 3 cr**

Physical, chemical and biological approaches to remediation of land including; nature of contaminants, procedures for assessing the extent of the impact, consequences to the environment, approaches to remediation and case studies of contaminant remediation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 3600 or consent of the instructor.

**SOIL 4510 Soil and Water Management 3 cr**

Topics include: capability of land for agriculture; storage, movement and use of water; saline and alkaline soils; soil conservation including erosion; sustainability of soil organic matter; effect and fate of soil amendments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 3600.

**SOIL 4520 Soil Fertility 3 cr**

Forms and behaviour of plants nutrients in soil; soil fertility evaluation and management, including fertilizer sources and practices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 3600.

## Spanish (SPAN)

**SPAN 1180 Introductory Spanish 6 cr**

(Lab required) A course designed for those with little or no previous knowledge of Spanish. The course includes grammar, reading and oral practice, with language laboratory exercises. An oral approach is utilized. The student is given glimpses of cultural aspects of Spain and Spanish America. Students with Senior 4 Spanish may not normally take the course for credit. Not open to students with native oral fluency. Students may not hold credit for SPAN 1180 and any of: SPAN 1171 or SPAN 1190 or SPAN 1191 or the former SPAN 1181 (former TRAD 1181). Not open to students who have previously obtained credit in SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271.

**Equip To:** SPAN 1181, TRAD 1181

**Mutually Exclusive:** SPAN 1171, SPAN 1190, SPAN 1191, SPAN 1260, SPAN 1261, SPAN 1270, SPAN 1271, SPAN 1272, SPAN 1273, SPAN 1280, SPAN 1290, TRAD 1261, TRAD 1271

**Attributes:** Humanities, Recommended Intro Courses

**SPAN 1190 Introductory Spanish 2 3 cr**

(Lab required) The second term of SPAN 1180 Introductory Spanish. This course is intended for students who have already knowledge of the alphabet and the sound system, as well as elementary comprehension, communication and writing skills equivalent to those that would be achieved in the first term of SPAN 1180. Students may not hold credit for SPAN 1190 and any of: SPAN 1191 or SPAN 1180 or the former SPAN 1181 (former TRAD 1181). Not open to students who have previously obtained credit in SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1171] or [Senior 4 Spanish] or written consent of instructor or department head.

**Equiv To:** SPAN 1191

**Mutually Exclusive:** SPAN 1180, SPAN 1181, SPAN 1260, SPAN 1261, SPAN 1270, SPAN 1271, SPAN 1272, SPAN 1273, SPAN 1280, SPAN 1290, TRAD 1181, TRAD 1261, TRAD 1271

**Attributes:** Humanities, Recommended Intro Courses

**SPAN 1262 Intermediate Spanish Grammar and Conversation 1 3 cr**

(Lab required) This course is the first of the intermediate Spanish language sequence. Focus is on developing intermediate skills in reading, writing, speaking and listening. The primary goals are to build communicative competence and enhance social and cultural awareness of the Spanish-speaking world. Not open to students with native oral fluency. Students may not hold credit for SPAN 1262 and any of: SPAN 1263 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1180 (the former SPAN 1181 or the former TRAD 1181) or SPAN 1190 or SPAN 1191] or written consent of instructor or department head.

**Equiv To:** SPAN 1263

**Mutually Exclusive:** SPAN 1260, SPAN 1261, SPAN 1280, SPAN 1290, TRAD 1261

**Attributes:** Humanities, Recommended Intro Courses

**SPAN 1272 Intermediate Spanish Grammar and Conversation 2 3 cr**

(Lab required) This course is the second of the intermediate Spanish language sequence. Focus is on continued development of intermediate skills in reading, writing, speaking and listening. The primary goals are to further enhance communicative competence and social and cultural awareness of the Spanish-speaking world. Not open to students with native oral fluency. Students may not hold credit for SPAN 1272 and any of: SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1262 or SPAN 1263 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261] or written consent of instructor or department head.

**Equiv To:** SPAN 1273

**Mutually Exclusive:** SPAN 1180, SPAN 1181, SPAN 1190, SPAN 1191, SPAN 1270, SPAN 1271, SPAN 1280, SPAN 1290, TRAD 1271

**Attributes:** Humanities, Recommended Intro Courses

**SPAN 1280 Spanish for Native Speakers 3 cr**

A survey of grammar and writing for people with an advanced level of oral Spanish. All the class exercises, readings, activities and examinations will be in Spanish. Students may not hold credit for SPAN 1280 and any of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor or department head.

**Mutually Exclusive:** SPAN 1180, SPAN 1181, SPAN 1190, SPAN 1191, SPAN 1260, SPAN 1261, SPAN 1262, SPAN 1263, SPAN 1270, SPAN 1271, SPAN 1272, SPAN 1273, SPAN 1290, TRAD 1261, TRAD 1271

**Attributes:** Humanities, Recommended Intro Courses

**SPAN 1290 Accelerated Intermediate Spanish 6 cr**

(Lab required) This is a one term accelerated course which combines the content of SPAN 1262 and SPAN 1272 (or the former SPAN 1260 and the former SPAN 1270). It is a review of grammar and pronunciation structured around extensive writing practice and conversation of contemporary issues relating to the Spanish speaking world. There will be six hours of classroom instruction with a two hour laboratory per week. This course is not open to students with native oral fluency. Students may not hold credit for SPAN 1290 and any of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1180 (or the former SPAN 1181 or the former TRAD 1181 or SPAN 1190 or SPAN 1191)] or written consent of instructor or department head.

**Mutually Exclusive:** SPAN 1180, SPAN 1181, SPAN 1190, SPAN 1191, SPAN 1260, SPAN 1261, SPAN 1262, SPAN 1263, SPAN 1270, SPAN 1271, SPAN 1272, SPAN 1273, SPAN 1280, TRAD 1261, TRAD 1271

**Attributes:** Humanities, Recommended Intro Courses

**SPAN 2200 Spanish American Culture and Civilization 3 cr**

A picture of the geographical, political, economic, social, artistic and cultural forces in Latin America. Essays, cultural readings, newspaper articles, magazines and films are utilized to enhance awareness and to stimulate discussion.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271] or written consent of department head.

**Attributes:** Humanities

**SPAN 2210 Voices and Images of Latin America 3 cr**

A study of the important figures that have influence on social and artistic movements of the Latin American culture such as Frida Khalo, Diego Rivera, Che Guevara, and Fernando Botero.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271] or written consent of department head.

**Attributes:** Humanities

**SPAN 2510 Survey of Spanish Civilization 3 cr**

A study of the history of Spanish culture with special stress on its non-literary arts, and selected aspects of Spanish life.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271] or written consent of department head.

**Attributes:** Humanities

**SPAN 2520 Introduction to Spanish Literature 3 cr**

This course will consist of an introduction to Spanish literary characteristics and the study of selected works from the major historical periods and genres.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271] or written consent of department head.

**Attributes:** Humanities

**SPAN 2550 Advanced Spanish Composition 3 cr**

Designed to enhance the student's ability in writing Spanish. Emphasis on advanced grammatical concepts and clarity of expression. Students may not hold credit for both SPAN 2550 and SPAN 2551.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1262 or SPAN 1263 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261] or written consent of department head.

**Equiv To:** SPAN 2551

**Attributes:** Humanities

**SPAN 2560 Advanced Spanish Conversation 3 cr**

Designed to enhance the student's conversational skills. Intensive oral practise as well as written exercises based on contemporary issues. Not open to students with native oral fluency.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1262 (the former SPAN 1260) and SPAN 1272 (the former SPAN 1270)] or [SPAN 1263 (the former SPAN 1261 or the former TRAD 1261) and SPAN 1273 (the former SPAN 1271 or the former TRAD 1271)] or [SPAN 1290] or written consent of department head.

**Attributes:** Humanities

**SPAN 2570 Special Studies 3 cr**

The content of this course is variable, depending on the needs and interests of students and instructors. A tutorial form is used. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [1000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 2580 Contemporary Spanish Female Playwrights 3 cr**

This course introduces students to the study of Spanish theater written by contemporary women writers. The course will explore how they use their work and the stage to denounce a contemporary Spanish society that needs to be reexamined. Analysis will underscore how these playwrights treat dis/similar subject matters: search for identity, gender, sexuality, relationships, patriarchal values, feminism, among others. The course will be taught in Spanish. All class readings and examinations are in Spanish.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 or the former SPAN 1261 or the former TRAD 1261 or the former SPAN 1270 or the former SPAN 1271 or the former TRAD 1271] or written consent of department head.

**Attributes:** Humanities

**SPAN 3070 Dali, Lorca, Bunuel 3 cr**

Study of the three most representative members of Spanish surrealism and avant-gardism in the twentieth century.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3080 Contemporary Latin American Novel 3 cr**

This course will concentrate on the major writers of the Latin American "Boom" such as: Gabriel Garcia Marquez, Carlos Fuentes, Julio Cortazar and Mario Vargas Llosa. It may also include other authors connected with the Boom such as: Alejo Carpentier, Juan Rulfo, Jorge Luis Borges, Manuel Puig.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3220 Contemporary Spanish Cinema 3 cr**

A survey of Contemporary Spain through its cinema and other cultural manifestations. All the class readings, class lectures, movies and examinations are in Spanish.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3270 Special Studies 3 cr**

The content of this course is variable, depending on the needs and interests of students and instructors. A tutorial format is used. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3290 The Art of Translation 3 cr**

A course on the basic techniques of translation and a study of specialized vocabulary related to the professions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3300 Cinema and Literature 3 cr**

A survey of the culture (Spain and Latin America) through its literature and cinema. The course will be taught in Spanish. All the readings, movies, activities and examinations will be in Spanish.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3310 Advanced Spanish Vocabulary and Composition 3 cr**

A survey of grammar and vocabulary, the course also emphasizes and enhances students' writing abilities. The course will be taught in Spanish. All the class exercises, readings, activities and examinations will be in Spanish.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3320 Testimony and Human Rights in Latin America 3 cr**

A survey of the culture of human rights in Latin America through its testimonial literature. The course will be taught in Spanish. All readings, activities and examinations will be in Spanish.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3330 Spanish Phonetics and Pronunciation 3 cr**

This course includes a thorough study of advanced Spanish phonetics and pronunciation. Students may not hold credit for both SPAN 3330 and the former SPAN 3280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Equiv To:** SPAN 3280

**Attributes:** Humanities

**SPAN 3340 Spanish Syntax and Grammar 3 cr**

This course includes a thorough study of advanced Spanish syntax and grammar. Students may not hold credit for SPAN 3340 and any of: SPAN 3441 or the former SPAN 3280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Equiv To:** SPAN 3280

**Attributes:** Humanities

**SPAN 3670 Poetry and Novel of the Golden Age 3 cr**

This course will concentrate on major poets and novelists of the sixteenth and seventeenth centuries such as Garcilaso de la Vega, Fray Luis de Leon, S. Juan de la Cruz, Lope de Vega, Gongora, and Cervantes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3680 Drama of the Golden Age 3 cr**

A study of representative works by the principal dramatists of the Spanish classical period, such as Lope de Vega, Tirso de Molina, Vélez de Guervara, and Calderon de la Barca.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3780 Short Fiction in Spanish 3 cr**

A study of short narrative fiction as a genre in Spain and Latin America through the close reading of representative works.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

**SPAN 3790 Latin American Cinema and Society 3 cr**

A survey of contemporary Latin American society through its cinema. The course will be taught in Spanish. All class readings, movies and examinations are in Spanish.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [2000-level Spanish course] or written consent of department head.

**Attributes:** Humanities

## Statistics (STAT)

**STAT 1000 Basic Statistical Analysis 1 3 cr**

(Lab required) This course is not recommended for students in certain programs (see the description of STAT 1150). An introduction to the basic principles of statistics and procedures used for data analysis.

Topics to be covered include: gathering data, displaying and summarizing data, examining relationships between variables, sampling distributions, estimation and significance tests, inference for means. May not be held with STAT 1001, STAT 1150, STAT 2220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Any grade 12 or 40S Mathematics, or equivalent.

**Equiv To:** STAT 1001

**Mutually Exclusive:** STAT 1150, STAT 2220

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**STAT 1150 Introduction to Statistics and Computing 3 cr**

(Lab required) This course is recommended for students in mathematically rich disciplines, including Statistics, Mathematics, Actuarial Science, Computer Science, and related interdisciplinary programs. Topics to be covered include: summarizing and displaying large datasets, sampling, estimation and significance tests, probability calculations, random variables and probability distributions, introduction to regression and correlation analysis, statistical software. Not to be held with STAT 1000, STAT 1001, STAT 2000, STAT 2001 and STAT 2220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Minimum of 70% in Pre-calculus Mathematics 40S or a grade of B or better in MSKL 0100 or equivalent.

**Mutually Exclusive:** STAT 1000, STAT 1001, STAT 2000, STAT 2001, STAT 2220

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**STAT 2000 Basic Statistical Analysis 2 3 cr**

(Lab required) This course is not recommended for students in certain programs (see the description of STAT 2150). The study of estimation and hypothesis testing procedures for means and proportions in one, two and multiple sample situations, introduction to the analysis of variance; regression and correlation analysis; optional topics may include nonparametric procedures, design of experiments, probability models. May not be held with STAT 1150, STAT 2001.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 1000 or STAT 1001.

**Equiv To:** STAT 2001

**Mutually Exclusive:** STAT 1150

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**STAT 2150 Statistics and Computing 3 cr**

(Lab required) This course is recommended for students in mathematically rich disciplines, including Statistics, Mathematics, Actuarial Science, Computer Science, and related interdisciplinary programs. Topics to be covered include: exploratory data analysis and visualization, graphical methods, random number generation, random variables, simple statistical models and computing, Monte Carlo methods, large sample and simulation-based inference, statistical software packages.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of STAT 1150, STAT 2000 (B), STAT 2001 (B), or STAT 2220] and [one of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, or MATH 1690].

**Attributes:** Mathematics Requirement, Science, Recommended Intro Courses

**STAT 2220 Contemporary Statistics for Engineers 3 cr**

(Lab Required) Descriptive statistics, basic probability concepts, special statistical distributions, statistical inference-estimation and hypothesis testing, regression, reliability, statistical process control. May not be held with STAT 1000, STAT 1001 or STAT 1150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of MATH 1232, MATH 1690, the former MATH 1680, MATH 1700, MATH 1701, MATH 1710.

**Mutually Exclusive:** STAT 1000, STAT 1001, STAT 1150

**Attributes:** Mathematics Requirement, Science

**STAT 2300 Principles of Data Collection 3 cr**

Introduction to the basic principles and foundational aspects of data collection with a focus on the design and basic analysis of observational and experimental studies. Important issues like randomization, blocking and confounding, sampling, stratification, response bias and nonresponse will be covered. May not be held with the former STAT 3480.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of STAT 1150, STAT 2000, STAT 2001, or STAT 2220.

**Mutually Exclusive:** STAT 3480

**Attributes:** Mathematics Requirement, Science

**STAT 2400 Introduction to Probability 1 3 cr**

(Lab required) Basic probability, discrete and continuous random variables, important families of distributions, functions of a random variable, expectation and variance, introduction to joint distributions. This course is not available to students who have previously obtained credit for STAT 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of STAT 1150, STAT 2000 (B), STAT 2001 (B), or STAT 2220] and [one of MATH 1232, MATH 1690, MATH 1700 (B), MATH 1701 (B), MATH 1710 (B)].

**Mutually Exclusive:** STAT 3500

**Attributes:** Mathematics Requirement, Science

**STAT 2800 Introduction to Probability 2 3 cr**

(Lab Required) Joint and conditional distributions, distributions of functions of random variables, laws of total expectation and variance, moments and generating functions. May not be held with the former STAT 3400 or the former STAT 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 2400. Pre- or corequisite: one of MATH 2150, MATH 2151, MATH 2720, MATH 2721, or the former MATH 2750.

**Mutually Exclusive:** STAT 3400, STAT 3500

**Attributes:** Mathematics Requirement, Science

**STAT 3000 Applied Linear Statistical Models 3 cr**

Applied linear regression, analysis of variance for designed experiments and related topics. This course is not for use in the Honours or Major degree programs in Statistics. May not be held with STAT 3450, the former STAT 3120, or the former STAT 3470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of STAT 1150, STAT 2000, STAT 2001, or STAT 2220.

**Mutually Exclusive:** STAT 3120, STAT 3450, STAT 3470

**Attributes:** Mathematics Requirement, Science

**STAT 3030 Introduction to Stochastic Processes 3 cr**

Review of conditional probability and expectations, Markov chains, homogeneous and nonhomogeneous Poisson processes. Optional topics include: reliability theory, queuing theory and Brownian motion. May not be held with the former STAT 3050.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of STAT 2800, the former STAT 3400, or the former STAT 3500] and [one of MATH 2150, MATH 2151, MATH 2720, MATH 2721, or the former MATH 2750].

**Equiv To:** STAT 3050

**Attributes:** Mathematics Requirement, Science

**STAT 3100 Introduction to Statistical Inference 3 cr**

(Lab Required) Overview of the most common approaches to inference associated with point estimation, confidence intervals and hypothesis testing, including likelihood, least-squares and moment-based methods, as well as large sample approximations. May not be held with the former STAT 3600 or the former STAT 3800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STAT 2150 and STAT 2400. Pre- or corequisite: one of MATH 2150, MATH 2151, MATH 2720, MATH 2721, or the former MATH 2750.

**Mutually Exclusive:** STAT 3600, STAT 3800

**Attributes:** Mathematics Requirement, Science

**STAT 3150 Statistical Computing 3 cr**

Programming using statistical software, random number generation, principles of Monte Carlo simulation, simulation-based inference, Monte Carlo integration, and other related topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STAT 2150 and STAT 2400.

**Attributes:** Mathematics Requirement, Science

**STAT 3170 Statistical Quality Control 3 cr**

Techniques for quality improvement through the use of statistical process control. Topics will include acceptance sampling, Pareto diagrams, control charts, measurements of process capability and process performance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of STAT 1150, STAT 2000, STAT 2001, or STAT 2220.

**Attributes:** Mathematics Requirement, Science

**STAT 3380 Introduction to Nonparametric Statistics 3 cr**

Parametric versus nonparametric inference, inference using ranks and order statistics, contingency tables, goodness-of-fit tests, applications in the social and physical sciences.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of STAT 1150, STAT 2000, STAT 2001, or STAT 2220.

**Attributes:** Mathematics Requirement, Science

**STAT 3450 Linear Models 3 cr**

Least-squares approach to simple and multiple regression, one-way analysis of variance, two-way analysis of variance and related topics. May not be held with STAT 3000, the former STAT 3120, or the former STAT 3470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STAT 2150 and STAT 2400 and [one of MATH 1220, MATH 1300 (B), or MATH 1301 (B)].

**Equip To:** STAT 3120, STAT 3470

**Mutually Exclusive:** STAT 3000

**Attributes:** Mathematics Requirement, Science

**STAT 3490 Time Series Analysis 3 cr**

Analysis of time series data and related methodologies: autoregressive and moving-average models and their generalizations, trend and seasonal components, exponential smoothing, the Box-Jenkins Methodology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of STAT 3450, the former STAT 3120, or the former STAT 3470.

**Attributes:** Mathematics Requirement, Science

**STAT 3550 Nonlinear Regression Models 3 cr**

Nonlinear multiple regression, logistic regression, Poisson regression and generalizations, over/under dispersion, model selection techniques. May not be held with STAT 4000.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of STAT 3450, the former STAT 3120, or the former STAT 3470. Pre- or corequisites: [one of STAT 3100, the former STAT 3600, or the former STAT 3800] and STAT 3150.

**Mutually Exclusive:** STAT 4000

**Attributes:** Mathematics Requirement, Science

**STAT 3690 Multivariate Analysis 3 cr**

Multivariate normal distribution, multivariate regression and applications, visualization of multivariate data and dimension reduction, principal component analysis, canonical correlation. May not be held with the former STAT 4690.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of STAT 2800, the former STAT 3400, or the former STAT 3500] and [one of STAT 3450, the former STAT 3120, or the former STAT 3470] and [one of MATH 2150, MATH 2151, MATH 2720, MATH 2721, or the former MATH 2750].

**Mutually Exclusive:** STAT 4690

**Attributes:** Mathematics Requirement, Science

**STAT 3900 Intermediate Topics in Statistics 3 cr**

Topics of current interest in Statistics that will vary with the needs and interests of students and faculty. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of Department.

**Attributes:** Mathematics Requirement, Science

**STAT 3910 Intermediate Topics in Statistics with Laboratory 3 cr**

(Lab required) Topics of current interest in Statistics that will vary with the needs and interests of students and faculty. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of Department.

**Attributes:** Mathematics Requirement, Science

**STAT 3980 Work Term I 0 cr**

Work assignment in business, industry, or government for students registered in the Statistics Honours or Major Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: STAT 3470 and STAT 3480.

**Attributes:** Mathematics Requirement, Science

**STAT 3990 Work Term II 0 cr**

Work assignments in business, industry or government for students registered in the Statistics Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 3980 (P).

**Attributes:** Mathematics Requirement, Science

**STAT 4000 Applied Statistical Modelling 3 cr**

Generalizations of linear models, including polynomial regression, analysis of covariance, logistic regression and regression for count data. Other optional topics include: random effects and mixed models, models for dependent data, advanced concepts in designing experiments. This course may not be used in the Honours or Major degree programs in Statistics. May not be held with STAT 3550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of STAT 3000, STAT 3450, the former STAT 3120, or the former STAT 3470.

**Mutually Exclusive:** STAT 3550

**Attributes:** Mathematics Requirement, Science



**STAT 4100 Statistical Inference 3 cr**

(Lab required) Rigorous treatment of inferential methods associated with point estimation, confidence intervals and hypothesis testing, including large sample techniques. May not be held with the former STAT 4140.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of STAT 2800, the former STAT 3400, or the former STAT 3500] and [one of STAT 3100, the former STAT 3600, or the former STAT 3800].

**Mutually Exclusive:** STAT 4140

**Attributes:** Mathematics Requirement, Science

**STAT 4150 Bayesian Analysis and Computing 3 cr**

(Lab required) Bayesian modelling, prior and posterior distributions, predictive distributions, credible regions, Bayes factors and model uncertainty, Bayesian computational methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of STAT 2800, the former STAT 3400, or the former STAT 3500] and [one of STAT 3100, the former STAT 3600, or the former STAT 3800] and STAT 3150.

**Attributes:** Mathematics Requirement, Science

**STAT 4170 Lifetime Data Analysis 3 cr**

Introduction to basic principles and techniques for lifetime data analysis in biostatistics and reliability, with emphasis on theory and applications. Topics to be covered include: censoring, truncation, survival and hazard functions, parametric and nonparametric methods, proportional hazards regression.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of STAT 3100, the former STAT 3600, or the former STAT 3800] and [one of STAT 3450, the former STAT 3120, or the former STAT 3470].

**Attributes:** Mathematics Requirement, Science

**STAT 4250 Statistical Learning 3 cr**

(Lab required) Topics related to the use of Statistics and inferential methods in machine learning, including the lasso and ridge regression, classification and clustering, neural networks, support vector machines, bagging, boosting and ensemble methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [one of STAT 3100, the former STAT 3600, or the former STAT 3800] and STAT 3150 and [STAT 3690 or the former STAT 4690].

**Attributes:** Mathematics Requirement, Science

**STAT 4520 Sampling Techniques 3 cr**

Development of sampling theory for use in sample survey problems. Covered topics include: probability sampling and inclusion probabilities, standard sampling designs, ratio and regression estimators, linearization of estimators.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [STAT 2300 and (one of STAT 3450, the former STAT 3120, or the former STAT 3470)] or the former STAT 3480.

**Attributes:** Mathematics Requirement, Science

**STAT 4530 Design of Experiments 3 cr**

Construction and analysis of commonly used experimental designs: block designs, Latin square designs, factorial and fractional factorial designs, split-plot designs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: [STAT 2300 and (one of STAT 3450, the former STAT 3120, or the former STAT 3470)] or the former STAT 3480.

**Attributes:** Mathematics Requirement, Science

**STAT 4630 Stochastic Processes 3 cr**

Continuous time processes, renewal processes, Brownian motion, martingales, and other related processes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 3030 or the former STAT 3050.

**Attributes:** Mathematics Requirement, Science

**STAT 4700 Statistical Consulting 3 cr**

The role of a Statistics Consultant. Practical consulting experience. This course is restricted to students in the Honours, Joint Honours, or Major degree programs in Statistics. Students are advised to take this course in their fourth year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 2300 or the former STAT 3480. Pre- or corequisites: STAT 3550 and [STAT 3690 or the former STAT 4690].

**Attributes:** Mathematics Requirement, Science

**STAT 4900 Advanced Topics in Statistics 3 cr**

Topics of current interest in Statistics that will vary with the needs and interests of students and faculty. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of Department.

**Attributes:** Mathematics Requirement, Science

**STAT 4910 Advanced Topics in Statistics with Laboratory 3 cr**

(Lab required) Topics of current interest in Statistics that will vary with the needs and interests of students and faculty. This course can be completed as a topics course multiple times under different titles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of Department.

**Attributes:** Mathematics Requirement, Science

**STAT 4950 Honours Thesis in Statistics 6 cr**

The student will conduct a research project chosen in consultation with a Statistics faculty member, acting as an advisor, and the Department Head (or designate). The student will present the project, the results and conclusions in both a written format (i.e. the thesis) and an oral format (i.e. an oral presentation to be held upon completion of the thesis). Both data oriented and theoretical topics are acceptable. This course will normally be taken in a student's final year. This course is restricted to students in the Honours or Joint Honours degree programs in Statistics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of Department.

**Attributes:** Mathematics Requirement, Science

**STAT 4980 Work Term III 0 cr**

Work assignments in business, industry or government for students registered in the Statistics Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 3990 (P).

**Attributes:** Mathematics Requirement, Science

**STAT 4990 Work Term IV 0 cr**

Work assignments in business, industry or government for students registered in the Statistics Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 4980 (P).

**Attributes:** Mathematics Requirement, Science

## Supply Chain Management (SCM)

### SCM 2160 Supply Chain and Operations Management 3 cr

Study of supply chain management (SCM) and operations management. Positions operations management as a critical area of study within SCM. Focuses on process approach and system design. May not be held with SCM 2161, the former OPM 2600, or OPM 2601.

**Equiv To:** OPM 2600

### SCM 2210 Transportation Principles 3 cr

This course is a study of demand forecasting, cost analysis, regulation of carriers, role of transport in economic development, project appraisal, and transport planning focusing upon agricultural, agri-food and other supply chains. Also offered as ABIZ 2210. May not be held with ABIZ 2210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [ECON 1010 and ECON 1020] or former ECON 1200 (D).

**Equiv To:** ABIZ 2210

### SCM 2220 Selected Topics in Logistics and Transportation 3 cr

This course provides coverage on a number of critical topics in Supply Chain Logistics and Transportation. Areas of emphasis are based on current issues confronting managers and regulators/policy makers such as global supply chain logistics and transportation policy.

**Mutually Exclusive:** SCM 2250, SCM 2260, SCM 3250, SCM 3260, SCM 3270, SCM 3280

### SCM 2230 Introduction to Supply Chain Management 3 cr

An examination of the management activities that are necessary to ensure an efficient flow of materials, funds, and information among the various organizations in supply chains, from the acquisition of raw materials to the delivery of the finished product to the end user.

### SCM 2240 Purchasing and Supply Management 3 cr

Purchasing and supply management is an increasingly important element of corporate strategy as global supply chains become longer and more complex. In this course, students will learn about a major paradigm shift in purchasing, from a clerical activity to a strategic corporate function.

The course covers strategic supply management, inter-organizational relationships, product and service specifications, price and cost analysis, negotiation, quality management, supply chain information technology, and other important purchasing topics, from a supply chain management perspective. Students may not hold credit for both SCM 2240 and SCM 2220 Topic: Purchasing Management.

**Equiv To:** SCM 2220

### SCM 2260 Transportation Strategy and Policy 3 cr

This course provides students relevant fundamental knowledge on the major concepts of competitive strategies, governance and policies, as well as their application in the transportation sector. Through different teaching methods, this course aims to enable students to develop the ability to put strategic theories and policy concepts into practice within the transportation sector, both in Canada and the world. May not be held with SCM 2220 when titled "Transportation Strategy and Policy".

**Mutually Exclusive:** SCM 2220

### SCM 3230 Global Supply Chains 3 cr

The course provides a global orientation to supply chain management, with a particular emphasis on the global linkages between organizations in international supply chains. Supply chain management practices in selected countries are also examined.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SCM 2230 (D) or SCM 3360 (D); or consent of instructor.

### SCM 3250 Airline Business 3 cr

This course provides a practical overview of the modern airline business from a global perspective. Topics such as airline pricing, airline alliance and airline-airport interaction will be included. May not be held with SCM 2220 when titled "Airline Business".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SCM 2230 (D) or consent of instructor.

**Mutually Exclusive:** SCM 2220

### SCM 3260 Supply Chain Sustainability 3 cr

This course covers supply chain sustainability. From a functional viewpoint, supply chain management (SCM) includes logistics/transportation, purchasing and certain elements of marketing. Sustainability is a multi-dimensional concept, spanning ecological, social, cultural and economic issues. The course includes a special focus on sustainable transportation. May not be held with SCM 2220 when titled "Supply Chain Sustainability".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GMGT 2010 (D) or consent of instructor.

**Mutually Exclusive:** SCM 2220

### SCM 3270 Lean Management 3 cr

Lean Management will provide students with a basic understanding of the components of Lean Management and the opportunity to practically apply the principles, methods and tools of Lean Management to real problems. Students will learn how to analyze case studies and apply course material in real-world situations. May not be held with SCM 2220 when titled "Lean Management".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SCM 2160 (D) (or SCM 2161) or SCM 2230 (D) or ABIZ 2520 (D) or MSCI 2150 (D) (or MSCI 2151) or the former OPM 2600 (D) (or OPM 2601) or consent of the instructor.

**Mutually Exclusive:** SCM 2220

### SCM 3280 Project Management in Supply Chain 3 cr

Topics covered in this course will include project initiating, planning, executing, monitoring and controlling, and closing. Following the PMI methodology, all ten knowledge areas will be covered, including: integration, scope, schedule, cost, HR, quality, risk, communication, procurement and stakeholder management. Students will learn how to analyze case studies and effectively use team work to develop strong planning and an analytical approach pertinent to project management. May not be held with SCM 2220 when titled "Project Management in Supply Chain".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: a grade of "D" or better in SCM 2160 (D) (or SCM 2161) or SCM 2230 (D) or ABIZ 2520 (D) or GMGT 1010 (D) (or GMGT 1011) or MIS 2000 (D) (or MIS 2001) or MSCI 2150 (D) (or MSCI 2151) or the former OPM 2600 (D) (or OPM 2601) or consent of instructor.

**Mutually Exclusive:** SCM 2220

### SCM 3360 Supply Chain Logistics 3 cr

The course provides an international/global orientation to logistics and supply chain management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 2210 (D).

## Theatre (THTR)

### THTR 1220 Introduction to Theatre 6 cr

A study of plays both as literature and as texts for stage presentation. The course will include practical work in studio sessions.

**Attributes:** Humanities, Recommended Intro Courses

**THTR 2150 Theatrical Techniques: Onstage 6 cr**

Advanced acting and an introduction to the fundamentals of directing. Lectures on dramatic and theatrical theory, and the analysis of representative plays; workshops on acting and directing, including the presentation of scenes; participation in the current Theatre Program season.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 1220] and written consent of instructor.

**Attributes:** Humanities

**THTR 2160 Theatrical Techniques: Backstage 6 cr**

An introduction to the backstage arts and crafts of the Theatre: set, props, and costume design and construction; lighting and sound design and execution; stage management; company management. Practical projects required in conjunction with the current Theatre Program season, the nature of the projects to be determined by the student's interests and the needs of the Program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 1220] and written consent of instructor.

**Attributes:** Humanities

**THTR 2170 Specialized Practical Training 1 3 cr**

Two special workshops, such as voice, stage movement, mime, or directing, from the Prairie Theatre Exchange Adult Program and approved in advance by the University of Manitoba Theatre Program. Students may hold credit for only two of: THTR 2170 or THTR 2180 or THTR 2490.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 1220] and written consent of the Theatre program chair.

**Attributes:** Humanities

**THTR 2180 Specialized Practical Training 2 3 cr**

Two special workshop courses, other than those credited for THTR 2170, from the Prairie Theatre Exchange Adult Program and approved in advance by the University of Manitoba Theatre Program. Students may hold credit for only two of: THTR 2170 or THTR 2180 or THTR 2490.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 1220] and written consent of the Theatre program chair.

**Attributes:** Humanities

**THTR 2200 Canadian Indigenous Theatre 3 cr**

This course offers an introduction to Indigenous theatre in the location now known as Canada. The plays to be studied will include work from several Indigenous nations. Class instruction will model respectful and culturally attentive engagement with Indigenous practices and worldviews. Consult the Department of English, Theatre, Film & Media website for more details.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [one of THTR 1220, ENGL 1200, ENGL 1201, ENGL 1300, or ENGL 1301] or [ENGL 1400 (the former ENGL 1310) and ENGL 1340].

**Attributes:** Humanities

**THTR 2470 Fundamentals of Dramatic Analysis 3 cr**

This course aims at developing critical and analytic skills specific to the understanding of dramatic texts, through an introduction to key concepts, terminology and critical methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 1220 or ENGL 1200 or ENGL 1201 or ENGL 1300 or ENGL 1301] or written consent of instructor.

**Attributes:** Humanities

**THTR 2480 Theatre History 3 cr**

A study of plays, theatre architecture, dramatic theory, acting theory, and the social context in which theatre was presented in an era in the history of the theatre (e.g. Classical Greek and Roman, British Medieval and Tudor, Restoration and Seventeenth Century French).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 1220] or written consent of instructor.

**Attributes:** Humanities

**THTR 2490 Specialized Practical Training 3 3 cr**

An alternative method of taking THTR 2170 or THTR 2180. Two special workshops, other than those credited for THTR 2170 or THTR 2180, taken one each term in a single academic year, from the Prairie Theatre Exchange Adult Program and approved in advance by the University of Manitoba Theatre Program. Students may hold credit for only two of: THTR 2170 or THTR 2180 or THTR 2490.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 1220] and written consent of the Theatre program chair.

**Attributes:** Humanities

**THTR 2600 Special Studies 3 cr**

An extensive examination of selected topics that will vary from year to year, depending upon the needs and interests of the instructor and students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 1220] or written consent of instructor.

**Attributes:** Humanities

**THTR 3460 Theory of Drama and Performance 3 cr**

Studies in major theories of drama, performance and its reception from Aristotle to the present day. Theories will be studied in conjunction with an in-depth analysis of a number of dramatic texts.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 2470 or ENGL 2960 or ENGL 2961] or written consent of instructor.

**Attributes:** Humanities

**THTR 3470 Text and Performance 3 cr**

Explores the works of a significant playwright or group of playwrights, the appropriate dramatic theory/ies, the production and performance style involved. Students may be required to direct, act and/or design. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [THTR 2150] or [six credit hours from: THTR 2170 or THTR 2180 or THTR 2490] or written consent of instructor.

**Attributes:** Humanities

**THTR 3610 Special Studies 3 cr**

An extensive examination of selected topics that will vary from year to year, depending upon the needs and interests of the instructor and students. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**Attributes:** Humanities

**THTR 3630 Practicum 1 3 cr**

Theatre Practicum in which the student works with a professional mentor on a production at the Prairie Theatre Exchange. Openings contingent on a match between student's theatrical field and interest and PTE's needs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours from: THTR 2150 or THTR 2160 or THTR 2170 or THTR 2180 or THTR 2490] and written consent of the Theatre program chair.

**Attributes:** Humanities

**THTR 3640 Practicum 2 6 cr**

Theatre Practicum in which the student works with a professional mentor on a production at the Prairie Theatre Exchange. Openings contingent on a match between student's theatrical field and interest and PTE's needs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [six credit hours from: THTR 2150 or THTR 2160 or THTR 2170 or THTR 2180 or THTR 2490; and written consent of the Theatre program chair.

**Attributes:** Humanities

## Ukrainian (Slavic Studies) (UKRN)

**UKRN 1230 Language Seminar in Ukraine 1 3 cr**

The study of Ukrainian language at an intensive language school in Ukraine. The course is designed for students aiming at near-native fluency.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities, Recommended Intro Courses

**UKRN 1310 Introductory Ukrainian 6 cr**

(Lab required) Three hours of lectures plus one hour of lab per week. Basic grammar, conversation, composition and reading. Emphasis is placed on communication skills. Cultural content is introduced through a range of audio-visual materials. Not open to native speakers and students with Ukrainian 40S credit. Students may not hold credit for both UKRN 1310 and UKRN 1320.

**Mutually Exclusive:** UKRN 1320

**Attributes:** Humanities, Recommended Intro Courses

**UKRN 1320 Introductory Ukrainian 2 3 cr**

(Lab required) Three hours of lectures plus one hour of lab per week. This course is intended for students who already have a knowledge of the alphabet and the sound system and elementary oral comprehension and reading, writing, and speaking skills equivalent to those that would be achieved in the first term of UKRN 1310. Students may not hold credit for both UKRN 1320 and UKRN 1310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: successful completion of a placement test administered by the department.

**Mutually Exclusive:** UKRN 1310

**Attributes:** Humanities, Recommended Intro Courses

**UKRN 2100 Exploring Ukrainian Literature 3 cr**

An introduction to Ukrainian literature. A number of works by major authors and from different genres are discussed.

**Attributes:** Humanities

**UKRN 2200 Ukrainian Myth, Rites and Rituals 3 cr**

An exploration of folk mythology, and the rites, rituals and festivals associated with the calendar cycle. Lectures and readings in English. Students may not hold credit for UKRN 2200 and any of: the former UKRN 2510 or the former UKRN 2520.

**Equiv To:** UKRN 2510, UKRN 2520

**Attributes:** Humanities, Written English Requirement

**UKRN 2260 Ukrainian Culture Seminar Abroad 3 cr**

This course is offered as part of the Summer Session. It is a study experience in Ukraine. The course features extensive exploration of contemporary Ukrainian culture. The course is taught in English. Students are given the maximum individual attention. Mornings are spent in class. Excursions are planned in Kyiv and neighboring sites.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [UKRN 1310 or UKRN 1320 (or equivalent)] and written consent of the department head.

**Attributes:** Humanities

**UKRN 2410 Ukrainian Canadian Cultural Experience 3 cr**

A study of the legacy left by several generations of Ukrainian Canadians in literature and the performing arts, music, art and architecture, with particular attention to the construction of identity and the critique of culture. Lectures and readings in English. Students may not hold credit for both UKRN 2410 and the former UKRN 2420.

**Equiv To:** UKRN 2420

**Attributes:** Humanities, Written English Requirement

**UKRN 2590 Ukrainian Literature and Film 3 cr**

An examination of the relationship of Ukrainian literature and film. Students read literary works which have inspired films and analyze the unique formal qualities of each. The course considers the stylistic influence of film on literature and vice versa; the relationship between writer and director, especially in the case where they are one and the same person. Readings in the original and/or in English. Films in Ukrainian with English subtitles or plot summaries.

**Attributes:** Humanities, Written English Requirement

**UKRN 2600 Special Topics in Ukrainian Studies 3 cr**

Language of Instruction: English. Study of selected topics in Ukrainian literature or culture. The course content may vary. Students can earn multiple credits for the course only when the topic subtitle is different.

**Attributes:** Humanities, Written English Requirement

**UKRN 2720 Intermediate Ukrainian 6 cr**

Grammar review, conversation, translation and reading of selected texts. Development of communication skills through practical exercises. Cultural content is introduced through audio-visual materials. Students may not hold credit for both UKRN 2720 and UKRN 2730.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [UKRN 1310 or UKRN 1320] or [Ukrainian 40S] or written consent of department head.

**Mutually Exclusive:** UKRN 2730

**Attributes:** Humanities, Recommended Intro Courses

**UKRN 2730 Intermediate Ukrainian 2 3 cr**

This course is the second term of UKRN 2720 Intermediate Ukrainian, and is intended for students who already have basic oral comprehension and reading, writing, and speaking skills equivalent to those that would be achieved in the first term of UKRN 2720. Students may not hold credit for both UKRN 2730 and UKRN 2720.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: successful completion of a placement test administered by the department.

**Mutually Exclusive:** UKRN 2720

**Attributes:** Humanities, Recommended Intro Courses

**UKRN 2770 Ukrainian Culture until 1900 3 cr**

A survey that examines the Ukrainian Culture Heritage from the pre-Christian era, through medieval times and the baroque to the end of the 19th century. Issues in mythology, religion, the arts and literature are discussed. Lectures in English. Readings are available in both English translation and the original.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**UKRN 2780 Ukrainian Culture from 1900 to the Present 3 cr**

Major trends in thought, the visual arts, film and literature from the end of the 19th century to the present day. Lectures in English. Readings are available in both English translation and Ukrainian.

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

**UKRN 2800 Literature and Revolution in Ukraine 3 cr**

A study of literature and its relationship to the arts in the decade that followed the Revolution of 1917. Lectures in English. Readings available in English and in the original. Viewing and discussion of films.

**Attributes:** Humanities

**UKRN 2820 Holodomor and Holocaust in Ukrainian Literature and Culture 3 cr**

A study of how the Holodomor (Famine) of 1932-33 and the Holocaust have been represented, and of the international impact of these representations. References to art and film. Lectures and readings in English.

**Attributes:** Humanities, Written English Requirement

**UKRN 3100 Ukrainian Story Writing Through the Ages 3 cr**

Masterpieces of the short story genre from early modern times to the present. Focusing on great works and writers, the course provides insights into the genre and into different periods in Ukrainian literature. Film adaptations of some works will be viewed and discussed. Students may not hold credit for both UKRN 3100 and the former UKRN 3850.

**Equip To:** UKRN 3850

**Attributes:** Humanities

**UKRN 3300 Literature of Independent Ukraine 3 cr**

A study of recent writings from Ukraine, focusing on the post-1991 period. References to art and film of the period.

**Attributes:** Humanities

**UKRN 3440 Ukrainian Poetry 3 cr**

A study of some of the best Ukrainian poetry with a particular emphasis on the modern period. Lectures and readings in Ukrainian.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [UKRN 1310 or UKRN 1320] or written consent of department head.

**Attributes:** Humanities

**UKRN 3840 Ukrainian Novel 3 cr**

A study of representative novels of the 19th and 20th centuries. The course begins with the Romantic period and ends with contemporary writing. Lectures in English. Readings in the original or in English.

**Attributes:** Humanities

**UKRN 3880 Special Studies 3 cr**

The content of this course will vary from year to year, depending on the needs and interests of instructors and students. A description of the course is available in advance at the department office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of courses at the 1000-level or above] or written consent of department head.

**Attributes:** Humanities

**UKRN 3910 Shevchenko 3 cr**

A study of the greatest works, focusing on the writer's intellectual and artistic development. References to his art and the imperial context. Lectures in English.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of 24 credit hours of courses at the 1000-level or above] or written consent of department head.

**Attributes:** Humanities

**UKRN 3952 Advanced Ukrainian Conversational Practice 3 cr**

Development of oral and comprehension skills within the context of contemporary Ukrainian living culture via a variety of sources, such as: short stories, news articles, comics, cartoons, films, music, etc. Students may not hold credit for both UKRN 3952 and the former UKRN 3950.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: UKRN 2720 or UKRN 2730 or written consent of department head.

**Mutually Exclusive:** UKRN 3950

**Attributes:** Humanities

**UKRN 3962 Advanced Ukrainian Through Short Stories 3 cr**

Development of advanced language skills in modern Ukrainian: writing, reading, listening comprehension, and speaking. Continued work in advanced composition, translation, readings and study of selected literary and other texts within the context of short stories. Students may not hold credit for both UKRN 3962 and the former UKRN 3960.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: UKRN 2720 or UKRN 2730 or written consent of department head.

**Mutually Exclusive:** UKRN 3960

**Attributes:** Humanities

**UKRN 3970 Women and Ukrainian Literature 3 cr**

A study of the literature produced by Ukrainian women writers in the nineteenth, twentieth, and twenty-first centuries. Lectures in English. Readings in the original and/or in English.

**Attributes:** Humanities, Written English Requirement

**UKRN 4640 Selected Topics 1 3 cr**

A program of independent reading and/or research on selected topics to 1900, undertaken by a student in consultation with his or her prospective instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**Attributes:** Humanities

## Ukrainian Cdn Heritage Studies (UCHS)

### UCHS 3100 The Ukrainian Arts in Canada 3 cr

A study of varied aspects of artistic performance and production among Ukrainians in Canada, past and present: music, theatre, dance, cinema, fine arts and architecture. The course will focus on crucial trends and processes and adopt an evaluative approach in its exploration of the above artistic phenomena.

**Attributes:** Humanities

## Women's and Gender Studies (WOMN)

### WOMN 1500 Introduction to Women's and Gender Studies in the Humanities 3 cr

Examination of the central concerns of women and gender in the Humanities. A focus on representation, voice, knowledge, and subjectivity. Students may not hold credit for both WOMN 1500 and the former WOMN 1530.

**Equiv To:** WOMN 1530

**Attributes:** Humanities, Recommended Intro Courses, Written English Requirement

### WOMN 1600 Introduction to Women's and Gender Studies in the Social Sciences 3 cr

Examination of women's historical and contemporary roles in the economy, family, and society from the perspective of the social sciences. Introduction of feminist theories, with emphasis on the role of gender. Topics covered focus on the social conditions of women's lives: work, health, violence and organizing for change. Students may not hold credit for both WOMN 1600 and the former WOMN 1540.

**Equiv To:** WOMN 1540

**Attributes:** Social Science, Recommended Intro Courses, Written English Requirement

### WOMN 2000 Feminist Thought 3 cr

Survey of the varieties of historical and contemporary feminist ideas. Students may not hold credit for both WOMN 2000 and the former WOMN 2520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

**Equiv To:** WOMN 2520

### WOMN 2430 Indigenous Women's Stories 3 cr

This course will investigate through the media of film and literature, including life writing, fiction, creative non-fiction and poetry, the experiences of Indigenous women in North America, particularly Canada, as articulated in their own voices. Also offered as INDG 2430. Students may not hold credit for WOMN 2430 and any of: INDG 2430, the former NATV 2430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of WOMN 1500, WOMN 1600, INDG 1200 (the former NATV 1200), INDG 1220 (the former NATV 1220), or INDG 1240 (the former NATV 1240), or written consent from either the Women's and Gender Studies coordinator or Indigenous Studies department head.

**Equiv To:** INDG 2430, NATV 2430

**Attributes:** Humanities

### WOMN 2500 Race, Class and Sexuality 3 cr

An exploration of the various ways race, class, and sexual orientation impact on women's lives and identities. Focus is on how racism, classism and heterosexism are produced and reproduced both within and outside of the feminist movement.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

**Attributes:** Social Science

### WOMN 2530 Writing Women's Lives 3 cr

Examination of the ways that traditional scripts for women have been rewritten in literature and film. Topics include coming-of-age, madness, utopia, motherhood, and romantic love as represented in fairytales, autobiographies, documentaries, contemporary novels, and Hollywood films.

**Attributes:** Humanities

### WOMN 2540 Special Topics in Women's Studies 3 cr

Course content will vary according to the needs and interests of students and instructors. Consult the Women's and Gender Studies Program office for information as to specific topics offered. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** WOMN 3120

### WOMN 2560 Women, Science and Technology 3 cr

An overview of women's historical and contemporary participation in science, issues in science and math education, feminist critiques and theories on science and gender, and the impact of technology on women's lives.

**Attributes:** Social Science, Recommended Intro Courses, Written English Requirement

### WOMN 2600 Sex, Gender, Space and Place 3 cr

An examination of how we use places and spaces in our everyday lives to produce and maintain social differences of gender, sexuality, race, class, and citizenship. Drawing on perspectives from feminist geography and history, this course explores ideas about places (for example, homes) and spaces (for example, regions), as well as historical claims that women belong in place but men should control space. Students may not hold credit for both WOMN 2600 and WOMN 2540 with the topic "Sex, Gender, Space and Place."

**Attributes:** Humanities, Recommended Intro Courses

### WOMN 2610 Gender, Transport and Social Justice 3 cr

Examines the gendered impact of uneven access to transportation. Using feminist theories of gender and mobility, it considers claims that mobile women are in danger, and that different forms of transportation have gendered cultures. It studies the links between imperialism, development, and transportation. The course also examines the particular ways in which transportation disadvantage, automobility, limited public transit services, and aging in place affect women as well as initiatives to promote sustainable transportation. Students may not hold credit for both WOMN 2610 and WOMN 2540 with the topic "Gender, Transport and Social Justice."

**Attributes:** Social Science

**WOMN 2620 Feminism and Popular Culture 3 cr**

This course introduces critical skills and a theoretical framework or "toolkit" in feminist popular cultural studies in order to facilitate more critically aware participation, analysis, and production in/of popular culture. It is a feminist examination, using various popular cultural and media forms, of how normative and revolutionary social relations of power are/may be constituted in and through popular culture. Students may not hold credit for both WOMN 2620 and the former WOMN 2570.

**Mutually Exclusive:** WOMN 2570

**Attributes:** Humanities

**WOMN 2630 Indigenous Feminisms 3 cr**

With reference to scholarship, activism, and literary, narrative, and/or creative works, this course critically engages differences and shared priorities across Indigenous feminisms past and present. Also offered as INDG 2630. Students may not hold credit for WOMN 2630 and any of: INDG 2630, the former NATV 2630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: one of WOMN 1500, WOMN 1600, INDG 1200 (the former NATV 1200), INDG 1220 (the former NATV 1220), or INDG 1240 (the former NATV 1240), or written consent from either the Women's and Gender Studies coordinator or Indigenous Studies department head.

**Equiv To:** INDG 2630, NATV 2630

**Attributes:** Humanities

**WOMN 2640 Issues in Gender and the Body 3 cr**

Using a feminist critical lens, this course examines issues relating to gender, the body, and embodiment. Topics to be considered include (but are not limited to) social and scientific constructions of the body; constructions of beauty, health, fitness, and fatness; intersectionality and embodiment; incongruence of sex and gender identification; symbolic and literal cultural discipline and punishment of gendered bodies; artistic representations of and responses to gendered bodies; embodiment in trans and queer communities; embodiment in Indigenous and racialized communities.

**Attributes:** Social Science

**WOMN 2650 Issues in Gender and Sexualities 3 cr**

Using a feminist critical lens, this course examines issues relating to gender and sexuality. Of particular interest will be considerations of how social, political, historical, and popular cultural forces influence representations and constructions of gender and sexuality, as well as how we understand ourselves, others, and our relationships to each other and the world around us.

**Attributes:** Social Science

**WOMN 3000 Interdisciplinary Research in Women's and Gender Studies 3 cr**

An introduction to the approaches scholars use to challenge the dominant theories of knowledge and the major methodologies used to produce it. The course examines the influence of gender theory and feminism on the research questions we ask, the types of materials we use, and the methods we employ. Students may not hold credit for both WOMN 3000 and the former WOMN 3580.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

**Mutually Exclusive:** WOMN 3580

**WOMN 3100 Sex Work in Contemporary Canadian Culture 3 cr**

This course examines cultural linkages between femininity and prostitution in the context of contemporary Canadian culture. The course begins by considering historical cultural and feminist discourses about sex work and sex workers. Keeping in mind that the actual exchange of sexual services for money is currently legal in Canada, course discussions will interrogate enduring representations of sex work/ers. The course also examines some prostitution-related legislation, ideological and "real world" linkages between violence and prostitution, and ongoing activism that reinforce or resist negative representations and the violent realities of sex work/ers in Canada today. Students may not hold credit for both WOMN 3100 and WOMN 2540 with the topic "Sex Work in Contemporary Canadian Culture."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

**Attributes:** Social Science

**WOMN 3110 Women and the Military 3 cr**

The course will: introduce feminist theoretical analyses of militarization; explore the mobilization of women in wartime and its relation to postwar battles over women's on-going access to well-paid occupations inside and outside the armed forces; through case studies, examine the processes by which women challenged their exclusions from particular roles; compare women's experiences in different armed forces and their recruitment strategies; analyse sexual misconduct policies and the treatment of military families and veterans; consider the relationship between the feminist peace movement and women in the military; and study the struggles to commemorate women's wartime contributions. Students may not hold credit for WOMN 3110 and WOMN 3500 with the topic "Women in the Military."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of instructor.

**Mutually Exclusive:** WOMN 3500

**Attributes:** Humanities

**WOMN 3120 Indigenous Women and the Camera 3 cr**

Indigenous women have had a long and problematic relationship with the camera. The colonial lens created a visual legacy of exoticism and objectification, creating images that continue to haunt us. However, women also sought the camera for their own purposes, seizing control of their own representation, and 'speaking back'. Now photography and film are among the strongest modes of women's contemporary artistic expression. This course will explore both legacies from Indigenous women worldwide. Whenever possible, the class will integrate with the Native Women & Film festival, a film event that brings women filmmakers to Winnipeg. Students may not hold credit for WOMN 3120 and WOMN 2540 with the topic "Indigenous Women and the Camera."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of instructor.

**Mutually Exclusive:** WOMN 2540

**Attributes:** Humanities

**WOMN 3130 Gender, Race and Environmental Justice 3 cr**

Relying on interdisciplinary feminist and Indigenous perspectives, this course examines how historical and present-day environmental issues do not exist "out there," but profoundly shape our bodies and lives, and in turn are shaped by social structures and inequities. It includes study of relationships between human and non-human beings in different places and times, and invites students to consider both the interconnection between social and environmental struggles and the misperception that humans and environments somehow exist in isolation from one another. It also provides room to study, envision and enact alternative planetary relationships. Students may not hold credit for both WOMN 3130 and WOMN 3500 with the topic "Nature, Culture, Gender."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of instructor.

**Mutually Exclusive:** WOMN 3500

**Attributes:** Social Science

**WOMN 3500 Selected Topics in Women's Studies 3 cr**

Course in which content varies from year to year according to needs and interests of students and instructors. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

**Mutually Exclusive:** WOMN 3110, WOMN 3130, WOMN 3620

**WOMN 3520 Transnational Feminisms 3 cr**

Introduction to transnational feminist perspectives in order to analyse our contemporary world, including gendered, racialized, and classed power relations and inequalities. Focus is placed on how current global phenomena such as neoliberalism, structural adjustment, and migration shape people's lived experiences in different regions of the world. Students may not hold credit for both WOMN 3520 and the former WOMN 3510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of instructor.

**Equiv To:** WOMN 3510

**Attributes:** Social Science, Written English Requirement

**WOMN 3530 Readings in Women's Studies 6 cr**

Directed readings in a range of Women's Studies literature. This is an independent study course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor and Women's and Gender Studies coordinator.

**WOMN 3540 Readings in Women's Studies 3 cr**

Directed readings in a range of Women's Studies literature. This is an independent study course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor and Women's and Gender Studies coordinator.

**WOMN 3550 Feminist Community Organizing: Theories and Practices 3 cr**

Overview of organizing efforts and techniques, community issues and strategies that women have developed in North American and especially Canadian communities. Focus is on a synthesis of thought and action, theory and practise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

**Attributes:** Social Science

**WOMN 3560 Feminist Perspectives on Violence Against Women 3 cr**

An overview of feminist research and theories on violence against women as an integral component of our social structure, and on issues of social change to alleviate the problem.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

**Attributes:** Social Science

**WOMN 3576 History of Women, Gender, and Sexuality in Canada 3 cr**

This course examines the history of women, gender, and sexuality in Canada's past. Specific topics may include women, gender and sexuality in Indigenous peoples, English and French colonization, nation-building, immigration and urbanization, politics, race, migration and racialization, violence, war, and protest. This course is also offered as HIST 3576. Students may not hold credit for WOMN 3576 and any of: HIST 3576, the former HIST 3570, the former HIST 3572.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 6 credit hours in HIST; or 3 credit hours in Women's and Gender Studies; or written consent of Department Head.

**Equiv To:** HIST 3576

**Mutually Exclusive:** HIST 3570, HIST 3572

**WOMN 3620 Masculinities 3 cr**

An introduction to the key debates in masculinity studies from a feminist perspective. Considering the idea of "hegemonic masculinity" and the practice of creating a typology of masculinity, this course examines the changing forms of masculinity as a political and cultural category, using historical examples from the 19th century and the 1970s and considers the influence of feminist theories on men's engagement with masculinity in North America. Students may not hold credit for both WOMN 3620 and WOMN 3500 with the topic "Masculinities."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

**Mutually Exclusive:** WOMN 3500

**Attributes:** Humanities

**WOMN 4100 Honours Thesis 6 cr**

The Thesis presents the results of an independent research project supervised by a faculty member.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Women's and Gender Studies coordinator.



**WOMN 4120 Practicum in Feminist Organizing 6 cr**

Between September and March, the student will complete a minimum of 80 hours of unpaid independent work in a feminist or woman-centered organization and meet regularly with the instructor and other practicum students. Students will reflect critically on the work experience in course assignments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [at least 24 credit hours in Women's and Gender Studies courses] and written consent of the Women's and Gender Studies coordinator.

**WOMN 4200 Seminar in Women's and Gender Studies 3 cr**

An advanced seminar on a contemporary theme in Women's and Gender Studies. The theme will vary from year to year in accordance with the research interests of the instructor and new developments in the field. Student presentations and discussions will be emphasized. Students may not hold credit for both WOMN 4200 and the former WOMN 4110.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [WOMN 2000 or the former WOMN 2520] and written consent of the Women's and Gender Studies coordinator.

**Equiv To:** WOMN 4110

## Yiddish (YDSH)

**YDSH 1220 Yiddish 6 cr**

This course is intended for those who have little or no experience with the Yiddish language, and may not normally be taken by students who have attended a Yiddish day school. Emphasis on conversational Yiddish and reading comprehension.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of program coordinator.

**Attributes:** Humanities, Recommended Intro Courses

**YDSH 2320 Yiddish Literature and Language 6 cr**

Survey of Yiddish literature; review of Yiddish language skills. This course is intended for graduates of Yiddish day schools, those who have completed YDSH 1220 or equivalent, and students with other previous training in Yiddish.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [YDSH 1220] or written consent of program coordinator.

**Attributes:** Humanities

# GRADUATE STUDIES

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The Faculty of Graduate Studies serves prospective and current graduate students from the moment they apply to the University to the time they receive their degrees at convocation. To do so, it provides oversight for all of the University's graduate programs and collaborates with individual units to ensure clarity and transparency of their program requirements and practices.

## Important Notice

The University of Manitoba reserves the right to make changes in the information contained in the *Undergraduate Calendar* and the *Graduate Calendar* without prior notice. The University of Manitoba web site, [umanitoba.ca](http://umanitoba.ca) (<http://umanitoba.ca>) is a source for updated information.

Not every course listed in the *Undergraduate Calendar* or the *Graduate Calendar* will be offered in this academic year.

It is the responsibility of all students:

- To familiarize themselves each year with the university's academic regulations and policy in general;
- To familiarize themselves with the regulations and policies applying specifically to their faculty, school, or program;
- To familiarize themselves with the specific graduation requirements of the degree, diploma, or certificate they are seeking; and
- To ensure that the courses they have selected are appropriate to their programs.

In the event of an inconsistency between the general academic regulations and policies published in the *Undergraduate Calendar* and the *Graduate Calendar*, and such regulations and policies established by Senate and the councils of the faculties and schools, the version established by Senate and the councils of the faculties and schools shall prevail.

The regulations and policies contained in this year's editions of the *Undergraduate Calendar* and the *Graduate Calendar* apply, subject to change, only for the academic year indicated on the cover page of each publication.

The material in the current editions of the *Undergraduate Calendar* and the *Graduate Calendar* was submitted by the academic and administrative units concerned. The university neither represents nor warrants that all general information and course references used in these publications is accurate although reasonable efforts have been used to check the accuracy of the information.

Students also agree by the act of registration to be bound by the regulations, policies, procedures, bylaws and rules of the University of Manitoba that are in effect at the time of registration, including any amendments which may be enacted during the period of their registration. Students agree by the act of registration to be bound by the regulations, policies, procedures, bylaws and rules of the faculty or program in which they have registered, including any amendments which may be made during the period of their registration. Students also acknowledge that such amendments may have retroactive application.

Students also acknowledge that such regulations, policies, procedures, bylaws and rules will include, but are not limited to, those related to COVID-19 health and safety rules, protocols and processes.

No liability shall be incurred by the University of Manitoba for any loss or damage directly or indirectly suffered or incurred by any student, or any party claiming through or under any student, as a result of interruption or delays in, failure to provide or termination, of services, courses or classes arising out of cause or causes beyond its control including but not limited to acts of God, fires, floods, riots, wars, strikes or lockouts, mass casualty events, local, regional or global outbreak of disease or other public health emergency, social distancing or quarantine restriction, legislative or regulatory requirements, unusually severe weather, failure of public utility or common carrier, or attacks or other malicious acts, including but not

limited to attacks on or through the internet, or any internet service, telecommunications provider or hosting facility, damage to university property, financial exigency, or any other occurrence beyond the control of the University. Further, the University of Manitoba shall not be liable for any losses or damage suffered by a student who discloses his/her personal identification number (PIN) to anyone other than a university employee in the course of registration.

In March 2020, a global pandemic of the virus leading to COVID-19 was declared by the World Health Organization. The Governments of Canada, the Province of Manitoba, and local Governments responded and continues to respond to the pandemic with legislative amendments, controls, orders, by-laws, requests and requirements (collectively, the "Governmental Response"). It is uncertain how long the pandemic, and the related Governmental Response, will continue, and it is unknown whether there may be future resurgences of the virus leading to COVID-19 or any further mutation thereof (collectively, the "Virus") and resulting or supplementary renewed Government Response. Without limiting the foregoing paragraph, the University of Manitoba shall not be liable for and direct or indirect costs, losses or damages associated with any claim, loss or any failure, delay or termination in performance arising out of:

- a. the continued spread of or exposure to the Virus;
- b. the continuation of or renewed Governmental Response to control the spread of the Virus; and
- c. a decision of the University of Manitoba, made on an organization-wide basis and in good faith, to control the spread of the Virus, even if exceeding the then current specific Government Response.

Specifically, the COVID-19 pandemic may necessitate revisions to the format of course offerings. Tuition and mandatory fees have been set regardless of the method of instruction and will not be refunded in the event of a change in the method of instruction during any part of the academic year. In addition, scheduled dates and times may be extended or changed by the University of Manitoba as required. The University of Manitoba will notify students promptly of any such delays or changes and shall, so far as practicable use reasonable efforts to minimize and mitigate any such changes or delays.

## Freedom of Information and Protection of Privacy Act (FIPPA)

This personal information is being collected under the authority of The University of Manitoba Act. It will be used for the purposes of admission, registration, assessment of academic status, and communication with the student. It may be used for administrative research in support of provision of education and general administration of the University. It may be disclosed to other educational institutions, government departments, and co-sponsoring organizations, and, for those students who are members of UMSU, it will be disclosed to the University of Manitoba Students' Union. Upon graduation, the student's name and address, together with information on degrees, diplomas, and certificates earned will be given to and maintained by the alumni records department in order to assist the University's advancement and development efforts. Information regarding graduation and awards may be made public. Personal information will not be used or disclosed for other purposes, unless permitted by The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection of personal information, contact the Access and Privacy Office (tel. 204-474-9844),

The University of Manitoba  
233 Elizabeth Dafoe Library  
Winnipeg, Manitoba, Canada, R3T 2N2.

## **Disclosure of Personal Information to Statistics Canada**

The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student. At any time, students who do not wish to have their information used are able to ask Statistics Canada to remove their identifying information from the national database. Further information on the use of this information can be obtained from Statistics Canada's website (<https://www.statcan.gc.ca/eng/start/>) or by writing to the:

Post-Secondary Section, Centre for Education Statistics  
17th Floor, R.H. Coats Building  
Tunney's Pasture, Ottawa, Ontario, Canada, K1A 0T6.

## About the University

About the University (<http://umanitoba.ca/about/>)

University Administration (<http://umanitoba.ca/admin/>)

## Organizational Structure

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#### University Secretary

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Raman Dhaliwal, B.Comm. (Hons.)

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Annemieke Farenhorst, Ph.D., D.R.S.

Suzanne Harden, B.B.A.

Stephanie Levene, M.B.A.

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### Université de Saint-Boniface

Rectrice: Sophie Bouffard, M.Mus. (Laval), Ph.D. (Musicology) (Regina)

### St. John's College

Warden and Vice-Chancellor: Allison Abra, B.A., M.A., Ph.D.

### St. Paul's College

Rector: Christopher Adams, Ph.D.

## Approved Teaching Centres

William and Catherine Booth College

Prairie Theatre Exchange

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**Bernstein**, C., M.D. (Manitoba), F.R.C.P.C.; **Chen**, Tina, B.A. (Toronto), M.A., Ph.D. (Wisconsin-Madison); **Chochinov**, H. M., O.M., M.D., Ph.D. (Man.), F.R.C.P.C., F.R.S.C., F.C.A.H.S.; **Davie**, James, B.Sc., Ph.D. (UBC), F.C.A.H.S., F.R.S.C.; **Dhalla**, N.S., B.Sc. (Panjab), M.S. (Pennsylvania), Ph.D. (Pittsburgh); **Fayek**, M., B.Sc. Honours (Carleton), Ph.D. (Saskatchewan); **Gole**, A.M., B.Tech. (IIT Bombay), M.Sc., Ph.D.; **Greenfield**, H.J., B.A., M.Phil., M.A., Ph.D. (City University of New York); **Hack**, T., B. Comm. (Distinction) (Saskatchewan), B.Sc. (First Class Honours) (Calgary), M.N. (Manitoba), Ph.D. (Manitoba), FCAHS; **Jayas**, D.S., B.Sc. (G.B.Pant), M.Sc. (Manitoba), Ph.D. (Saskatchewan), P.Ag., P.Eng.; **Kouritzin**, S., B.A. (UBC), M.A. (UBC), Ph.D. (UBC); **Linden**, Rick, B.A. (Alberta), M.A. (Alberta), Ph.D. (Washington); **McCance**, D.C., Cert. Ed., M.A., Ph.D. (Manitoba); **Murphy**, L., B.Sc. (Hons.), Ph.D. (University of Sydney); **Nickerson**, P., B.Sc., M.D., F.R.C.P. (Manitoba); **Perkins**, P., B.A. (Hons.) (Utah), M.A., Ph.D. (Dalhousie); **Perry**, A., B.A. (Simon Fraser), M.A., Ph.D. (York); **Perry**, R.P., B.A. (UBC), M.Sc., Ph.D. (Calgary); **Pierce**, G., O.M., B.P.H.E. (Hons.) (Lakehead), M.Sc. (Dalhousie), Ph.D. (Manitoba); **Rockman-Greenberg**, C., B.Sc. (Hons.), M.D. (McGill), C.M., F.R.C.P.C., F.C.C.M.G.; **Roos**, L., A.B. (Stanford), Ph.D. (MIT); **Toles**, G., B.A., M.A., Ph.D. (Virginia); **Woodgate**, Roberta, B.N., M.N., Ph.D. (Manitoba)

## Distinguished Professors Emeritus

**Anna**, T.E., B.A., M.A., Ph.D. (Duke), F.R.S.C.; **Anthonisen**, N.R., A.B. (Dartmouth), M.D. (Harvard), Ph.D. (McGill); **Berkes**, F., B.Sc., Ph.D. (McGill); **Brydon**, D., B.A. (Hons), M.A. (Toronto), Ph.D. (Australian National), FRSC; **Butler**, M., B.Sc. (Hons.) (Birm.), M.Sc. (Wat), Ph.D. (King's College, London); **Chaturvedi**, M.C., B.Sc. (Met.) (Banara), M.Met., Ph.D. (Sheffield), P.Eng.; **Cohen**, H., B.Sc. (Hons.) (Manitoba), Sc.M. (Brown), Ph.D.; **Comack**, Elizabeth, B.A. (Hons) (Winnipeg), Ph.D. (Alberta); **Degner**, L.F., B.N., M.A., Ph.D. (Michigan); **Eales**, J.G., B.A. (Hons.) (Oxford), M.Sc., Ph.D. (UBC), F.R.S.C.; **Friesen**, G., B.A. (Saskatchewan), M.A., Ph.D. (Toronto); **Friesen**, H.G., O.C., B.Sc. (Med.), M.D. (Manitoba), D.Sc. (Western Ontario), F.R.C.P.C., F.R.S.C.; **Gibson**, D., B.A., LL.B. (Manitoba), LL.M. (Harvard); **Gratzer**, G., B.Sc., Ph.D., F.R.S.C.; **Hawthorne**, F.C., O.C., B.Sc. (Spec.) (Imperial College), A.R.S.M. (Royal School of Mines, London), Ph.D. (McMaster), F.R.S.C., F.G.A.C., F.M.S.A.; **Holley**, R.A., B.Sc., M.Sc. (McGill); Ph.D. (Guelph); **Judd**, E.R., B.A. (Hons.) (Queen's), M.A., Ph.D. (UBC), Diploma (Beijing Language Institute), Diploma (Fudan), F.R.S.C.; **Klostermaier**, K.K., D.Phil. (Gregorian), Ph.D. (Bombay); **Kwong**, J., B.A. (Hong Kong), M.Ed. (Alberta), Ph.D. (Toronto); **Martin**, G., B.A. (Colorado), M.A., Ph.D. (Arizona); **Oleszkiewicz**, J.A., M.Sc. (Wroclaw), M.Sc. (Vanderbilt), Ph.D., F.C.S.C.E.; **Page**, J.H., B.Sc. (Hons.) (Dal.), D.Phil. (Oxf.); **Ronald**, A.R., M.D., B.Sc., (Med.) (Manitoba); **Roos**, L., A.B. (Stanford), Ph.D. (MIT); **Sehon**, A., B.Sc., M.Sc., Ph.D., D.Sc. (Manchester), F.R.S.C.; **Shafai**, L., B.Sc. (Tehran), M.Sc., Ph.D. (Toronto), F.R.S.C.; **Smil**, V., M.S. (Prague), Ph.D. (Pennsylvania State), F.R.S.C.; **van Oers**, W.T.H., Ph.D. (Amsterdam); **Wolfart**, H.C., [B.A. equiv.] (Albert-Ludwigs-University, Freiburg im Breisgau), M.A. (Yale), M.A. (Cornell), M. Phil., Ph.D. (Yale), F.R.S.C.; **Younes**, M., Ch.B., D.P.H. (Egypt), F.R.C.P., Ph.D.

## Chancellors Emeriti

**Mauro**, A.V., O.C., Q.C., B.A., LL.B., LL.M., LL.D. (Manitoba), D.Comm. (Lakehead)

**Secter**, H.L., O.M., B.Comm., LL.B. (Manitoba), LL.M. (Harvard), LL.D. (Winnipeg)

## Presidents Emeriti

**Barnard**, D.T., O.M., Ph.D., F.R.S.C.

**Naimark**, A., B.Sc. (Med.), M.D. (Manitoba), M.Sc., (M.), LL.D., F.R.C.P.C., F.R.S.C.

**Szathmáry**, E.J.E. C.M., O.M., B.A. (Hons.), Ph.D., LL.D. (Toronto), D.Sc. (Western Ontario), D. Litt.S. (St. Michael's College), LL.D. (York), LL.D. (McMaster), LL.D. (Manitoba), LL.D. (Calgary), F.R.S.C.

## Faculties/Schools and Departments

**Note:** Codes for Faculties/Schools, Departments are shown in brackets.

Faculties/Schools	Departments
Agricultural and Food Sciences (Faculty 07; School 24)	Agribusiness and Ageconomics (061)
	Animal Science (035)
	Biosystems Engineering (034)
	Entomology (038)
	Food Science (078)
	General Agriculture (065)
	Plant Science (039)
	Soil Science (040)
	Human Nutritional Science (030)
Architecture (09)	Architecture (050)
	Architecture Interdisciplinary/ Design and Planning (166)
	City Planning (073)
	Environmental Design (079)
	Interior Design (051)
	Landscape Architecture (031)
Art (15)	Fine Arts (054)
Arts (01)	Anthropology (076)
	Arts Interdisciplinary (099)
	Asian Studies (150)
	Canadian Studies (151)
	Catholic Studies (160)
	Central and East European Studies (099S)
	Classics (003)
	Economics (018)
	English, Film, and Theatre (004)
	French, Spanish and Italian (044)
	German and Slavic Studies (008)
	Global Political Economy (157)
	History (011)
	Icelandic (012)
	Judaic Studies (055)
	Labour Studies (153)
	Linguistics (126)
	Indigenous Studies (032)
	Philosophy (015)
	Political Studies (019)
	Psychology (017)

	Religion (020)
	Sociology (077)
	Ukrainian Canadian Heritage Studies (155)
	Women's and Gender Studies (156)
Education (08)	Curriculum, Teaching and Learning (132)
	Disability Studies (162)
	Educational Administration, Foundations and Psychology (129)
	Education Ph.D. (124)
Engineering (03)	Civil Engineering (023)
	Electrical and Computer Engineering (024)
	Engineering - Preliminary Year (130)
	Mechanical (025)
	Engineering (025)
Environment, Earth, and Resources, Clayton H. Riddell (028)	Geological Sciences (007)
	Environment and Geography (128)
	Environment, Earth, and Resources (177)
	Resource Management (056)
Extended Education (26)	
Graduate Studies (016)	Graduate Studies (069)
	Mauro Centre for Peace Studies (170)
Health Sciences (29)	General Human Ecology (028)
	Health Sciences (173)
	Health Studies (173)
Dentistry (17)	Dental Diagnostic and Surgical Sciences (103)
	Dentistry (066)
	Oral Biology (100)
	Preventative Dental Science (101)
	Restorative Dentistry (102)
Dental Hygiene (20)	Dental Hygiene (070)
Medicine (05)	Anaesthesia (096)
	Biochemistry and Medical Genetics (137)
	Community Health Sciences (093)
	Family Social Sciences (062)
	Human Anatomy and Cell Science (080)
	Immunology (072)
	Interdisciplinary Medicine (165)
	Medical Education (888)
	Medical Microbiology and Infectious Diseases (097)
	Medicine (083)
	Pathology (088)
	Pharmacology (089)
	Psychiatry (091)
	Physiology (090)

	Surgery (094)
Nursing (13)	Midwifery (049)
	Nursing (049)
Pharmacy (11)	Pharmacy (046)
Rehabilitation Sciences (19)	Medical Rehabilitation (068)
	Occupational Therapy (168)
	Physical Therapy (167)
	Respiratory Therapy (169)
Kinesiology and Recreation Management (22)	Kinesiology (171)
	Physical Education (057)
	Physical Education & Recreation Studies General (172)
	Recreation Studies (123)
Law (10)	Law (045)
Management, I. H. Asper School of Business (06)	Accounting and Finance (009)
	Actuarial Studies, Warren Centre (010)
	Business Administration (027)
	Interdisciplinary Management (098)
	Marketing (118)
	Supply Chain Management (164)
Music, Marcel A. Desautels (21)	Music (033)
Science (02)	Biological Sciences (071)
	Chemistry (002)
	Computer Science (074)
	Data Science (178)
	Mathematics (136)
	Microbiology (060)
	Physics and Astronomy (016A)
	Statistics (005)
Social Work (12)	Social Work (047)
University 1 (27)	

## Alphabetical Listing of Subjects

Subject	Code	Faculty/School
Accounting	ACC	Management
Actuarial Studies Warren Centre	ACT	Management
Agribusiness and Ageconomics	ABIZ	Agricultural and Food Sciences
Agroecology	AGEC	Agricultural and Food Sciences
Agriculture	AGRI	Agricultural and Food Sciences
Agriculture Diploma	DAGR	Agricultural and Food Sciences
American Sign Language	ASLL	Arts
Anatomy	ANAT	Medicine
Anesthesia	ANES	Medicine
Animal Science	ANSC	Agricultural and Food Sciences

Anthropology	ANTH	Arts
Applied Mathematics	AMAT	Science
Arabic	ARA	Arts
Architecture	ARCG	Architecture
Architecture Interdisciplinary	ARCH	Architecture
Arts Interdisciplinary	ARTS	Arts
Asian Studies	ASIA	Arts
Astronomy	ASTR	Science
Biochemistry and Medical Genetics	BGEN	Medicine
Biological Sciences	BIOL	Science
Biosystems Engineering	BIOE	Agricultural and Food Sciences
Biomedical Engineering	BME	Engineering
Biotechnology	BTEC	Science
Canadian Studies	CDN	Arts
Catholic Studies	CATH	Arts
Chemistry	CHEM	Science
City Planning	CITY	Architecture
Civil Engineering	CIVL	Engineering
Classics	CLAS	Arts
Community Health Sciences	CHSC	Medicine
Computer Science	COMP	Science
Data Science	DATA	Science
Dental Diagnostic and Surgical	DDSS	Dentistry
Dental Hygiene	HYGN	Dental Hygiene
Dentistry	DENT	Dentistry
Diagnostic Cytology	CYTO	Medical Rehabilitation
Diploma in Agriculture	AGRI	Agricultural and Food Sciences
Disability Studies	DS	Disability Studies
Economics	ECON	Arts
Education Ph.D.	EDUC	Education
Educational Administration, Foundations and Psychology	EDUA	Education
Education: Curriculum, Teaching and Learning	EDUB	Education
Electrical Engineering	ECE	Engineering
Engineering - Preliminary Year	ENG	Engineering
English	ENGL	Arts
Entomology	ENTM	Agricultural and Food Sciences
Entrepreneurship/Small Business	ENTR	Management
Environment	ENVR	Environment, Earth, and Resources
Environment, Earth, and Resources	EER	Environment, Earth, and Resources



Environmental Architecture	EVAR	Architecture	Kinesiology	KIN	Kinesiology and Recreation Management
Environmental Design	EVDS	Architecture	Kinesiology, Phys.Ed and Recreation	KPER	Kinesiology, Phys.Ed and Recreation
Environmental Interior Environment	EVIE	Architecture	Labour and Workplace Studies	LABR	Arts
Environmental Landscape and Urbanism	EVLU	Architecture	Landscape Architecture	LARC	Architecture
Family Social Sciences	FMLY	Medicine	Latin	LATN	Arts
Film Studies	FILM	Arts	Law	LAW	Law
Finance	FIN	Management	Linguistics	LING	Arts
Fine Art General Courses	FA	Art	Management Information Systems	MIS	Management
Fine Art Diploma	FNDP	Art	Management Science	MSCI	Management
Fine Art: Art History	FAAH	Art	Marketing	MKT	Management
Fine Art Studio Courses	STDO	Art	Mathematics	MATH	Science
Food Science	FOOD	Agricultural and Food Sciences	Mechanical Engineering Graduate	MECG	Engineering
Forensic Sciences	FORS	Science	Mechanical Engineering Undergraduate	MECH	Engineering
French	FREN	Arts	Medical Microbiology and Infectious Diseases	MMIC	Medicine
General Agriculture	AGRI	Agricultural and Food Sciences	Medical Rehabilitation	REHB	Medical Rehabilitation
General Human Ecology	HMEC	Human Ecology	Medicine	MED	Medicine
General Management	GMGT	Management	Microbiology	MBIO	Science
Geography	GEOG	Environment, Earth, and Resources	Midwifery	MDFY	Nursing
Geological Sciences	GEOL	Environment, Earth, and Resources	Music	MUSC	Music
German	GRMN	Arts	Native Studies	NATV	Arts
Global Political Economy	GPE	Arts	Nursing	NURS	Nursing
Graduate Studies	GRAD	Graduate Studies	Occupational Therapy	OT	Medical Rehabilitation
Greek	GRK	Arts	Operations Management	OPM	Management
Health Studies	HEAL	Health Sciences	Oral Biology	ORLB	Dentistry
Hebrew	HEB	Arts	Pathology	PATH	Medicine
History	HIST	Arts	Peace Studies	PEAC	Graduate Studies
Human Nutritional Sciences	HNSC	Agricultural and Food Sciences	Pharmacology	PHAC	Medicine
Human Resources Management/ Industrial Relations	HRIR	Management	Pharmacy	PHRM	Pharmacy
Icelandic	ICEL	Arts	Pharmacy	PHMD	Pharmacy
Immunology	IMMU	Medicine	Philosophy	PHIL	Arts
Indigenous Studies	INDG	Arts	Physical Education	PHED	Kinesiology and Recreation Management
Interdisciplinary Management	IDM	Management	Physical Education and Recreation Studies General	PERS	Kinesiology and Recreation Management
Interdisciplinary Medicine	IMED	Medicine	Physical Therapy	PT	Medical Rehabilitation
Interior Design	IDES	Architecture	Physics	PHYS	Science
International Business	INTB	Management	Physiology	PHGY	Medicine
Italian	ITLN	Arts	Plant Science	PLNT	Agricultural and Food Sciences
Judaic Studies	JUD	Arts	Polish	POL	Arts
			Political Studies	POLS	Arts
			Post Graduate Medical Education	PGME	Medicine

Preventive Dental Science	PDSO	Dentistry
Psychiatry	PCTY	Medicine
Psychology	PSYC	Arts
Recreation	REC	Kinesiology and Recreation Management
Religion	RLGN	Arts
Resource Management	NRI	Environment, Earth, and Resources
Respiratory Therapy	RESP	Medical Rehabilitation
Restorative Dentistry	RSTD	Dentistry
Russian	RUSN	Arts
Semitic Languages and Literature	SEM	Arts
Slavic Studies	SLAV	Arts
Social Work	SWRK	Social Work
Sociology	SOC	Arts
Soil Science	SOIL	Agricultural and Food Sciences
Spanish	SPAN	Arts
Statistics	STAT	Science
Supply Chain Management	SCM	Management
Surgery	SURG	Medicine
Textile Sciences	TXSC	Agriculture
Theatre	THTR	Arts
Ukrainian	UKRN	Arts
Ukrainian Cdn. Heritage	UCHS	Arts
Undergraduate Medical Education	UGME	Medicine
Women's Studies	WOMN	Arts
Yiddish	YDSH	Arts

# Academic Schedule

## Academic Schedule Fall/Winter Term 2022-2023 Dates Applicable to all U of M Students

### University Closure

When the University is closed no classes/examinations will be held

Event	Date
Canada Day	July 1, 2022
Terry Fox Day (Civic Holiday)	August 1, 2022
Labour Day	September 5, 2022
Queen Elizabeth II Day of Mourning	September 19, 2022
National Day for Truth and Reconciliation	September 30, 2022
Thanksgiving Day	October 10, 2022
Remembrance Day	November 11, 2022
Winter Holiday	December 24, 2022- January 3, 2023
Louis Riel Day	February 20, 2023
Good Friday	April 7, 2023
Victoria Day	May 22, 2023
Canada Day (Holiday Observed)	July 3, 2023
Terry Fox Day (Civic Holiday)	August 7, 2023

## Dates Applicable to most U of M Students

Some additional or differing date information is included in separate sections for: Agriculture Diploma, Art (School of), Dental Hygiene, Dentistry (includes IDDP), Education (B.Ed. only), Management, Medicine (excludes Family Social Sciences), Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician's Assistant Studies, Respiratory Therapy, and Social Work. Students in these programs should also see their respective section of the Academic Schedule.

### Orientation

Event	Date
New Student Orientation Fall Term Fort Garry Campus	Sept 6, 2022
Faculty of Agricultural & Food Sciences, Faculty of Arts, School of Art, Faculty of Environment, Earth & Resources, Faculty of Music, Faculty of Science, Faculty of Social Work, Interdisciplinary Health Program	Sept 6, 2022
Faculty of Law First Year Orientation	Sept 6 to 7, 2022
New Student Orientation Fort Garry Campus Winter Term	Jan 6, 2023

## Start and End Dates

Additional or differing dates exist for: Agriculture Diploma, Dental Hygiene, Dentistry, Education, Management, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician's Assistant Studies, Respiratory Therapy, and Social Work. Students in these programs should also see their respective section of the Academic Schedule.

Event	Date
Fall Term	September 7- December 12, 2022
Winter Term (no classes, examinations or tests will be held April 7, 2023)	January 9 to April 12, 2023
Winter/Summer Term spanning distance and online courses	January 9 to July 6, 2023

## Registration and Withdrawal Dates

Additional or differing dates exist for: Agriculture Diploma and other faculties, colleges and/or schools offering irregularly scheduled courses. Agriculture Diploma students should also see their respective section of the Academic Schedule; all others should also refer to either the 'Irregular Refund and Voluntary Withdrawal Deadline' information posted on the Registrar's Office website (<https://umanitoba.ca/registrar/>), or the Class Schedule. ([https://aurora.umanitoba.ca/banprod/bwckschd.p\\_disp\\_dyn\\_sched/](https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/))

### Regular Registration Period

Event	Date
Fall Term and Fall/Winter Term classes	Ends September 6, 2022
Winter Term classes and Winter / Summer Term spanning distance and online courses	Ends January 8, 2023

### Limited Access Term Expiry Dates

(to be determined by the Registrar's Office in accordance with the Registration Schedule)

Event	Date
Fall Term and Fall/Winter Term classes	TBD
Winter Term and Winter/Summer Term spanning distance and online courses	TBD

### Registration Revision Period

Students may use this period of time to make changes to their selected courses or class schedule. Last day to drop is 1 business day prior to the end of the Registration Revision Period.

Event	Date
Fall Term and Fall/Winter Term classes	September 7 to 21, 2022
Winter Term classes and Winter/ Summer Term spanning distance and online courses	January 9 to 23, 2023

## Last Date to Drop without Penalty

Last date to drop and have course excluded from transcripts; VWs will be recorded on transcripts for courses dropped after this date. There will be no refunds for courses dropped after this date. Additional or differing dates exist for Agriculture Diploma; students in this program should also see their respective section of the Academic Schedule.

Event	Date
Fall Term	September 20, 2022
Fall/Winter Term classes Part A	September 20, 2022

Fall/Winter Term classes Part B (VW January 20, 2023 recorded if dropped after Sept 21, 2021)

Winter Term classes and Winter/Summer Term spanning distance and online courses	January 20, 2023
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### Last Date to Register/Registration Revision Deadline

Event	Date
Fall Term and Fall/Winter Term classes	September 21, 2022
Winter Term classes and Winter/Summer Term spanning distance and online courses	January 23, 2023

### Voluntary Withdrawal (VW) Deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from courses after this date

Event	Date
Fall Term classes	November 22, 2022
Fall/Winter Term spanning classes	January 20, 2023
Winter Term classes	March 22, 2023
Winter/Summer Term spanning distance and online courses	May 11, 2023

### Fee Payment Deadlines

A financial penalty will be assessed on accounts with an outstanding balance after this date.\*

Event	Date
Fall Term	October 5, 2022
Winter Term	February 7, 2023

\* Please see Last Day to Drop without Penalty

### Term Breaks

Academic and administrative offices will be open during this period; no classes, tests or assignment due dates occur during this time. Additional or differing dates exist for: Dental Hygiene, Dentistry, Education (B.Ed. only), Medicine (M.D. only), Occupational Therapy, Pharmacy, Physical Therapy, and Respiratory Therapy. Students in these programs should also see their respective section of the Academic Schedule.

Event	Date
Fall Term Break (The U of M will be closed Friday November 11 for Remembrance Day)	November 7 to 10, 2022
Winter Term Break (The U of M will be closed Monday February 20 for Louis Riel Day)	February 21 to 24, 2023

### Examination and Test Dates

Students are reminded that they must remain available until all examination and test obligations have been fulfilled. Additional or differing dates exist for: Agriculture Diploma, Dental Hygiene, Dentistry, Education, Medicine (M.D.), and Pharmacy. Students in these programs should also see their respective section of the Academic Schedule. Students in faculties, colleges, schools or programs offering irregularly

scheduled courses should also see the exam timetable available through their program office

Event	Date
Fall Term (includes tests and mid term exams for Fall/Winter Term classes)	December 13 to 23, 2022
Winter Term (includes final exams for Fall/Winter Term classes)	April 14 to 28, 2023

### Challenge for Credit Application Deadline

Event	Date
For classes offered Fall Term 2022 and spanning Fall/Winter 2022-2023	September 21, 2022
For classes offered Winter Term 2023	January 23, 2023

### Final Grade Appeal Deadlines

Event	Date
For Final grades received for Fall Term 2022 classes	January 23, 2023
For final grades received for Winter Term 2023 and Fall 2022/Winter 2023 classes	May 29, 2023

### Graduation and University Convocation

Degrees, Diplomas and Certificates will be awarded at Convocation. Graduation date may differ from Convocation Ceremony date. Additional or differing dates exist for Agriculture Diploma, Dental Hygiene, Dentistry, Medicine, Occupational Therapy, Pharmacy, Physical Therapy, and Respiratory Therapy; students in these programs should also see their respective section of the Academic Schedule.

#### For students graduating Fall 2022

Event	Date
Deadline to apply online to graduate for most Undergraduate students	August 2, 2022
Faculty of Graduate Studies Submission Deadline*	August 25, 2022
Convocation Ceremony (Fort Garry Campus)	October 19 to 20, 2022
Convocation Ceremony (Bannatyne Campus)	October 27, 2022

#### For students graduating February 2023

Event	Date
Deadline to apply online to graduate for most Undergraduate students	September 21, 2022
Faculty of Graduate Studies Submission Deadline*	January 4, 2023
Graduation date for students graduating in February	February 1, 2023
Convocation Ceremony (Fort Garry Campus)	June 6-9, 2023

**For students graduating Spring 2023**

Event	Date
Deadline to apply online to graduate for most Undergraduate students	January 23, 2023
Faculty of Graduate Studies Submission Deadline*	March 30, 2023
Convocation Ceremony (Bannatyne Campus)	May 18, 2023
Convocation Ceremony (Fort Garry Campus)	June 6-9, 2023
Convocation Ceremony- Université de Saint-Boniface	June 12, 2023
Graduate Studies Submission Deadline* for students graduating Fall 2022	August 24, 2023
Annual Traditional Graduation Pow Wow in honour of Indigenous graduates	May 6, 2023

\* Last date for receipt by Graduate Studies of Theses/Practica and reports on Theses/Practica, comprehensive examinations, and project reports from students, and lists of potential graduands from departments.

**Dates Applicable to Agriculture Diploma****Orientation**

Event	Date
Orientation	September 7, 2022 (morning)
Orientation	September 8, 2022 (morning)
Orientation	September 9, 2022 (all day)

**Start and End Dates**

Event	Date
Fall Term	Sept. 12 to Dec 9, 2022
Experiential Learning	Oct 11 to 14, 2022 (subject to change)
Winter Term	Jan 9 to Apr 6, 2023
Experiential Learning	Jan 19, 23 to 25, 2023 (subject to change)

**Registration and Withdrawal Dates****Regular Registration Period**

Event	Date
Fall Term and Fall/Winter Term classes	Ends Sept. 11, 2022
Winter Term Classes	Ends Jan 8, 2023

**Late Registration/Registration Revision Period**

A financial penalty may be assessed on late registrations. Students may use this period of time to make changes to their selected courses or class schedule

Event	Date
Fall Term and Fall/Winter Term classes	Sept 12 to 27, 2022
Winter Term Classes	Jan 9 to 24, 2023

**Last Day to Drop without Penalty**

Last date to drop and have class excluded from transcripts; VWs will be recorded on transcripts for classes dropped after this date

Event	Date
Fall Term and Fall/Winter Term classes	Sept 26, 2022
Winter Term Classes	Jan 23, 2023

**Last Date to Register/Registration Revision Deadline**

Event	Date
Fall Term and Fall/Winter Term classes	Sept 27, 2022
Winter Term Classes	Jan 24, 2023

**Voluntary (VW) Withdrawal deadline**

Last date to withdraw and not receive a final grade; students cannot withdraw from classes after this date.

Event	Date
Fall Term classes	Nov 21, 2022
Winter Term and Fall/Winter Term classes	Mar 17, 2023

**Examination and Test Dates**

Event	Date
Fall Term (includes tests and midterms exams for Fall/Winter Term classes)	Dec 12 to 22, 2022
Winter Term (includes final exams for Fall/Winter Term classes; no classes, examinations or tests will be held on April 15, 2022)	Apr 10 to 19, 2023

**Dates applicable to Architecture****Important Dates (Mandatory for all ED2 Students)**

Event	Date
Orientation	Aug 26, 2022 (subject to change)

**Dates applicable to Art (School of)****Important Dates**

Event	Date
First Year Field Trip	TBD

**Dates applicable to Dental Hygiene****Start and End Dates**

Event	Date
Year 2	
Fall Term Classes	Aug 15 to Nov 25, 2022 (classes) Dec 2, 2022 (Clinics)
Winter Term Classes	Jan 3 to March 31, 2023
Year 3	
Fall Term Classes	Aug 8 to Nov 25, 2022 (Classes) Dec 9, 2022 (Clinics)
Winter Term Classes	Jan 9 to March 31, 2023 (classes) April 6, 2023 (clinics)

## Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 2	
Fall Term	August 29, 2022
Winter Term	January 23, 2023
Year 3	
Fall Term	September 6, 2022
Winter Term	January 30, 2023

Voluntary Withdrawal (VW) deadline

Event	Date
Year 2	
Fall Term	November 7, 2022
Winter Term	March 6, 2023
Year 3	
Fall Term	October 31, 2022
Winter Term	March 13, 2023

## Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students

Event	Date
Fall Term Break	N/A
Winter Term Break	Feb 27 to March 3, 2023

## Examination and Test Dates

Event	Date
Year 2	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec 5 to 16, 2022
Winter Term	Apr 3 to 6, 2023
Year 3	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec 12 to 16, 2022
Winter Term	Apr 10 to 14, 2023

## Convocation Ceremony

Event	Date
Bannatyne Campus	May 18, 2023

## Dates applicable to Dentistry (including International Dentist Degree Program)

### Start and End Dates

Event	Date
Years 1 and 2 Classes and Clinics	
Fall Term	Aug 8 to November 25, 2022
Winter Term	Jan 3 to April 28, 2023
Year 3/IDDP 1 Classes and Clinics	
Fall Term	Aug 2 to Nov 25, 2022 (classes) & Dec 3 (clinics), 2022
Winter Term	Jan 3 to Apr 28, 2023

Year 4/IDDP 2 Classes and Clinics

Fall Term	Aug 2 to Dec 2, 2022 (classes & clinics)
Winter Term	Jan 3 to Apr 21, 2023

## Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 1 & 2	
Fall Term	August 29, 2022
Winter Term	January 30, 2023
Years 3 & 4	
Fall Term	August 22, 2022
Winter Term	January 30, 2023

Voluntary Withdrawal (VW) deadline

Event	Date
Years 1, 2 & 3	
Fall Term	October 31, 2022
Winter Term	March 27, 2023
Year 4	
Fall Term	October 31, 2022
Winter Term	March 20, 2023

## Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students

Event	Date
Fall Term Break	N/A
Winter Term Break	Feb 27 to Mar 3, 2023

## Examination and Test Dates

Event	Date
Years 1,2 and 3/IDDP 1	
Fall Term (includes tests and midterm exams for Fall/Winter term classes)	Dec 5 to 16, 2022
Winter Term	May 1 to 12, 2023
Year 4/IDDP 2	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec 12 to 16, 2022
Winter Term	Jan 9 to 13, 2023

## Convocation Ceremony

Event	Date
Bannatyne Campus	May 18, 2023

## Dates applicable to Education (B.Ed. only \*)

Note: Unless registered in a B.Ed. course, PBDE students follow the dates listed in Section 1.2: Dates applicable to most U of M students.

\*All dates are tentative and dependent on decisions made by the Province regarding K – 12 schools during and post-pandemic.

**Orientation**

Event	Date
All students	September 6, 2021

**Start and End Dates**

Note: Practicum dates may vary by practicum placement.

Event	Date
Fall Term	
Practicum Block	Sept 7 to 9, 2022
Practicum Mondays	Sept 12, 26; Oct 24, 31, 2022
Day Classes	Sept 13 to Nov 9, 2022
MTS PD Day	Oct 21, 2022
Practicum Block	Nov 14 to Dec 13, 2022
Winter Term	
Day Classes	Jan 10 to Mar 17, 2023
Practicum Mondays	Jan 9, 16, 23, 30; Feb 6, 13, 27; Mar 6, 13, 2023
Practicum Block	Mar 20 to 24; Apr 3 to 26, 2023

**Term Breaks**

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Fall Term Break (Note: Dates may vary by practicum placement)	Nov 10 to 11, 2021
Winter Term Break	see Term Break for all U of M students
Winter Practicum Break (Note: Dates may vary by school division and/or practicum placement)	Mar 27 to 31, 2023

**Examination and Test Dates**

Event	Date
Fall Term (as required)	Nov 5, 2022
Winter Term (as required)	March 18, 2023

**Dates applicable to Management (Graduate Programs)****Orientation**

Event	Date
Fall Term (all programs)	Early August 2022 TBD

**Start and End Dates**

Event	Date
Fall Term (M.B.A, M. Fin., and M.S.C.M.) Irregular Start	early August to Dec. 9, 2022
Winter Term (M.B.A., M. Fin., and M.S.C.M.) Irregular Start	Early Jan to April 12, 2023
Fall Term (M.Sc., and Ph.D.)	Sept 7 to Dec 12, 2022
Winter Term (M.Sc., and Ph.D.) No classes, examinations or tests will be held Apr.7, 2023.	Jan 9 to Apr 12, 2023

**Dates applicable to Medicine (excludes Family Social Sciences and Interdisciplinary Health Programs)**

Note: Family Social Sciences and Interdisciplinary Health Programs students follow the Dates applicable to most U of M students.

**Orientation**

Event	Date
Year 1	Aug 23 to 26, 2022

**Start and End Dates**

Event	Date
Year 1	
Fall Term	Aug 29 to Dec 22, 2022
Winter Term	Jan 9 to June 3, 2023
Rural Week	May 29 to June 2, 2023
Year 2	
Fall Term	Aug 29 to Dec 22, 2022
Winter Term	Jan 9 to May 26, 2023
Year 3	
Fall Term	August 22 to Dec 16, 2022
Winter Term	Jan 3 to May 14, 2023
Year 4	
Fall Term	Aug 22 to Dec 16, 2022
Winter Term	Jan 3 to May 14, 2023

**Registration and Withdrawal Dates**

Last Date to Drop without Penalty

Event	Date
Fall Term	
Year 1	Sept 19, 2022
Year 2	Sept 19, 2022
Year 3	Sept 12, 2022
Year 4	Sept 12, 2022
Winter Term	
Year 1	Jan 30, 2023
Year 2	Jan 30, 2023
Year 3	Jan 24, 2023
Year 4	Jan 24, 2023

Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Year 1	Nov 21, 2022
Year 2	Nov 21, 2022
Year 3	Nov 14, 2022
Year 4	Nov 14, 2022
Winter Term	
Year 1	Apr 17, 2023
Year 2	Apr 10, 2023
Year 3	Apr 4, 2023
Year 4	Apr 4, 2023

### Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Year 1 & 2	
Fall Term Break	N/A
Winter Term Break	Mar 20 to 24, 2023
Year 3 & 4	
Fall & Winter Term Break	N/A

### Examination and Test Dates Convocation Ceremony

N/A

Event	Date
Bannatyne Campus	May 18, 2023

### Dates applicable to Nursing

#### Orientation

Event	Date
Fall Term	Aug 30 to 31, 2022
Winter Term	Dec 20 to 21, 2022

### Dates applicable to Occupational Therapy

#### Orientation

Event	Date
Year 1	Aug 22 to 23, 2022
Year 2	Aug 22, 2022

#### Start and End Dates

Event	Date
Year 1	
Fall Term Classes	Aug 22 to Nov 18, 2022
Basic Fieldwork	Nov 21 to Dec 16, 2022
Winter Term Classes	Jan 4 to May 5, 2023
Intermediate Fieldwork 1	May 8 to June 30, 2023
Year 2	
Fall Term Classes	Aug 22 to Dec 16, 2022
Intermediate Fieldwork 2	Jan 2 to March 3, 2023
Winter Term Classes	Mar 13 to June 30, 2023
Advanced Fieldwork	Flexible start and end dates between July 3 to Oct 6, 2023

### Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Fall Term	
Year 1	Sept 6, 2022
Year 2	Sept 6, 2022
Winter term	
Year 1	Jan 25, 2023
Year 2	Mar 27, 2023

Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Year 1	Oct 24, 2022
Year 2	Nov 14, 2022
Winter Term	
Year 1	Apr 5, 2023
Year 2	June 5, 2023

### Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students

Event	Date
Fall Term Break	Oct 10 to 14, 2022
Winter Term Break *	March 6 to 10, 2023

\*Note: Some students may need to complete fieldwork during the mid-term break depending on availability of fieldwork sites.

### Convocation Ceremony

Event	Date
Bannatyne Campus	October 27, 2022

### Dates applicable to Pharmacy

#### Orientation

Event	Date
Year 1	Aug 29, 2022

#### Start and End Dates

Event	Date
Year 1	
Fall Term Classes	Aug 29 to Dec 9, 2022
Winter Term Classes	Jan 9 to Apr 14, 2023
Year 2	
Fall Term Classes	Aug 29 to Dec 5, 2022
IPPE Community	Jan 3 to 27, 2023
Winter Term Classes	Jan 30 to May 5, 2023
Year 3	
Fall Term Classes	Sept 6 to Dec 9, 2022
Winter Term Classes	Jan 9 to Apr 14, 2023
Year 4	
Practicum Block 1	May 9 to June 30, 2022
Practicum Block 2	July 4 to Aug 26, 2022
Practicum Block 3	Aug 29 to Oct 21, 2022
Practicum Block 4	Oct 24 to Dec 16, 2022
Practicum Block 5	Jan 3 to Feb 24, 2023
Practicum Block 6	Feb 27 to Apr 21, 2023

### Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Fall Term	
Years 1 & 3	Sept 20, 2022
Year 2	Sept 12, 2022



Year 4	By Course
Winter term	
Years 1 & 3	Jan 23, 2023
Year 2	Feb 13, 2023
Year 4	By Course

## Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Years 1 & 3	Nov 22, 2022
Year 2	Nov 14, 2022
Year 4	By Course
Winter Term	
Years 1 & 3	Mar 27, 2023
Year 2	Apr 17, 2023
Year 4	By Course

## Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Year 1 & 3	Please refer to dates applicable to most U of M students
Year 2	
Fall	Please refer to dates applicable to most U of M students
Winter	Mar 20 to 24, 2023
Year 4	n/a

## Examination &amp; Test Dates

Event	Date
Years 1 & 3	Dec 12 to 22, 2022
Fall Term Exams	Please refer to dates applicable to most U of M students
Winter Term Exams	Apr 17 to 28, 2023
Year 2	
Fall Term Exams	Dec 6 to 16, 2022
Winter Term Exams	May 8 to 19, 2023
Year 4	
Fall and Winter Term Exams	n/a

## Convocation Ceremony

Event	Date
Bannatyne Campus	May 18, 2023

## Dates applicable to Physical Therapy

Event	Date
Orientation	N/A

## Start and End Dates

Event	Date
Year 1	
Fall Term Classes	Aug 2 to Dec 22, 2022
Winter Term Classes	Jan 3 to Mar 24, 2023

Clinical Placement	2x6 week placement between Apr 3 to Aug 4, 2023
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## Year 2

Fall Term Classes	Aug 2 to Sept 29, 2022
Clinical Placement	1x5 week placement block + 1x5 week research block between Oct 3 to Dec 22, 2022
Winter Term Classes	Jan 3 to Mar 24, 2023
Clinical Placement	2x6 week placement between Apr 3 to Aug 4, 2023

## Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Fall Term	
Year 1	Aug 28, 2022
Year 2	Aug 28, 2022
Winter term	
Year 1	Jan 15, 2023
Year 2	Jan 15, 2023

## Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Year 1	Nov 14, 2022
Year 2	Sept 12, 2022
Winter Term	
Year 1	Feb 27, 2023
Year 2	Feb 27, 2023

## Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Fall Term Break	N/A
Winter Term Break	Mar 27 to 31, 2023

## Convocation Ceremony

Event	Date
Bannatyne Campus	October 27, 2022

## Dates applicable to Physician Assistant Studies

## Orientation

Event	Date
Year 1	Aug 29 to Sept 6, 2022
Clinical Year 2 Orientation	Aug 22 to 26, 2022

## Start and End Dates

Event	Date
Fall Term	Please refer to dates applicable to most U of M students (subject to change)
Winter Term	Jan 4 to Apr 7, 2023
Spring/Summer Term	Apr 24 to Jul 14, 2023
Fall Term Clinical Year 2 Rotations	Aug 29 to Dec 16, 2022

Winter Term Clinical Year 2 Rotations	Jan 2 to Apr 23, 2023
Spring/Summer Term Clinical Year 2 Rotations	Apr 24 to Aug 16, 2023

### Term Breaks

Event	Date
Term 1 Break	Dec 23, 2022 to Jan 2, 2023
Reading Week	Feb 21 to Feb 24, 2023
Term 2 BReak	Apr 17 to Apr 21, 2023
Summer Break (Term 3)	Jul 24, 2023 until Clinical Orientation for next year

### Examination and Test Dates

Event	Date
Fall Term Year 1	Dec 12 to 16, 2022
Winter Term Year 1	Apr 10 to 14, 2023
Spring Term Year 1	July 17 to July 23, 2023

### Convocation Ceremony

Event	Date
Bannatyne Campus	October 27, 2022

## Dates applicable to Respiratory Therapy

### Orientation

Event	Date
Year 1	Sept 1 & 2, 2022
Year 3	Aug 18, 2022

### Start and End Dates

(Includes clinical placement and classes)

Event	Date
Year 1	
Fall Term	Sept 6 to Dec 16, 2022
Winter Term	Jan 4 to Apr 21, 2023
Winter Term Clinical Placement	May 1 to 26, 2023
Year 2	
Fall Term	Sept 6 to Dec 16, 2022
Winter Term	Jan 4 to May 26, 2023
Winter Term Clinical Placement	May 29 to June 23, 2023
Year 3	
Fall Term	Aug 18 to Dec 16, 2022
Winter Term	Jan 3 to May 26, 2023

### Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Fall Term	
Years 1 & 2	Sept 20, 2022
Year 3	Sept 6, 2022
Winter Term	
Year 1	Jan 25, 2023
Year 2	Feb 1, 2023
Year 3	Jan 25, 2023

### Voluntary Withdrawal (VW) Deadline

Event	Date
Fall Term	
Years 1 & 2	Nov 22, 2022
Year 3	Nov 15, 2022
Winter Term	
Year 1	Apr 12, 2023
Year 2	May 3, 2023
Year 3	Apr 11, 2023

### Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Event	Date
Fall Term Break	N/A
Winter Term Break	Please refer to dates applicable to most U of M students

### Convocation Ceremony

Event	Date
Bannatyne Campus	October 27, 2022

## Dates applicable to Social Work

### Orientation

Event	Date
Fort Garry, Inner City Field Instruction Orientation	Sept 6, 2022

### Start and End Dates

#### Field Instruction\*

Event	Date
Field Instruction*	
Fall Term	Sept 6 to Dec 16, 2022
Winter Term	Jan 9 to Apr 21, 2023

\*Note: Some students may need to complete fieldwork during the fall and/or winter term breaks.

## Dates for Summer Term

### Start and End Dates (Generally Monday to Thursday classes)

Classes on Monday, May 22<sup>nd</sup> will be made up on Friday, May 26<sup>th</sup>

Classes on Monday, July 3<sup>rd</sup> will be made up on Friday July 7<sup>th</sup>

Classes on Monday, August 7<sup>th</sup> will be made up on Friday, August 11<sup>th</sup>

May - August courses will have no classes scheduled Monday, June 19<sup>th</sup> to Friday, June 30<sup>th</sup>

Event	Date
May- June	May 8 to June 15, 2023 6 hours instruction/week
July-August	July 3 to August 11, 2023 6 hours instruction/week

May- August 3 credits	May 8 to August 11, 2023 3 hours instruction/week
May-August 6 credits	May 8 to August 11, 2023 6 hours instruction/week

## Registration and Withdrawal Dates

### Regular Registration Period

Registration start dates are to be determined by the Registrar's Office.

Event	Date
May-June	Ends May 7, 2023
July- August	Ends July 2, 2023
May- August 3 credits	Ends May 7, 2023
May-August 6 credits	Ends May 7, 2023

## Late Registration/Registration Revision Period

Students may use this period of time to make changes to their selected courses or class schedule.

Event	Date
May-June	May 8 to May 11, 2023
July- August	July 3 to July 7, 2023
May-August 3 credits	May 8 to May 18, 2023
May-August 6 credits	May 8 to May 11, 2023

## Last Date to Drop without Penalty

Last date to drop and have course excluded from transcripts; VWs will be recorded on transcripts for courses dropped after this date. There will be no refunds for courses dropped after this date.

Event	Date
May-June	May 11, 2023
July-August	July 7, 2023
May- August 3 credits	May 18, 2023
May- August 6 credits	May 11, 2023

## Voluntary Withdrawal (VW) deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from courses after this date.

Event	Date
May-June	June 1, 2023
July-August	July 27, 2023
May- August 3 credits	July 11, 2023
May-August 6 credits	July 11, 2023

## Fee Payment Deadlines

A financial penalty will be assessed on accounts with an outstanding balance after this date. (determined by Financial Services)

## Examination and Test Dates

Event	Date
Winter/Summer Term Spanning distance and online courses	July 7 to 10, 2023
May-June	June 19 to 24, 2023
July-August	August 14 to 19, 2023

May-August 3 credits	August 14 to 19, 2023
May-August 6 credits	August 14 to 19, 2023

## Challenge for Credit

Event	Date
Challenge for credit application deadline	
For classes offered Summer Term 2023	Apr 28, 2023

## Other Summer Term Start and End Dates

### Dentistry

Event	Date
IDDP Program, Year 1	May 8 to June 30, 2023

### Management

Event	Date
Management	Irregular dates Apr to Aug 2023

### Medicine

Event	Date
Year 3	May 15 to Sept 24, 2023
Year 3 Summer Break	Jul 29 to Aug 13, 2023

### Nursing

Event	Date
Regular Registration Period Ends	May 7, 2023
First Day of Classes	May 8, 2023
Late Registration/Registration Revision Period	May 8 to 19, 2023
Drop Date	May 19, 2023
Summer Term Break	June 19 to 23, 2023
Voluntary Withdrawal Date	July 21, 2023
Last Instructional Day	August 11, 2023
Summer Term Final Exam	August 14 to 19, 2023

### Pharmacy

Event	Date
Year 2 IPPE Hospital Rotation	4 week block completed between June 5 to Aug 18, 2023

### Physician Assistant Studies

Event	Date
Year 1 Summer Term	April 24 to July 14, 2023
Year 1 Summer Exams	Jul 17 to 21, 2023
Year 2 Clinical Rotations and Final Activities	Apr 24 to Aug 16, 2023

## University Policies and Procedures

- Accessibility Policy and Procedures (p. 1251)
- Authorized Withdrawal Policy and Procedure (p. 1258)
- Campus Alcohol Policy (p. 1260)
- Conflict of Interest Between Evaluators and Students Due to Close Personal Relationships Policy and Procedure (p. 1261)
- Disclosure and Security of Student Academic Records (p. 1261)
- Electronic Communication with Students (p. 1262)
- Final Examinations and Final Grades Policy and Procedure (p. 1262)
- Grade Point Averages Policy (p. 1267)
- Repeated Course Policy (p. 1269)
- Respectful Work and Learning Environment and Sexual Assault Policy and Procedure (p. 1271)
- Responsibilities of Academic Staff with Regard to Students Policy and Procedure (p. 1289)
- Self-Declaration for Brief and Temporary Student Absences Policy and Procedure (<https://catalog-next.umanitoba.ca/graduate-studies/university-policies-procedures/self-declaration-for-brief-and-temporary-student-absences/>)
- Student Discipline Bylaw and Procedure (p. 1295)
- University Parking Regulations (p. 1314)
- Violent or Threatening Behaviour and Procedure (p. 1321)
- Voluntary Withdrawal Policy (p. 1327)

## Accessibility Policy and Procedures

### Accessibility Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

#### Part I: Reason for Policy

1.1 The University of Manitoba promotes diversity, inclusion, and accessibility in our programs, employment opportunities, and in the conduct of the University's affairs. We believe in the inherent dignity of all people. We are committed to identifying and removing barriers that prevent full and meaningful participation in all aspects of campus life. The University will comply with all applicable federal, provincial, and municipal legislation with respect to accessibility and will implement the standards specified under The Accessibility for Manitobans Act ("AMA").

1.2 The purpose of this Policy is to ensure that all members of the University community, including those with disabilities, are provided with an accessible learning and working environment.

#### Part II: Policy Content

##### Disability

2.1 For the purpose of this Policy and related procedures an employee or student with a disability is a person who experiences a mental, cognitive, physical or sensory impairment for which they may require accommodation.

##### General

2.3 The University recognizes it is subject to The Human Rights Code (Manitoba) and the AMA, and as such has a duty to provide reasonable accommodation to employees and students with documented disabilities in its efforts to provide an accessible learning and working environment.

2.4 The concept of reasonable accommodation requires a partnership between the individual requiring the accommodation and the University. All concerned should be responsible for respecting the dignity and confidentiality of the individual who requests the accommodation.

2.5 The University shall endeavor to maintain an accessible work and learning environment at all its campuses through the provision of accommodation supports and services to employees and students with disabilities.

2.6 The University will use reasonable efforts to offer reasonable accommodation in the working and learning environments. The University will also seek to identify, remove and prevent barriers to accessibility at the University.

2.7 The University will use reasonable efforts to ensure that employment opportunities and programs of study are accessible to potential employees and students with disabilities.

#### 2.8 Confidentiality

All communication regarding the accommodation of an employee's or student's disability shall be confidential and in accordance with the University's policy and procedures related to The Personal Health Information Act (Manitoba).

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Policy is required.

3.2 The Associate Vice-President (Human Resources) and Vice-Provost (Students) are responsible for the implementation, administration and review of this Policy.

3.3 All members of the University community are responsible for complying with this Policy.

### Part IV: Authority to Approve Procedures

4.1 The Board, the Senate and the Administration may approve procedures which give effect to this Policy, in accordance with their respective jurisdiction.

### Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years by the Responsible Executive Officer. The next scheduled review date for this Policy is January 1, 2025.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document

### Part VI: Effect on Previous Statements

6.1 This Policy is a new policy.

### Part VII: Cross References

7.1 This Policy, should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Student Accessibility Procedure;

- (b) Student Accessibility Appeal Procedure;
- (c) Respectful Work and Learning Environment Policy;
- (d) RWLE and Sexual Assault Procedure;
- (e) The Accessibility for Manitobans Act;
- (f) The Human Rights Code; and
- (g) The Personal Health Information Act.

## Student Accessibility Procedure

### Part I: Reason for Procedure

1.1 To set out Procedures secondary to the Policy entitled “The University of Manitoba Accessibility Policy” in connection with supporting an accessible learning environment where students with disabilities who are admitted to the University can gain access to and participate in all programs for which they are academically qualified.

1.2 While it is a guiding principle of this policy that all members of the University community share responsibility for creating and maintaining an accessible learning environment, the University has designated Student Accessibility Services (“SAS”) to facilitate the implementation of accommodations for students with documented disabilities.

1.3 The University’s duty to provide reasonable accommodation to students with documented disabilities may obligate the University to offer a modification, substitution, or waiver. Such accommodations are consistent with the obligation to administer the University’s academic programs as approved by Senate so long as

- (a) The accommodation is reasonable;
- (b) The accommodation does not create an undue hardship for the University; and
- (c) The accommodation does not compromise a defined Bona Fide Academic Requirement.

### Part II: Procedural Content

#### Definitions

2.1 The terms below have the following defined meanings for the purpose of this Procedure:

- (a) **“Documented Disability”** means a disability requiring accommodation which has been accepted as such by Student Accessibility Services.
- (b) **“Bona Fide Academic Requirement”** or “BFAR” describes the knowledge and skills that a Student must acquire and /or demonstrate in order to complete a course or program successfully. These are the essential and minimum requirements, including methods of assessment that the Student must meet. Unless otherwise specified by an academic program, BFARs may be modified. They cannot be waived or substituted.
- (c) **“Reasonable Accommodation”** means an accommodation of the special needs of any Student, if those special needs are based upon a Documented Disability, that is reasonable but not necessarily perfect in the circumstances, that does not cause undue hardship to the University, and does not compromise a Bona Fide Academic Requirement of the University. The University is under no obligation

to offer a Reasonable Accommodation (or any accommodation for that matter) on compassionate or other grounds.

(d) **Standard Accommodations** are those Reasonable Accommodations that are widely accepted by post-secondary institutions in Canada, which includes but are not limited to examples of Modifications provided in section 2.2(a)(i-vi).

(e) **Non-Standard Accommodations** are considered when Standard Accommodations do not address the disability-related barriers a Student is experiencing in an academic program. Non-Standard Accommodations are those Reasonable Accommodations recommended by Student Accessibility Services and considered by the Accommodation Team in accordance with section 2.24.

(f) **“Academic Staff Member”** means a professor, instructor and/or academic staff person who is responsible for providing the educational program or course to a Student requiring Reasonable Accommodation.

(g) **“Accessibility Advisory Committee”** (AAC) means a Faculty/School or College committee, which is responsible for advising the respective Dean/Director on matters related to accommodation and the impact of accommodation on academic standards. Other resource personnel from within or external to the University may act as a consultant to the AAC. Since the AAC is advisory to the Dean/Director and may, at times, be in receipt of and requested to consider a Student’s personal information and personal health information, student membership on the AAC is not recommended.

(h) **“Accommodation Team”** (AT) means the Faculty/School or College team established to work with Student Accessibility Services on the provision of Reasonable Accommodation when Student Accessibility Services identifies the Reasonable Accommodation as Non-Standard or unusual for the circumstances. It is intended AT will be engaged early on in the process when necessary.

(i) **“Faculty/School”** includes:

(ii) all faculties, including constituent colleges within a faculty and constituent schools of a faculty, in which students enroll for study, and including the Extended Education Division and University 1; and

(i) all schools of the University

(j) **“SAS”** refers to the office of Student Accessibility Services at the University of Manitoba.

(k) **“Student”** means any of the following individuals:

- (i) Applicant- an individual who has submitted application for admission to the University;
- (ii) Admitted- an individual who has accepted an offer of admission to the University;
- (iii) Current- an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension.

2.2 The terms below have the following defined meanings and are types of 'Reasonable Accommodation':

(a) "**Modification**" means an accommodation involving a relatively minor change made to an academic requirement of a program or course. Modifications usually entail a revision to the way a Student must demonstrate required skills and knowledge, or sometimes additional assistance for a Student which does not detract from the skills and knowledge the Student must acquire. Without limitation, modifications typically include such things as:

- (i) providing additional time and quiet space to write examinations;
- (ii) alternate exam formats;
- (iii) alternate modes of course delivery or evaluation;
- (iv) provision of a note taker or interpreter;
- (v) special equipment in classrooms; and
- (vi) adaptive technology

(b) "**Substitution**" means the replacement of a certain admission criterion, prerequisite course, course/program requirement or University requirement with another that is deemed comparable. Substitutions are commonly used to effect accommodations. Senate approves required program content including courses and other elements such as breadth, depth, math and written requirements; Faculties/Schools administer these programs. In administering a program, it may become impossible, impractical, or unfeasible for a Student to complete all program requirements exactly as approved by Senate. Deans and directors, or their designates may approve Substitutions. Deans may delegate their authority to an associate Dean or department head. Such delegations should be made in writing.

(c) "**Waiver**" means the removal of a criterion for admission, progression or graduation from a program of study. A waiver is an accommodation, but should never be offered in regard to a Bona Fide Academic Requirement. A Waiver does not include a case where a requirement is replaced by another requirement (this is a Substitution), but rather is the complete elimination of a non-essential academic requirement. Deans and Directors may approve Waivers and may delegate this authority to an associate Dean. Such delegations should be made in writing. Deans and Directors do not have the authority to waive general university academic requirements that apply to all students regardless of Faculty/ College or School.

(d) "**Degree Notwithstanding a Deficiency**" means a degree that is conferred upon a Student who has not met all the Senate-approved requirements of his or her program of study and for whom no other accommodation has been approved in regard to the missing requirements. A Degree Notwithstanding a Deficiency, when approved by Senate, is the only way in which a Student may effectively obtain a Waiver of what would otherwise be considered a Bona Fide Academic Requirement. Senate alone may grant a Degree Notwithstanding a Deficiency.

### Responsibilities and Rights of Students

2.3 In order to facilitate appropriate Reasonable Accommodations of a student's disability related needs, SAS requires Students with disabilities

requesting accommodations to register with the office as soon as possible.

2.4 Students registering with SAS must provide the following information in a form approved by SAS:

- (a) Name, contact information, student number; and
- (b) Documentation from a registered health professional which should include:
  - (i) Name of the registered health professional;
  - (ii) Dates of the clinical assessments performed in determining the disability and the need for Reasonable Accommodations;
  - (iii) How the disability will affect the Student in the academic setting (i.e. on campus, in classroom, lab, clinical/fieldwork and other instructional settings, and during tests and exams);
  - (iv) An indication of the duration of the Student's period of disability; and
  - (v) Recommendations for appropriate accommodations to be made for that Student, with reference to any relevant health information that may support those recommendations.

2.5 The information outlined in section 2.4 is required from the Student at time of registration and must be kept up to date.

2.6 All personal information, including personal health information, shall be kept confidential in accordance with *The Freedom of Information and Protection of Privacy Act (Manitoba)* and *The Personal Health Information Act (Manitoba)*. The information will be shared with only those who need to know in order to give effect to the Policy and assist the Student in obtaining Reasonable Accommodations.

2.7 Students must schedule a meeting with SAS staff to discuss their accommodation requirements and acquaint themselves with the SAS procedures. The following documents should be prepared by SAS staff for each Student as required:

- (a) Letter of Accommodation (outlining individual needs for distribution to instructors); and
- (b) Tests/Exams Particular Forms (to be completed for each test/exam).

2.8 As part of the registration process, Students should be made aware of the Canada Student Grant program of funding.

### The Canada Student Grant

2.9 All eligible Students will be requested to complete an application for a Canada Student Grant or notify SAS of ineligibility for the grant.

2.10 Upon receipt of a Canada Student Grant, any portion designated for services retained through the SAS office at the University should be submitted to the SAS office. A receipt will then be issued to the Student for their records.

### Responsibility and Rights of Student Accessibility Services<sup>1</sup>

2.11 Student Accessibility Services has the responsibility and right to:

- (a) Offer advice, guidance and support for Students requiring academic accommodation and assign a SAS advisor to the Student.

(b) Request and evaluate documentation from registered health professionals provided by Students requesting assistance from SAS and assign appropriate services to meet the needs of each Student by adapting services, courses, and programs as feasible. SAS will consider the suggestions/recommendations noted in the documentation of a disability/condition but may not agree to all of the suggestions/recommendations.

(c) On the basis of supporting documentation, make recommendations and decisions regarding Reasonable Accommodation in a timely manner. In situations where the requested academic accommodation is beyond the authority of SAS (i.e. a Substitution, Waiver, or Degree Notwithstanding a Deficiency), SAS will provide recommendations to the appropriate authority identified in section 2.2 of this procedure.

(d) Coordinate service(s) and Reasonable Accommodation(s) for Students with Documented Disabilities to ensure that their needs are addressed.

(e) Provide support to Academic Staff Members in accommodating and working with Students with Documented Disabilities.

(f) Prepare the recommended accommodation plan for the Student with Documented Disabilities and send out the Letter of Accommodation to alert Academic Staff Members to the Reasonable Accommodations in place.

(g) Inform and assist Academic Staff Members and other staff in providing Reasonable Accommodations and understanding disability issues.

(h) Ensure that the University's Bona Fide Academic Requirements will not be compromised.

(i) Work with Students and Academic Staff Members to resolve disagreements regarding recommended Reasonable Accommodation(s).

(j) Provide a focus for activity and expertise regarding disability-related Reasonable Accommodations within the University, and for liaison with outside organizations regarding accessibility issues, and programs and services for Students with disabilities at the University.

(k) Keep current with associated legislation.

(l) Prepare an annual report for the University Senate.

<sup>1</sup> Rights and Responsibilities section of policy adapted and used with permission from Mount Royal University, policy 517 Academic Accommodations for Students with Disabilities.

### **Responsibility and Rights of Academic Staff Members**

2.12 Academic Staff Members have the right to:

(a) Determine course content and methods of instruction.

(b) Ensure that the academic integrity and standards of the course are not compromised and ensure that established entry-to-practice competencies and requirements for professional disciplines are not compromised.

(c) Evaluate Student work, performance and competencies related to the course content and relevant academic standards, including

failing any Student who has not passed or satisfied the course requirements.

(d) Discuss with as much notice as possible, any particular Accommodation(s) with SAS, if in the Academic Staff Member's opinion, the Accommodation(s) compromise(s) the integrity of the course.

(e) Determine the appropriate method of adapting their teaching style to meet Accommodation(s).

(f) Consult with professionals, on or off campus, to determine how best to accommodate Students with Documented Disabilities in their course.

(g) Question or challenge an Accommodation by working first with SAS and/or with any Accommodation Team or Liaison.

2.13 Academic Staff Members have the responsibility to:

(a) Support the University's commitment and obligation to accommodate Students with Documented Disabilities.

(b) Work with SAS to gain knowledge of appropriate Reasonable Accommodations(s) for Student(s).

(c) Provide Reasonable Accommodation(s) recommended by SAS without compromising the academic integrity and professional standards of the course.

(d) Maintain the Student's dignity and privacy in relation to the Documented Disability and Reasonable Accommodation.

(e) Communicate in the classes and/or course outline their willingness to meet with Students to discuss Accommodation(s) facilitated by SAS.

(f) Work with Students and SAS to resolve disagreements regarding Reasonable Accommodation(s).

(g) Work with SAS when considering Reasonable Accommodations for field trips or clinical practicum that are requested or required.

(h) Work with their Accessibility Advisory Committee and /or Accommodation Team.

### **Responsibilities and Rights of Faculties/Schools**

2.14 Each Faculty/School and/or College has the responsibility to:

(a) create and maintain an Accessibility Advisory Committee (AAC);

(b) create and maintain an Accommodation Team (AT); and

(c) ensure that the academic integrity and standards of the program are not compromised and ensure that established entry-to-practice competencies and requirements for professional disciplines are not compromised.

### **Faculty/School Accessibility Advisory Committee**

2.15 Each Faculty/School and/or College will maintain an Accessibility Advisory Committee ("AAC").

### **Membership of the Faculty/School AAC**

2.16 The Faculty/ School AAC shall consist of the following staff:

(a) The Committee Chair will be the Associate Dean or designate, as appointed by the Dean/Director;

(b) 4 -6 Academic Staff Members of the Faculty/School as appointed by the Dean/Director; and

(c) A staff representative from SAS in a consultative role.

### Responsibilities the Faculty/School AAC

2.17 The AAC will be responsible for:

(a) Advising the Dean on all matters related to accommodations including the resolution of conflict; and

(b) Reviewing impact of Accommodations on academic standards.

2.18 The AAC role is to:

(a) Meet a minimum of two times per year;

(b) Recommend Faculty/School or College policies and processes;

(c) Receive reports from the SAS representative;

(d) Monitor trends internally, locally, and nationally regarding appropriate accommodations/approaches to accommodation;

(e) Support the Accommodation Team in working through the logistics of accommodations, including the acquisition of resources

(f) Generally monitor and ensure student awareness of procedures and processes

(g) provide an annual report to the Dean, Faculty Council and Vice-Provost(Students) (a copy of the report shall also be provided to the Coordinator of SAS).

2.19 In fulfilling its responsibilities, an AAC will establish practices to include the following:

(a) a process to keep Student identities anonymous, unless not feasible based on the requirements of the Student;

(b) a process to work with and support the Accommodation Team.

### Faculty/College/School Accommodation Team

2.20 Each Faculty/School will maintain an Accommodation Team ("AT"). Where a Faculty/School is comprised of constituent Colleges, a separate AT will be maintained for each College.

2.21 The AT shall consist of the following staff appointed by the Dean/Director or designate:

(a) one or more representatives from the Faculty/School or College who have expertise and responsibilities in the area of student academic progress;

(b) a Faculty/ School or College academic staff person who can offer insight into the essential requirements of a course/program or Bona Fide Academic Requirements; and

(c) the SAS staff member assigned to Faculty/School or College as member of the team.

2.22 The AT may consult with or add individuals to meetings as needed (for example: an academic staff person with content or assessment expertise in a particular field of knowledge).

### Responsibilities the Faculty/College/School AT

2.23 The Accommodation Team (AT) shall have the following responsibilities:

(a) meet as required;

(b) review consider Non-Standard Accommodation recommendations made by Student Accessibility Services (SAS);

(c) upon request, help SAS facilitate the implementation of approved Non-Standard Accommodations;

(d) monitor individual student progress as needed;

(e) report to the Dean/Director if it appears that established processes and procedures are not understood or being followed by members of the Faculty/School or College;

(f) provide information, as appropriate and on a 'need-to know' basis, to the respective AAC and to other individuals as needed; and

(g) at least annually provide a report to the respective AAC of matters considered by the AT, outlining de-identified information regarding the number and types of issues considered, information regarding observable trends (if any), and de-identified information regarding particularly important cases.

2.24 In fulfilling its responsibilities, an AT will establish practices to include an effective system of communications that includes SAS, instructors, Academic Staff Members, department heads and the associate Dean.

### Reconsideration Process

2.25 The reconsideration process is to review a Modification of a course or program requirement. Requests for Substitutions, Waivers, or Degree Notwithstanding a Deficiency must be referred directly to the appropriate authority identified in section 2.2 of this procedure.

2.26 Students who believe that they have not been treated fairly in accordance with this procedure or who believe they were not reasonably accommodated with the type of accommodation offered are expected first to discuss this matter with their SAS advisor.

2.27 Academic Staff Members concerned that the type of accommodation may compromise the academic integrity of a course or program of study are expected first to discuss this matter with the Student's SAS advisor.

2.28 Any matters unresolved by discussion between students, Academic Staff Members and the SAS advisor will be handled in accordance with the Student Accessibility Appeal Procedure.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a review of this procedure is required.

3.2 The Provost and Vice-President (Academic) is responsible for the communication, administration and interpretation of this procedure.

3.3 All Students and Employees are responsible for complying with this Policy.

## Part IV: Review

4.1 Formal procedure reviews will be conducted every ten (10) years. The next scheduled review date for this procedure is January 1, 2025.



4.2 In the interim this procedure may be revised or rescinded if:

- (a) the Provost and Vice-President (Academic) deems it necessary; or
- (b) the relevant Policy is revised or rescinded.

4.3 If this procedure is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:

- (a) comply with these revised procedures; or
- (b) are in turn repealed.

## Part V: Effect on Previous Statements

5.1 This procedure supersedes the following:

- (a) Accessibility for Students with Disabilities (January 26, 1995);
- (b) all previous Board/Senate procedures, and resolutions on the subject matter contained herein; and
- (c) all previous Administration procedures, and resolutions on the subject matter contained herein.

## Part VI: Cross References

6.1 This procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Accessibility Policy
- (b) Student Accessibility Appeal Procedure
- (c) General Academic Regulations, Academic Calendar

# Student Accessibility Appeal Procedure

## Part I: Reason for Procedure

1.1 To define the extent to which the University provides a process for

- (a) students to appeal decisions relating to accommodation of a disability which adversely affect them; and
- (b) Academic Staff Members to appeal decisions relating to student accommodation of a disability which would undermine Bona Fide Academic Requirements or any essential skills document developed for programs that are subject to external accreditation.

1.2 Appeals involving academic consequences related to accommodations, waiver and substitution requests and requests to graduate notwithstanding would not be heard through the Student Accessibility Procedure, but would instead be considered by Faculty/College/School appeal committees, and if not resolved, would be considered by the Senate Committee on Appeals.

## Part II: Procedural Content

### Definitions

2.1 All terms defined in the Student Accessibility Procedure shall have the same meaning in this Student Accessibility Appeal Procedure.

2.2 Students who believe that they have not been treated in accordance with the Student Accessibility Procedure, or who believe they were not reasonably accommodated by the proposed Accommodation, or who believe that the proposed Accommodation may have been different in light of new or previously unavailable information or documentation may first discuss this matter with the Coordinator of Student Accessibility

Services (SAS) and request reconsideration. In seeking to resolve any disagreement, the Faculty/School Accessibility Advisory Committee may be consulted by a party.

2.3 Academic Staff Members who believe that a proposed accommodation would compromise the defined Bona Fide Academic Requirements or essential skills document in question may request that the Coordinator of SAS reconsider the proposed accommodation. In seeking to resolve any disagreement, the Faculty/School Accommodation Team and/or Accessibility Advisory Committee may be consulted. An Academic Staff Member making the request for reconsideration must make it in writing and be able to demonstrate a substantial, viable and direct connection to the student and the proposed accommodation. In such cases, the student shall be made aware of the request for reconsideration and have the opportunity to provide their position to the Coordinator of SAS before a final determination is made.

2.4 Following a request for reconsideration from a student, an Academic Staff Member or both, the Coordinator of SAS shall issue a decision in writing to the student, the Academic Staff Member and the Faculty/School, as appropriate, in a timely manner. The Coordinator of SAS will consider any deadlines which impact the student's progress in their program and will make reasonable efforts to ensure that the timing of the decision does not delay the student's progress in their program. In the event of a conflict of interest on the part of the Coordinator of SAS, the request for initial reconsideration shall be addressed to the Executive Director of Student Support.

### Formal Appeal to Senate Committee on Academic Accommodation Appeals

2.5 If a student or an Academic Staff Member does not agree with the decision of the Coordinator of SAS regarding a request for reconsideration, they may file a formal appeal to the Senate Committee on Academic Accommodation Appeals. Such an appeal must be filed within ten (10) working days of the date on the letter of reconsideration, or until such time as the Chair may allow if a written request for extension is made prior to the deadline.

2.6 If an Appellant files for an appeal beyond the ten (10) working day period, the Appellant must provide written reasons for the delay. The Chair shall have the discretion to extend the deadline for filing the appeal if it is determined that there are special circumstances which justify or excuse the delay. The Chair's decision is final and not appealable.

2.7 The Appellant must submit all documentation that will be relied upon for the appeal and must include the following:

- (a) A completed and signed Senate Committee on Academic Accommodation Appeals – Appeal Form. The form is available at the Student Advocacy Office, The Office of the University Secretary, and on the University of Manitoba website;
- (b) A letter to the Chair clearly explaining the grounds for the appeal;
- (c) A copy of the letter of reconsideration from the Coordinator of SAS;
- (d) A copy of all the documentation submitted in regard to the request for accommodation and reconsideration;
- (e) If the Appellant intends to have a lawyer present at the appeal hearing, the name and address of the lawyer shall be provided at the time of filing the appeal.

2.8 The remedy sought of the Committee shall not differ from that requested in the reconsideration, unless extraordinary circumstances are presented.

2.9 The Appellant shall have the right to be accompanied by a spokesperson. In the event the Appellant is a student, the spokesperson may be an advocate from the Student Advocacy Office, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the university community not receiving payment for appearing, a member of the Appellant's immediate family or a lawyer. It is the Appellant's sole responsibility to ensure:

- (a) that his/her spokesperson is familiar with the Student Accessibility Appeal Procedure, the University of Manitoba Accessibility Policy and the Student Accessibility Procedure;
- (b) the adequacy of his/her representation, if any; and
- (c) to pay for his/her own lawyer's fees, if any.

2.10 Students may appeal a decision when:

#### Failure of Judgment

- (a) they believe the decision made by the Coordinator of SAS was incorrect in his/her judgment regarding the need for, application of, or implementation of an Accommodation.

#### Failure of Process

- (b) they believe the decision made by the Coordinator of SAS was incorrect due to a failure on his/her part or the part of SAS to dutifully perform the process of determining eligibility, or determining a reasonable accommodation.

#### Failure of Information

- (c) they believe the determination made by the Coordinator of SAS was incorrect due to a lack of information, or documentation. Generally speaking, a failure of information is informally handled by the student providing updated or requested documentation.

2.11 Academic Staff Members may appeal a decision when:

#### Compromising Academic Standards

- (a) they believe that the decision made by the Coordinator of SAS would undermine the Bona Fide Academic Requirements or essential skills document developed for programs that are subject to external accreditation. The onus is on the Academic Staff Member to establish how the standards or essential skills would be compromised by providing the Accommodation. If a Bona Fide Academic Requirements or an essential skills document has not been developed, no appeals shall be available to Academic Staff Members.

2.12 Academic Staff Members filing appeals under this Procedure must demonstrate a substantial, viable and direct connection to the student and the proposed accommodation.

2.13 The composition of the Senate Committee on Accommodation Appeals shall include:

- (a) Ten (10) members of the academic staff appointed by Senate for a three (3) year term;

(b) Two (2) students appointed by Senate for a one (1) year term;

(c) A Chair appointed by the President for a three (3) year term;

(d) A Vice-Chair elected from and by the academic staff members for a three (3) year term.

2.14 Upon receipt of an Appeal, the Senate Committee on Academic Accommodation Appeals will notify the Dean or delegate of the Faculty/School, SAS and the respondent of a hearing date.

2.15 Appeals will be heard by a panel of at least four (4) members: two (2) academic staff members, a student and the Chair.

2.16 The Committee panel will meet to determine whether there are grounds to hear the appeal and whether the appeal falls within the jurisdiction of the Committee.

2.17 The Chair of the panel shall only vote in case of a tie.

2.18 If the panel determines that it will hear the appeal, they shall convene a hearing with the appellant, SAS or others as soon as possible to consider submissions from all the parties and Dean, if applicable. If the appellant is an Academic Staff Member, the student shall also be invited to attend the hearing.

2.19 The Committee panel may establish rules and procedures for its hearings and meetings. Such procedures must ensure fairness for all parties and facilitate a timely resolution of appeals.

2.20 The Committee panel will determine the appropriate accommodation on the basis of the student's disability and the Bona Fide Academic Requirements or essential skills document of the course or program.

2.21 The Committee panel will provide written reasons for its decision, which shall be final and binding on all parties.

2.22 All matters considered by the Committee shall be strictly confidential.

2.23 In the consideration of appeals by the Committee panel, time shall be of the essence. Attention will be paid to any deadlines which impact the student's progress in their program and reasonable efforts will be made to ensure that the decision of the Committee does not delay the student's progress.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the University Secretary that a formal review of this Procedure is required.

3.2 The University Secretary is responsible for the implementation, administration and review of this Policy and is responsible for the implementation, administration and review of this Procedure.

3.3 All Students and Employees are responsible for complying with this Policy.

### Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2028.

4.2 In the interim, these Procedures may be revised or rescinded if:

- (a) the Provost and Vice-President (Academic) deems it necessary; or

- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Parent Policy is revised or repealed

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Accessibility Policy
- (b) Student Accessibility Procedure
- (c) Senate Committee on Admission Appeals
- (d) Senate Committee on Appeals

# Authorized Withdrawal Policy and Procedure

## Authorized Withdrawal Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

### Part I: Reason for Policy

1.1 The University of Manitoba provides Students with a range of course and program withdrawal options to facilitate academic progression and personal circumstances. The purpose of this Policy is to define and establish the requirements for Authorized Withdrawal at the University of Manitoba.

### Part II: Policy Content

#### Definitions

2.1 The following terms have the following defined meanings for the purpose of this Policy and its Procedures:

- (a) "Authorized Withdrawal" or "AW" is an approved withdrawal from all courses in a given period for medical or compassionate reasons.
- (b) "Calendar" means the University's official academic calendar for the Term and Level in which a course is taught.
- (c) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (d) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.
- (e) "Leave of Absence" is a period of leave, established, administered, and approved by the Faculty/College/School that enables Students to temporarily withdraw from the University.

(f) "Level" refers to the level of the degree in which the Student is enrolled, such as undergraduate level, graduate level or non-degree level.

(g) "Official Record" is a Student's complete academic history at the University of Manitoba that is maintained by the Registrar's Office. Official Records are available in the form of an Official Transcript or a Student History.

(h) "Official Transcript" is an official document printed on secure paper and signed by the Registrar that reflects a Student's permanent record at the University of Manitoba.

(i) "Policy" means this Authorized Withdrawal Policy.

(j) "Procedure" means the Authorized Withdrawal Procedure.

(k) "Registration Revision Period" is the period after the beginning of classes within which students may withdraw from a course or courses without academic or financial penalty.

(l) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(m) "Student" refers to any person enrolled at the University.

(n) "Student History" is the complete record of a Student's activity at the University, including a record of Authorized Withdrawals, produced for internal administrative use.

(o) "Term" is a period of time defined in the Calendar within which a course for credit may be offered, including Fall, Winter and Summer Terms.

(p) "University" means The University of Manitoba.

(q) "Voluntary Withdrawal" or "VW" is a registration option that enables students to withdraw from a course or courses after the Registration Revision Period without academic penalty.

(r) "Voluntary Withdrawal Period" is the period after the Registration Revision Period within which students may voluntarily withdraw from a course or courses, as outlined in section 2.6 of the Voluntary Withdrawal Policy.

#### General

2.2 An AW is to be distinguished from other withdraw options at the University, including Voluntary Withdrawal and Leaves of Absence.

2.3 Requests for AW must be based on medical or compassionate grounds as outlined in Section 2.2 of the Procedure.

2.4 Faculties/Colleges/Schools may adopt supplemental regulations, subject to approval by Senate, pertaining to AW from their programs.

#### Scope

2.5 Requests for AW will only be considered for withdrawal from all courses in a given Term, except in extraordinary circumstances.

2.6 Requests for AW will be considered for the currently enrolled Term and for Terms dating back no more than three academic years, except in extraordinary circumstances.

2.7 Withdrawal from future Terms may be subject to supplemental regulations adopted under section 2.4 of this Policy. Students

considering withdrawing from the University for future terms should consult their Faculty/College/School of registration.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Policy.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Policy.

### Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

### Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) The Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

### Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Voluntary Withdrawal Policy, effective February 1, 1977 and revised May 13, 1993, and December 7, 2005;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

### Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Authorized Withdrawal Procedure;
- (b) Definitions of Academic Units Policy;
- (c) Voluntary Withdrawal Policy.

## Authorized Withdrawal Procedure

### Part I: Reason for Procedure

1.1 To outline the Procedures to be followed in order to comply with the Authorized Withdrawal Policy.

### Part II: Procedural Content

2.1 These Procedures are to be read in conjunction with the Policy and all terms defined in the Policy shall have the same meaning in this Procedure.

2.2 An AW may be approved under the following circumstances:

- (a) Medical Grounds. When a serious event, including but not limited to illness, accident or injury affects a student's ability to attend classes and/or complete course requirements; and/or
- (b) Compassionate Grounds. When an extraordinary personal circumstance, including but not limited to a serious illness or death of a significant person in a Student's life affects a Student's ability to attend classes and/or complete course requirements.

2.3 Ceasing to attend a class or classes will not constitute an AW. In cases where a request for an AW is not approved, a Student will remain enrolled in, and will receive a final grade for all registered courses.

### Requests for Authorized Withdrawal

2.4 Requests for AW's at the undergraduate Level must be submitted to the Dean's Office of the Faculty/College/School of registration and will be processed through the Dean's Office of the Student's Faculty/College/School of registration.

2.5 Requests for AW's at the graduate Level must be submitted to the head or graduate chair in the department in which the Student is registered, for recommendation to and approval by the Faculty of Graduate Studies.

2.6 An AW request must include the following:

- (a) Official request form: The Request for an Authorized Withdrawal Form is available through the Dean's Office of the student's Faculty/College/School of registration, or from Student Advocacy.
- (b) Letter of Explanation written by the student and detailing how the circumstances or symptoms affected their ability to attend classes and/or complete course requirements;
- (c) Supporting documentation including but not limited to:
  - (i) Letters or documents from objective, credible and verifiable health care professionals. Students are encouraged to consult the Guidelines for Health Care Professionals that are available through the Office of Student Advocacy;
  - (ii) A funeral program and/or obituary;
  - (iii) A police report or auto accident report; and/or
  - (iv) Travel receipts (e.g., airline, rail, bus).

2.7 If an AW request is approved, a Faculty/College/School may impose conditions prior to re-enrolment including, but not limited to, meeting with an academic advisor, producing a certificate of fitness to return to studies, and/or making use of support services on campus.

2.8 In limited enrolment programs, re-enrolment following an AW may be subject to availability of space.

### Responsibilities of the Student

2.9 Students are responsible for considering all implications prior to requesting an AW. Withdrawal may affect academic progression, financial aid eligibility, CIS athletic eligibility, entrance into professional programs, and/or student visa requirements.

### Responsibilities of the Faculties/Colleges/Schools

2.10 Faculties/Colleges/Schools are required to consider requests for AW and to direct the Registrar's Office to process approved requests.

2.11 Faculties/Colleges/Schools are required to notify students of the outcome of their AW request in a timely manner.

2.12 Faculties/Colleges/Schools are responsible for ensuring that the receipt, storage and disposal of personal information are appropriately managed and secured under The Personal Health Information Act (PHIA), The Freedom of Information and Protection of Privacy Act (FIPPA), and the University's Access and Privacy Policy and Procedures.

2.13 Faculties/Colleges/Schools must provide an annual report on AW applications and approvals to the Provost and Vice-President (Academic).

### Official Records

2.14 An AW will appear on a Student History but will not appear on Official Transcripts issued by the University.

### Tuition Fee Refund

2.15 The approval of an AW request will not automatically result in a tuition fee refund. Students must apply to the Registrar's Office for a refund using the Tuition Fee Appeal Form, available at the Registrar's Office.

### Appeal Process

2.16 The process for appealing an unsuccessful AW request will be subject to the policies and procedures established by the Student's Faculty/College/School of registration or enrolment.

2.17 Faculties/Colleges/Schools must disclose to the Student the length of time available to appeal an unsuccessful AW request.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Procedure is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Procedure.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2026.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the Provost and Vice-President (Academic), or Approving Body, deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;

(c) the Procedure is now in conflict with another Governing Document; and/or

(d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) Voluntary Withdrawal Policy, effective February 1, 1977 and revised May 13, 1993 and December 7, 2005;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Authorized Withdrawal Policy;
- (b) Access and Privacy Policy and Procedure;
- (c) Guidelines for Healthcare Professionals;
- (d) Tuition Fee Appeal Form

# Campus Alcohol Policy

The Policy is available online at [http://umanitoba.ca/admin/governance/governing\\_documents#university-community](http://umanitoba.ca/admin/governance/governing_documents#university-community) ([http://umanitoba.ca/admin/governance/governing\\_documents/#university-community](http://umanitoba.ca/admin/governance/governing_documents/#university-community)).

## Part I: Reason for Policy

This policy is a general statement and guideline, setting out the University's requirement for strict compliance with the Liquor Control Act (Manitoba), as well as any rules and regulations, and any successor or replacement rules and regulations, at all events and facilities at which alcohol is available. This policy is further to the Liquor Control Act (Manitoba), as well as any rules and regulations and directives issued pursuant to the Act (The "MLCC rules and regulations").

## Part II: Policy Statement

2.1 Alcohol abuse is a serious health problem and can lead to conduct that may endanger the safety of individuals and result in damage to property both on and off the University of Manitoba Fort Garry and Bannatyne Campuses (the "Campuses"). This in turn may result in legal claims involving the University and others. The purpose of this policy is to explicitly establish the general means by which alcohol abuse on the Campuses can be reduced, and to the extent possible, eliminated.

2.2 The University shall meet the policy's objective by:

2.2.1 Offering an alcohol education and awareness program within the scope of programs offered by or through Student Affairs;

2.2.2 Maintaining University guidelines with respect to the serving and consumption of alcohol on the Campuses;

2.2.3 Requiring that events and facilities at which alcohol is served on the Campuses (the "events and facilities") be managed effectively, and in accordance with the University's policy and procedures and MLCC rules

and regulations; and This policy applies broadly, and covers all events and facilities on the Campuses.

### Part III: Accountability

3.1 The University Secretary is responsible for advising the Associate Vice-President (Administration) that a formal review of the Policy is required.

3.2 The Associate Vice-President (Administration) or the Manager of Special Functions is responsible for the communication, administration and interpretation of this policy.

### Part IV: Secondary Documents

4.1 The Approving Body may approve Procedures which are secondary to and comply with this Policy.

### Part V: Review

5.1 Formal Policy reviews will be conducted every ten (10) years. The next scheduled review date for this Policy is December 18, 2019.

5.2 In the interim, this Policy may be revised or rescinded if:

- (a) the Approving Body deems necessary; or
- (b) the relevant Bylaw, Regulations or Policy is revised or rescinded.

5.3 If this Policy is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:

- (a) comply with the revised Policy; or
- (b) are in turn rescinded.

### Part VI: Effect on Previous Statements

6.1 This Policy supersedes the following:

- (a) all previous Board/Senate Policies, Procedures, and resolutions on the subject matter contained herein; and
- (b) all previous Administration Policies, Procedures, and directives on the subject matter contained herein;
- (c) Campus Alcohol Policy dated September 25, 2001

### Part VII: Cross References

- (a) Procedures: Campus Alcohol Policy
- (b) Student Discipline Bylaw
- (c) The Liquor Control Act (Manitoba)

## Conflict of Interest Between Evaluators and Students Due to Close Personal Relationships Policy and Procedure

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

The purpose of this policy is to ensure that the relationship between an evaluator and the person being evaluated is and is seen to be impartial.

## Definitions

1. An evaluator includes any person who participates, whether at first instance or on appeal, in the process of admitting or selecting a student to a course or program, determination of a student's progress or academic standing, or the receipt by a student of a prize, award or university financial support.
2. A conflict of interest means a close personal relationship between an evaluator and a student or applicant, or between evaluators, that gives rise to a reasonable apprehension of bias and, in any event, such relationships shall include that of:
  - a. parent/child;
  - b. spouses;
  - c. grandparent/grandchild;
  - d. siblings;
  - e. in-laws; or
  - f. persons living in the same dwelling unit.

## Procedures

1. Responsibility for avoiding the conflict of interest rests with the evaluator. In cases of uncertainty, the evaluator shall and the student may refer the matter for determination to the department head (or dean/director, as appropriate). The decision of the department head is subject to review by the dean/director of the academic unit.
2. Where there is a conflict of interest, the evaluator shall immediately withdraw from participation and shall inform the student concerned and the head or dean/director, as appropriate.
  - a. Where alternative sections or electives exist, the alternative must be taken, unless the dean/director concerned determines that this will create an undue hardship for the student.
  - b. Where the dean/director has exercised discretion under 2.(a) or where no alternatives exist to compulsory courses, the dean/director shall ensure fair evaluation by having another suitably qualified evaluator review the submitted material or hear the oral presentations. Where practicable, the evaluator shall not participate in setting the examination or other evaluation method.
3. Where the dean or director has a conflict of interest, the President shall name a replacement to act in the matter.
4. In the case of failure to observe these regulations, staff members will be subject to the discipline procedures provided by the appropriate collective agreement or personnel policy of the University.

## Disclosure and Security of Student Academic Records

Relevant Governing Documents are available online at: [http://umanitoba.ca/access\\_and\\_privacy/governance.html](http://umanitoba.ca/access_and_privacy/governance.html)

The University and its constituent units have a clear obligation to the student and to society concerning the disclosure and security of information about a student's academic record. All student records will be handled in accordance with The Freedom of Information and Protection of Privacy Act (Manitoba) (FIPPA) and the Personal Health Information Act (Manitoba) (PHIA) as appropriate.

# Electronic Communication with Students

The Policy is available online at [http://umanitoba.ca/admin/governance/governing\\_documents#university-community](http://umanitoba.ca/admin/governance/governing_documents#university-community) ([http://umanitoba.ca/admin/governance/governing\\_documents/#university-community](http://umanitoba.ca/admin/governance/governing_documents/#university-community)).

## Part I: Reason for Policy

1.1 The University of Manitoba (the "University") is committed to using available technology to communicate among members of the University community. It recognizes an expanding reliance on electronic communication by academic and administrative staff of the University with students due to the convenience, speed, cost-effectiveness, and environmental advantages it provides. This policy will define the proper use of electronic communications between University academic or administrative staff and students. Electronic communications may include, but are not limited to, electronic mail, electronic bulletin boards, and web sites.

1.2 When communicating by email it is important to ensure that the email is being directed to the intended individual. In an effort to protect confidentiality and privacy in electronic communications and ensure compliance with applicable legislation and policies including The Freedom of Information and Protection of Privacy Act ("FIPPA"), The Personal Health Information Act ("PHIA") and the University's Computer Usage Policy, all official electronic communications must be directed to University of Manitoba email accounts (see section 2.4).

## Part II: Policy Content

2.1 The University requires all students to activate an official University email account.

2.2 The University authorizes the use of electronic communication for official communication between university staff and students, subject only to the confidentiality and privacy provisions outlined below.

2.3 All students are expected to comply with established guidelines and procedures that define the proper use of electronic communications as outlined in this policy and in the University's Use of Computer Facilities Policy.

### Provision of University of Manitoba Email Accounts

2.4 The University will provide all students with an official University email address. University email accounts must be obtained by students through the Claim ID process at: <http://umanitoba.ca/claimid> (<http://umanitoba.ca/claimid/>). The University email account claimed will be the address listed in University directories and contact information available to staff and faculty. The University will direct all official email communications to the official University email account.

### Appropriate Use of University Email

2.5 Certain University electronic communications may be time-critical. Students are responsible for checking their University email account on a regular basis in order to stay current with University communications.

2.6 In general, electronic communications, including email, are not appropriate for transmitting sensitive or confidential information, including personal information, unless an appropriate level of security matches its use for such purposes:

(a) Confidentiality regarding student records is protected under FIPPA. All use of electronic communication, including use for sensitive or confidential information, must be consistent with the University FIPPA and PHIA Policy;

(b) Personal Health Information should not be transmitted via electronic communication at any time;

(c) Email shall not be the sole method for notification of any legal action.

### Access to University Email

2.7 Students who are not in possession of a home computer or laptop, or do not have access to a computer at work, can use computers available in campus labs or in their local library.

### Use of University Email for Instructional Purposes

2.8 Academic staff may determine the extent to which electronic communication will be used in their classes. It is highly recommended that if academic staff have electronic communication requirements and expectations, these are specified in course syllabi, and that all assignments sent electronically (including by email) be accepted only when sent from a University email account. Academic staff may reasonably expect that students are accessing their University email account, and may use electronic communication for their courses accordingly.

## Final Examinations and Final Grades Policy and Procedure

### Final Examinations and Final Grades Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

### Part I: Reason for Policy

1.1 To establish the University of Manitoba's policy relating to final examinations and grades and to oversee the procedures related to final examinations, deferred and supplemental examinations, and final grades.

#### Use of Terms

1.2 Final Examination: A final examination is a test scheduled within an examination period which serves as the final evaluation of student performance in a course.<sup>1</sup>

1.3 Deferred Examination: A deferred examination is a privilege that may be granted to a student:

(a) who is unexpectedly unable to write a final examination as scheduled; or

(b) who knows in advance that he or she is unable to write an examination at the scheduled time. Students may request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:

(i) a medical condition; or

- (ii) participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event; or
- (iii) religious obligations.

Making a false or misleading claim regarding a deferred examination may be considered an offence under the Student Discipline Bylaw. Penalties may range from a failed grade in the course to suspension or expulsion.

(c) Supplemental Examination: A supplemental examination is the rewriting of a final examination and is a privilege offered by some faculties, schools, and academic units to students who have not achieved the minimum result in required courses. Within the conditions established by the student's faculty, a student who is granted a supplemental examination is given the opportunity to rewrite a final examination. The impact of a supplemental examination on the final grade is to be determined by regulations within the faculty.

<sup>1</sup> University of Western Ontario, Academic Handbook, Issued 2009 03.

## Part II: Policy Content

2.1 The Senate has determined that each faculty or school or academic unit shall be responsible for establishing regulations governing evaluation procedures for students enrolled in its courses.

2.2 Those relevant items listed under procedures for final examinations, deferred and supplemental examinations, and final grades shall be incorporated into the regulations established by faculties, schools or academic units.

2.3 Faculties, schools, and academic units shall submit regulations and amendments to evaluation procedures to Senate for its approval via the Senate Committee on Instruction and Evaluation.

2.4 The Senate has determined that each faculty or school or academic unit shall adopt a formal policy for the appeal of grades given for term work, in that faculty or school or academic unit, that has been returned or made available to students before the last day of classes. Policies adopted by a faculty or school or academic unit, after review by the Senate Committee on Instruction and Evaluation, shall be forwarded to Senate for information.

## Deferred and Supplemental Examinations Procedures

### Part I: Reason for Procedure

1.1 To set out procedures secondary to the Policy entitled "Final Examinations and Final Grades", in connection with deferred examinations and supplemental examinations.

### Part II: Procedural Content

#### Deferred Examinations

2.1 A deferred examination is a privilege that may be granted to a student who is unexpectedly unable to write an examination as scheduled or a student who knows in advance that he or she is unable to write an examination at the scheduled time. Making a false or misleading claim may be considered an offence under the Student Discipline Bylaw. Penalties may range from a failed grade in the course to suspension or expulsion.

2.2 Students who are unable to write an examination due to an unexpected illness must file an application for a deferred examination with the advising office of the faculty, school, or academic unit (including University 1 or Extended Education) in which they are registered, setting out the reasons for the deferral. The application must normally be filed within forty-eight (48) hours of the scheduled date of the missed examination or, in a case where more than one examination was missed, within forty-eight (48) hours of the scheduled date of the last examination missed. The application must be accompanied by a medical certificate or otherwise appropriate documentation certifying the reason for the deferral, the inability of the student to write the examination at the regular scheduled time and, where possible, an indication of the period of incapacity. Based on the evidence, the Dean or Director shall decide whether the application is approved. Based on the student's ongoing incapacity or other exceptional circumstances a deferral may be granted to a student who files an application after the forty-eight (48) hour period has lapsed.

2.3 Students may request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:

- (a) participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event;
- (b) religious obligations; or
- (c) a medical condition.

Students requesting a deferred examination due to a known condition as listed above must file an application normally twenty (20) working days prior to the day of the scheduled examination with the advising office of the faculty, school, or academic unit (including University 1 or Extended Education) in which they are registered.

2.4 Initial approval of all deferred examinations by the student's faculty, school, or academic unit shall be conditional upon verification that the student has completed all required components of the course and that it is mathematically possible for the student to pass the course by writing the final examination. Approval will be rescinded if these conditions are not met.

2.5 Any students requesting a deferred examination(s) on the grounds that said examination(s) conflict(s) with vacation or holiday plans shall not normally be granted a deferral.

2.6 If a student becomes ill or receives word of a family emergency during the course of an examination and is unable to continue, the student must report at once to the Chief Invigilator, hand in the examination, and indicate either that they wish to submit their examination paper as: (1) completed; or (2) not completed and with the right to request a deferred examination. The Chief Invigilator must record all notifications. Students leaving an examination early in compliance with this section are eligible to apply for a deferred examination under the provisions of section 2.2. Only students who do not complete the examination and who notify the Chief Invigilator of the reason they cannot complete the examination shall be eligible to apply for a deferred examination.

2.7 No faculty, school, or academic unit shall have regulations that compel students to accept deferrals for any or all examinations or examination series.

2.8 When an application for a deferred examination is approved by the faculty, school, or academic unit, the head of the unit in which the course is offered, in consultation with the instructor concerned, shall schedule



the deferred examination to take place normally within thirty (30) working days from the end of the examination series from which the examination was deferred, taking into account the following:

(a) If a deferred final examination is granted for a course that is a pre-requisite to another course or courses, students may be permitted to remain registered in those affected courses. However, if the examination is written after the revision deadline and the pre-requisite course is not satisfied, the student will be withdrawn from all courses requiring it. Faculties, schools, and academic units are encouraged to schedule deferred examinations in pre-requisite courses early in a term to ensure that results are available prior to the course revision deadline.

(b) Faculties, schools, and academic units are requested to schedule deferred examinations as soon as possible for potential graduands so that final grades may be available in sufficient time to meet planned graduation deadlines.

2.9 In the event students are unable to write the examination as outlined in section 2.8 the following may take place:

(a) the deferred examination shall be written at the next scheduled examination series in which the course is offered (unless the faculty, school, or academic unit chooses to make other arrangements); subsequent requests for re-deferral may result in the student being denied registration in the current or a future term until all outstanding examination obligations have been completed;

(b) the head of the academic unit in which the course is offered, in consultation with the instructor concerned, may assign a grade without examination. In such cases, the grades shall be assigned on the basis of the term work and assignments. Faculty or School Councils shall establish the procedure by which such a decision will be implemented.

(c) the deferred examination must be written within a time frame that enables the examination to be written and graded, and, if necessary, a supplemental examination to be written and graded, before the start of the next academic term in such cases in which the progression rules of the student's program require the successful completion of an entire academic year before a student is eligible to proceed in the next academic year.

2.10 Students who, for medical reasons, withdraw from a program or receive deferred examination privileges for all final examination series, or who fail to write deferred examinations as scheduled, may be prevented by the faculty, school or academic unit from reregistration until they have established, through appropriate medical consultation, their fitness to resume studies.

### Supplemental Examinations

2.11 Supplemental Examinations are offered by some faculties to students who have not achieved the minimum result in required courses. Within the conditions established by the student's faculty, a student who is granted a Supplemental Examination is given the opportunity to rewrite a final examination. The impact of a supplemental examination on the final grade is to be determined by regulations within the faculty.

2.12 The results of supplemental examinations must be reported to the faculty or school council.

## Final Examinations Procedures

### Part I: Reason for Procedure

1.1 To set out Procedures secondary to the Policy entitled "Final Examinations and Final Grades" in connection with the method of conducting final examinations. A final examination is a test scheduled within an examination period which serves as the final evaluation of student performance in a course<sup>1</sup>.

<sup>1</sup> University of Western Ontario, Academic Handbook, Issued 2009 03.

### Part II: Procedural Content

#### Information Provided to Students

2.1 Within the first week of the academic term, students shall be informed of the method of evaluation to be used in each course, as specified in the Responsibilities of Academic Staff with Regard to Students Policy.

#### Examination General Regulations

2.2 Any test or tests, which have an aggregate value of more than 20% of the total value of the course may not be scheduled to take place during the fourteen (14) calendar days ending with the last day of classes in the term during the regular session as defined in the University General Calendar, or during the last two (2) classes of Summer Evening and the last three (3) classes for Summer Session (see Responsibilities of Academic Staff with regard to Students Policy).

2.3 No project or assignment may be announced during the periods outlined in section 2.2 unless contained in the course outline or syllabus required to be provided to all students in the course during the first week of classes (see Responsibilities of Academic Staff with Regard to Students Policy).

#### Final Examinations

2.4 No final examinations or the submission of take-home final examinations shall be scheduled to occur prior to the examination periods as described in the General Calendar except with the expressed joint consent of the Deans and Directors involved.

2.5 The weight of each question shall be clearly indicated on the examination paper.

2.6 The name of the instructor or course coordinator shall be clearly indicated on the examination paper.

2.7 Faculties, schools or academic units electing to use the services of the Registrar's Office shall adhere to the regulations outlined in section 2.8 below.

#### Regulations for Examinations Administered by the Registrar's Office

2.8 If a faculty, school, or academic unit elects to use the services of the Registrar's Office to schedule and administer examinations, the following regulations shall apply:

(a) Requests for examination scheduling must be submitted five (5) working days prior to the Revision Deadline for the term in which the course is offered.

(b) Examinations shall be of one, two or three hours duration.

(c) The faculty, school, or academic unit shall be responsible for supplying the number of examination invigilators as deemed necessary by the Registrar's Office.

(d) Examination question papers must be submitted to the Registrar's Office ten (10) calendar days in advance of the examination.

(e) The Registrar's Office shall make a record of any issues arising during the conduct of examinations and bring any matters to Senate that it deems to be significant.

(f) The responsibilities of invigilators (see section 2.14-2.16) shall apply for examinations administered by the Registrar's Office.

### Regulations for Examinations Administered by Student Accessibility Services

2.9 Examinations administered by Student Accessibility Services are additionally regulated by the Accessibility for Students with Disabilities Policy.

### Invigilation of Examination

2.10 The faculty, school, or academic unit shall supply such number of examination invigilators as is necessary. At a minimum, there shall normally be one invigilator for the first sixty (60) students and one additional invigilator for each fifty (50) students thereafter.

2.11 Invigilation of examinations shall normally be carried out by the instructor of record. In addition, university employees appointed as invigilators by a faculty, school, or academic unit may assist.

2.12 An instructor must be available during the whole of his or her examination even though he or she is not invigilating that examination.

2.13 In view of the responsibilities with which a Chief Invigilator has been charged, selection of Chief Invigilators for large examination halls shall ensure that they are persons at a more senior rank than that of teaching assistants.

### Responsibilities of Invigilators and Students

#### 2.14 Prior to an Examination

(a) Invigilators are required to report to the Registrar's Office for examinations administered by the Registrar's Office for supervisory duties not later than thirty minutes (one half hour) prior to the scheduled time for each examination. Examination material, supervisory lists, and the name of the invigilator in charge will be distributed.

(b) At each seat in the examination room, the invigilator should place the appropriate material required for the examination.

(c) The time of commencement of the examination shall be announced.

(d) Each student shall display his or her student card and photo identification and shall sign an attendance form.

#### 2.15 Conduct During Examination

(a) Any student departing from accepted procedure during an examination must be reported immediately to the Chief Invigilator.

(b) The Chief Invigilator shall allow the student to continue writing the examination except as noted in subsection 2.15(g).

(c) The Chief Invigilator shall record the nature of the alleged infraction on the form provided by the Registrar's Office.

(d) The Chief Invigilator shall complete the introductory section of the form immediately and shall ask the student to sign at that point in order that the student provides positive identification.

(e) The Chief Invigilator shall advise the student, when the identification portion of the form has been signed, of his or her right to submit a separate report on the circumstances of the incident to the Dean or Director of his or her faculty, school, or academic unit.

(f) The Chief Invigilator shall ask that the student read the form containing full details of the incident by or at the close of the examination. The form, thus completed, shall be sent to the Registrar's Office for distribution to the Dean or Director, to the student and to the invigilators involved in the incident.

(g) Notwithstanding the above, in those cases in which the behaviour of a student is disruptive to others writing the examination, or to the conduct of that examination, the Chief Invigilator may, after due warning, require that student to cease writing the examination and leave the examination hall. For such cases the form provided by the Registrar's Office must be completed, to the extent possible, in the manner outlined in the above paragraph.

(h) The Chief Invigilator shall ensure that no student leaves the room without signing the roll and submitting a script. In addition:

(i) No student shall be permitted to leave the examination room during the first thirty (30) minutes of an examination.

(ii) No student shall be permitted to enter the examination room after at least one other student who is writing the same examination has left the examination room.

(iii) A student who arrives to write an examination more than thirty (30) minutes after the start of the examination will not be permitted to write the examination.

(iv) Any student who, due to late arrival, is not permitted to write an examination will be asked to complete the appropriate form and will then be advised to contact the Office of his or her Dean or Director not later than the next business day to discuss possible alternatives.

(v) No student scheduled to write an examination in a centrally administered location who arrives late for the examination shall be permitted to write longer than the scheduled end-time for that examination. For those examinations not centrally scheduled, flexibility may be allowed at the discretion of the unit administering the examinations, but all students in a given course with commonly examined sections should have equal opportunities to take advantage of whatever flexibility is afforded.

(vi) Should a technical irregularity occur in an examination, such as misprinted information or wrong instruction, invigilators supervising the same examination in other locations must be informed. The Registrar's Office should be contacted immediately should this or other similar problems arise in an examination room.

(vii) If a student becomes ill or receives word of a family emergency during the course of an examination and is unable to continue, the student must report at once to the Chief Invigilator, hand in the examination, and indicate

either that they wish to submit their examination paper as: (1) completed; or (2) not completed and with the right to request a deferred examination. The Chief Invigilator must record all notifications. Students leaving an examination early in compliance with this section are eligible to apply for a deferred examination under the provisions outlined in section 2.2 of the Deferred and Supplemental Examinations Procedures. Only students who do not complete the examination and who notify the Chief Invigilator of the reason they cannot complete the examination shall be eligible to apply for a deferred examination.

Note: Documentation verifying the illness may be required.

### 2.16 At the Close of the Examination

- (a) The time of conclusion of the examination should be announced.
- (b) Every candidate must turn in an examination script before leaving the room to the invigilator located at the exit of the room.
- (c) A count must be made of the scripts by course number and balanced against the total for each course examination indicated on the nominal roll.
- (d) No student may be permitted to re-enter an examination room until all examination scripts have been collected.
- (e) The nominal roll must be returned to the Registrar's Office at the conclusion of the examination session. Examination scripts may be either received by the instructor(s) concerned or be delivered to the Registrar's Office.

### Audio Visual Supports

2.17 The use of audio visual supports to display examination or test questions shall be prohibited with either of the following two exceptions:

- (a) Audio visual supports may be used to display examination questions where arrangements have been made to display all questions simultaneously for the entire examination period; or
- (b) In courses where time limited identification is a legitimate and specified part of the examination process, the use of overhead or slide projectors, or other audio visual supports for display purposes shall be permitted.

Examinations using audio visual supports should not be scheduled with other examinations.

### Unauthorized Materials in Examinations

2.18 Students are not permitted to access any unauthorized materials during an examination. This includes but is not limited to calculators, books, notes, pencil cases, or any electronic device capable of wireless communication and/or storing information (e.g. computer, dictionary, translator, cell phone, pager, PDA, mp3 units, etc.). However, students may bring in such materials or devices when permission has been given by the instructor.

### Security

2.19 Students may store valuables and personal items under the desk or chair of the examination room but may not have access to these items during the examination. Items stowed under the desk or chair must not obstruct the aisles of the examination room. Students must ensure that all items required for the examination are placed on top of the desk prior to the start of the examination.

### Posting Examination Answers

2.20 Answers to examination questions shall not be posted prior to the conclusion of the examination.

### Student Access to Final Examinations

2.21 In order to allow proper feedback, students shall have an opportunity to read their own final examination script and any comments written on it prior to the deadline for a formal grade appeal, but only in the presence of the instructor or a staff member appointed by a faculty, school, or academic unit.

2.22 Notwithstanding section 2.21 above, there is no obligation upon the faculty, school, or academic unit to make machine-scored examination answer sheets available for consultation by students. It is expected that faculties, schools, and academic units will provide appropriate means of feedback to students in such circumstances and, where practicable, will encourage instructors to discuss selected questions and answers.

## Final Grades Procedures

### Part I: Reason for Procedure

1.1 To set out procedures secondary to the Policy entitled "Final Examinations and Final Grades", in connection with:

- (a) Final grades;
- (b) Incomplete grades;
- (c) Continuing grades;
- (d) Appeal of final grades; and
- (e) Grading systems.

### Part II: Procedural Content

#### Final Grades

2.1 Departments are required, subject to faculty and school regulations, to establish a procedure for the review and approval of final grades prior to submission to the Registrar.

2.2 All final grades must be submitted in accordance with the instructions received from the Registrar.

2.3 Final grades will be released to students by the Registrar's Office as they are submitted by faculties and schools, except where alternate arrangements have been made Between the Dean or Director and the Registrar.

2.4 To protect the confidentiality of students' personal and private information, neither faculties, schools, academic units, nor instructors may post or publicly release grades.

#### Incomplete Grades

2.5 A student who is unable to complete the term work prescribed in a course may apply to the instructor, on or before the End Date for the term in which the course is offered (as set out in the Academic Schedule), for consideration of a grade classification of Incomplete.

2.6 The student is expected to write the final examination if one is scheduled for the course. It is possible to request a deferred examination based upon the conditions stated in the Deferred and Supplemental Examinations Procedures.

2.7 Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work,

the instructor shall calculate the temporary grade using a zero value for incomplete work. The grade code reported will consist of the appropriate letter grade following by a space followed by the letter "I".

2.8 In addition to the grade, the recommendation should indicate the reason(s) for consideration being given, a description of the outstanding work to be completed, and the date by which the work must be submitted. The following maximum extensions are allowed:

- (a) for courses terminated in April – August 1st
- (b) for courses terminated in August – December 1st
- (c) for courses terminated in December – April 1st

2.9 If the final grade is not reported within one month of the extension deadline, the letter "I" will be dropped and the grade remains as awarded. The student's opportunity to improve the grade will have lapsed.

2.10 In no case will the satisfaction of the Incomplete requirements cause a grade to be lowered.

2.11 When specific circumstances warrant, Deans or Directors may extend the date by which an Incomplete must be cleared. Instructors must formally request such an extension prior to the elapse of the maximum deadline date. In addition, the Registrar's Office must be notified of the extension.

### Continuing Grades

2.12 For those graduate level courses which continue beyond the normal academic term, which are being taken by students enrolled in the Faculty of Graduate Studies, the instructor shall recommend that a grade of "CO" be used until such time as a final grade can be established.

### Appeal of Term Work

2.13 The appeal of term work returned or made available to students before the last day of classes shall be subject to policies and procedures established by Faculty/School Councils.

### Appeal of Final Grades

2.14 A student may enter an appeal, through the Registrar's Office, for assessment of one or more grades. A student wishing to make a final grade appeal must do so by the deadlines set for the following terms and sessions:

- (a) On a Fall Term course grade the deadline is fifteen (15) working days following the first day in January which the University is open.
- (b) On a Winter Term course grade the deadline is fifteen (15) working days after Victoria Day.
- (c) For Summer Session course grades the deadline is thirty (30) working days following the end of the examination period.
- (d) For all other programs the deadline is twenty (20) working days following the end of the examination period.

Applications must be made on a prescribed form obtainable from the Registrar's Office. On payment of the prescribed fee, such appeals shall be forwarded to the Head of the academic unit in which the course is offered.

2.15 Examination scripts are to be held by the teaching unit responsible for the course until six (6) months after the expiration of the appeal

period. In individual cases where appeals have been initiated, the holding period will be extended accordingly.

(a) Each faculty, school, or academic unit is responsible for arranging the proper processing of the appeals, and shall report the results of appeals to the Registrar's Office.

(b) Normally the re-evaluation of a grade shall be undertaken by the instructor(s) responsible for the particular course (section) in consultation with at least one other instructor – in the same or related subject area – who shall independently assess the script and/or other relevant material.

(c) In the event that an appealed grade has been awarded on the basis of an examination only, the entire script will be re-read.

(i) Except as noted below, where the grade has been awarded on the basis of an examination in combination with term work, the examination script will be re-read and term mark calculation reviewed.

(ii) In the case of grades awarded solely on the basis of term work, only the calculation will be reviewed.

(iii) In instances where term work has not been returned to students before the last day of classes, that term work shall also be re-read.

(d) Grades subject to appeal may not be lowered.

(e) In cases where appeals have resulted in a change of grade, the application fee will be refunded to the student.

(f) Teaching units shall be responsible for arranging to destroy examination scripts held by them in accordance with this section, ensuring in the process, the confidentiality of the document.

(g) The result of an appeal must be submitted to the Registrar's Office within thirty (30) days of the deadline for a student to submit the appeal being considered. In the event this deadline cannot be met, the academic unit must notify the Registrar's Office with reasons for the delay. In no case shall an appeal be delayed longer than sixty (60) days.

(h) Students who wish to appeal the results of a grade appeal based on procedural grounds must file an appeal with the office the Dean/Director of the teaching unit. A request for a review of appeal procedures must be filed within ten (10) working days of receipt of notification of the result of a Grade Appeal.

### Grading Systems

2.16 Faculties and schools may investigate various grading systems in order that a better understanding is reached regarding the relationship between grading systems, evaluation processes, student performance and program objectives. Prior to taking action based on such investigation, the faculty or school must submit its proposal to the Senate Committee on Instruction and Evaluation for its approval.

## Grade Point Averages Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

## Part I: Reason for Policy

1.1 The University of Manitoba articulates, on an institutional level, the rules for calculation of Grade Point Averages (GPA). The purpose of this Policy is to define and describe the manner in which GPA will be calculated and reported at the University.

## Part II: Policy Content

### Definitions

2.1 The following terms have the following defined meanings for the purpose of this Policy:

(a) "Authorized Withdrawal" or "AW" is an approved withdrawal from all courses in a given period for medical or compassionate reasons, granted in accordance with the Authorized Withdrawal Policy and Procedure.

(b) "Calendar" means the University's official academic calendar for the Term and Level in which a course is taught.

(c) "Challenge for Credit" is a process whereby students have the opportunity to demonstrate that they have acquired a command of the general subject matter, knowledge, intellectual and/or skills that would normally be found in a university-level course.

(d) "College" means a Professional College as defined under the Definitions of Academic Units Policy.

(e) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(f) "Letter of Permission" refers to a letter granting institutional permission for Students enrolled in a degree program at the University to take courses at other University-recognized colleges and universities. Courses may be considered for transfer credit provided that such courses are approved in advance by the Faculty/College/School in which the Student is registered.

(g) "Grade Point" refers to a numerical value assigned to a letter grade received in a course.

(h) "Level" refers to the level of the degree in which the Student is enrolled, such as undergraduate level, graduate level or non-degree level.

(i) "Official Record" is a Student's complete academic history at the University of Manitoba that is maintained by the Registrar's Office. Official Records are available in the form of an Official Transcript or a Student History.

(j) "Official Transcript" is an official document printed on secure paper and signed by the Registrar that reflects a Student's permanent record at the University of Manitoba.

(k) "Policy" means this Grade Point Averages Policy.

(l) "Procedure" or "Procedures" means a procedure approved by the Provost and Vice-President (Academic) under section 4.1 of this Policy.

(m) "Quality Points" is the grade point value of the assigned Letter Grade multiplied by the credit hours of the course.

(n) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(o) "Student" refers to any person enrolled at the University.

(p) "Student Information System" is any software application that enables the University to manage Student data.

(q) "Student History" is the complete record of a Student's activity at the University, including a record of Authorized Withdrawals, produced for internal administrative use.

(r) "Term" is a period of time defined in the Calendar within which a course for credit may be offered, including Fall, Winter and Summer Terms.

(s) "University" means The University of Manitoba.

(t) "Voluntary Withdrawal" or "VW" is a registration option that enables Students to withdraw from a course or courses without academic penalty.

### General

2.2 "Grade Point Average" or "GPA" is the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted. This calculation can be applied to determine the following types of GPA:

(a) "Cumulative Grade Point Average" or "CGPA", which is the calculated GPA of all courses, institutional and transferred, completed at the same Level;

(b) "Degree Grade Point Average" or "DGPA", which is the calculated GPA of all courses accepted for credit by the University towards a designated degree;

(c) "Sessional Grade Point Average" or "SGPA", which is the calculated GPA of all courses completed at the same Level during the Fall and Winter Terms of one academic year; and

(d) "Term Grade Point Average" or "TGPA", which is the calculated GPA of all courses completed during a single Term at the same Level.

2.3 The following rules apply in regards to calculating GPA at the University:

(a) All standard letter grades (A+ to F) will be included in GPA calculations and will be displayed on a Student's Official Record in the Term they were completed.

(b) When a Student repeats a course or takes an equivalent course or mutually exclusive course (for example, a course that may not be held for credit with the original course), all attempts at that course shall be used in the calculation of the TGPA and CGPA. Whether or not grades for repeated courses are used toward the DGPA will be subject to Faculty policy.

(c) Grades not included in GPA calculations (for example: Pass/Fail, VW, AW) are displayed on a Student's Official Record.

(d) Courses completed from another institution by means of a Letter of Permission shall be used in the calculation of CGPA and DGPA, but shall not be used in the calculation of TGPA.

(e) Courses completed by means of Challenge for Credit shall be used in the calculation of CGPA, DGPA, and TGPA.

2.4 The University of Manitoba will report CGPA, TGPA, and DGPA for all Students through the Student Information System.

2.5 Faculties/Colleges/Schools may use any of the GPA calculation methods to assess Student performance.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Policy.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Grade Point Averages Policy, effective May 1, 2006;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Authorized Withdrawal Policy;

(b) Definitions of Academic Units Policy;

(c) Voluntary Withdrawal Policy;

(d) Repeated Course Policy.

## Repeated Course Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

**Limited Access (see University Policy and Procedures-Limited Access section 2.5 (p. 1270) will not affect registration for the 2022-2023 (including Summer Term 2023).**

## Part I: Reason for Policy

1.1 The purpose of this Policy is to:

- (a) Articulate, on an institutional level, the rules that are to be applied when a course is repeated or its equivalent taken; and
- (b) Identify the implications of repeating courses at the University.

## Part II: Policy Content

### Definitions

2.1 The following terms are defined for the purpose of this Policy:

- (a) "Calendar" means the University's official academic calendar for the Term and Level in which a course is taught.
- (b) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (c) "Cumulative Grade Point Average" or "CGPA" is the calculated GPA of all courses, institutional and transferred, completed at the same Level.
- (d) "Degree Grade Point Average" or "DGPA" refers to the calculated GPA of all courses accepted for credit by the University towards a designated degree.
- (e) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.
- (f) "Grade Point" refers to a numerical value assigned to a letter grade received in a course.
- (g) "Grade Point Average" or "GPA" is the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted.
- (h) "Initial Registration Period" refers to the period of assigned registration times within the Calendar for new and returning Students.
- (i) "Level" refers to the level of the degree in which the Student is enrolled, such as undergraduate level, graduate level or non-degree level.
- (j) "Limited Access" is a registration rule that prevents Students who have previously enrolled in a course, including courses from which they VW, from registering prior to the Limited Access Registration Date.

(k) "Limited Access Registration Date" means the date, following the Initial Registration Period, upon which Students who are subject to Limited Access can register for courses.

(l) "Policy" means this Repeated Course Policy.

(m) "Procedure" or "Procedures" means a procedure approved by the Provost and Vice-President (Academic) under section 4.1 of this Policy.

(n) "Quality Points" is the grade point value of the assigned Letter Grade multiplied by the credit hours of the course.

(o) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(p) "Student" refers to any person enrolled at the University.

(q) "Term" is a period of time defined in the Calendar within which a course for credit may be offered, including Fall, Winter and Summer Terms.

(r) "University" means The University of Manitoba.

(s) "Voluntary Withdrawal" or "VW" is a registration option that enables Students to withdraw from a course or courses without academic penalty.

## General Policy

2.2 Subject to the regulations of Faculties/Colleges/Schools, a Student may be permitted to repeat a course or its equivalent. This applies to courses that were completed with a satisfactory grade or failing grade and courses from which a Student has received a VW.

2.3 Faculties/Colleges/Schools may determine, through their respective Faculty/College/School Councils, the limits on the number of repeated courses that a Student may incur while working towards completing their degree.

2.4 Faculties/Colleges/Schools may determine, through their respective Faculty/College/School Councils, the limits of repeated courses permitted for each individual course and whether or not Students who have previously achieved satisfactory grades will be permitted to repeat a course or its equivalent.

2.5 When a Student wishes to repeat a course or to register for a course equivalent to that for which the Student has received a VW, the following rules apply:

(a) Students will be subject to Limited Access for a period of three consecutive Terms following the Term in which the course was initially completed or in which the student elected to VW;

(b) Only the attempt in which the highest grade was achieved shall be counted towards a Student's degree or diploma. Inclusion of repeated course grades in the DGPA is subject to faculty/college/school regulations; and

(c) Grades from all course completions will be used in the calculation of the CGPA, subject to the Grade Point Averages Policy.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Policy.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) College Council Bylaws
- (b) Definitions of Academic Units Policy
- (c) Faculty and School Council General Bylaw
- (d) Grade Point Averages Policy
- (e) Voluntary Withdrawal Policy

# Respectful Work and Learning Environment and Sexual Assault Policy and Procedure

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#university-community](http://umanitoba.ca/admin/governance/governing_documents#university-community) ([http://umanitoba.ca/admin/governance/governing\\_documents/#university-community](http://umanitoba.ca/admin/governance/governing_documents/#university-community)).

## Respectful Work and Learning Environment (RWLE) and Sexual Assault Policy

### Part I: Reason for Policy

1.1 The University of Manitoba does not condone behaviour that is likely to undermine the dignity, self-esteem or productivity of any of its members and prohibits any form of discrimination or harassment whether it occurs on University property or in conjunction with University-related activities. The University of Manitoba is committed to providing an inclusive and respectful work and learning environment, free from discrimination or harassment as prohibited in the Manitoba Human Rights Code; and also an environment that does not detract from the academic freedom of the University's Academic Staff.

1.2 The reason for this Policy is to:

- (a) Promote and support a respectful work and learning environment at the University; and
- (b) Ensure compliance with relevant legislation, including The Human Rights Code (Manitoba), The Workplace Safety and Health Regulation (Manitoba), and The Freedom of Information and Protection of Privacy Act (Manitoba). Part II Policy Content Definitions

### Part II

2.1 The following terms are defined for the purpose of this Policy:

- (a) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.
- (b) "Breach" means any conduct, behaviour, action or omission which is prohibited under this Policy or the Procedure, including but not limited to Discrimination, Harassment, and Reprisals.
- (c) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (d) "Complainant" means the individual or individuals bringing forward a complaint of a Breach.

(e) "Designated Officer" means the Vice-President (Administration), or designate.

(f) "Discrimination" has the same meaning as defined in section 2.5 of the Procedure.

(g) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(h) "Formal Complaint" means a complaint to the Office of Human Rights and Conflict Management that is in writing and contains, at minimum, the following information:

- (i) The name of the Complainant and contact information for the Complainant;
- (ii) A description of the alleged Breach;
- (iii) The approximate date of the alleged Breach;
- (iv) The name of the Respondent;
- (v) Contact information for the Respondent, if known;
- (vi) An indication that the Complainant desires the complaint to be the subject of an Investigation;

(i) "Harassment" refers to Personal Harassment or Human Rights Based Harassment as defined in section 2.10 of the Procedure.

(j) "Informal Resolution" means the resolution of an alleged Breach to the satisfaction of the Complainant and the Respondent, without an Investigation being completed, as per sections 2.23 to 2.32 of the Procedure.

(k) "Investigation" means a formal investigation of an alleged Breach conducted in accordance with the Procedure.

(l) "Investigator" means one or more persons appointed as the investigator of an alleged Breach, pursuant to section 2.59 of the Procedure.

(m) "Office of Human Rights and Conflict Management" or "OHRCM" means the unit appointed by the University of Manitoba to implement this Policy and the Procedure.

(n) "Policy" means this Respectful Work and Learning Environment Policy.

(o) "Preliminary Assessment" means the initial review of a Formal Complaint, in accordance with sections 2.36 to 2.41 of the Procedure.

(p) "Procedure" means the Disclosures and Complaints Procedure.

(q) "Protected Characteristic" has the same meaning as defined in section 2.6 of the Procedure.

(r) "Reasonable Accommodation" means an accommodation of the special needs of any individual or group, if those special needs are based upon any Protected Characteristic, that is reasonable but not necessarily perfect in the circumstances, that does not cause undue hardship to the University, and does not compromise bona fide and reasonable requirements of the University.

(s) "Reprisal" means any measures taken against a Complainant, Respondent, or any other person because they have asked



for advice regarding this Policy or Procedure, brought forward allegations of a Breach or made a Formal Complaint, cooperated with an Investigation, or rejected a sexual solicitation or advance. Reprisal measures include, but are not limited to:

- (i) Discipline;
- (ii) Academic penalties (in the case of students);
- (iii) Demotion;
- (iv) Termination of employment;
- (v) Termination of an academic appointment;
- (vi) Any other measure which significantly adversely affects working conditions or educational experience; and
- (vii) A threat to take any of the measures referred to above.

(t) "Respondent" means an individual or individuals accused of having caused or contributed to a Breach.

(u) "School" means a "School of the University" or a "School of the Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(v) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(w) "University" means The University of Manitoba.

(x) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.

(y) "University Matter" has the same meaning as defined in section 2.3 of the Procedure.

### **Vision for the University Community**

2.2 The University wishes to promote and support a community which embraces diversity and inclusion, provides for equity, and recognizes the dignity of all people.

2.3 Members of the University Community, including every student and employee, are entitled to a respectful work and learning environment that is:

- (a) Free from Discrimination and provides for Reasonable Accommodation;
- (b) Free from Harassment; and
- (c) Collegial and conducive to early resolution of conflict between members of the University Community.

2.4 A respectful work and learning environment is critical to the success and proper functioning of the University. Whether behaviour is viewed as respectful can be influenced by place, time, and context.

2.5 The University wishes to encourage early resolution of conflict between members of the University Community, and to provide guidance to managers, Academic Staff and Unit Heads on addressing behaviour that falls short of Harassment or Discrimination, but that nevertheless

has a negative impact on the work and learning environment for which they are responsible.

2.6 Managers, Academic Staff and Unit Heads must establish and maintain a climate of respect and demonstrate and model appropriate behaviours within any work and learning environments for which they are primarily responsible. They are expected to identify and address issues of concern in a timely manner, recognizing the value of early intervention. The University will provide training and resources to assist managers, Academic Staff and Unit Heads to fulfil these expectations.

### **Implementation of Vision**

2.7 In furtherance of its vision, the University will:

(a) Through various academic and administrative units and programs, educate members of the University Community about:

- (i) The University's general expectations for respectful conduct;
- (ii) The rights and obligations of members of the University Community under this Policy and the Procedure; and
- (iii) Best practices to facilitate early resolution of conflict between members of the University Community and/or to address behaviour that falls short of Harassment or Discrimination, but nevertheless has a negative impact on the work and learning environment.

(b) Ensure, so far as is reasonably practicable, that:

- (i) No member of the University Community is subjected to Discrimination or Harassment while participating in a University Matter;
- (ii) No employee is subjected to Discrimination or Harassment in the workplace; and
- (iii) No student is subjected to Discrimination or Harassment in the learning environment;

(c) Adopt procedures, protocols, and practices which will encourage individuals to bring concerns about an alleged Breach to an appropriate authority, including provisions to protect against Reprisal those who bring forward such allegations;

(d) Provide supports to encourage and facilitate the Informal Resolution of an alleged Breach where appropriate;

(e) Take action respecting any person under the University's direction who subjects a student, an employee, or any other member of the University Community, to Discrimination or Harassment;

(f) Supplement existing policies, procedures or bylaws, by providing a mechanism for the Investigation of an alleged Breach; and

(g) Adopt procedures, protocols and practices which promote the creation of a respectful environment, including providing guidance on how to deal with matters of concern which do not constitute Harassment or Discrimination.

2.8 The University is committed to promoting a respectful work and learning environment that is harassment and discrimination-free by encouraging all members of the University Community to:

- (a) Bring forward credible evidence of a Breach of which they become aware, to an appropriate authority;
- (b) Provide reasonable cooperation in an Investigation of a Breach; and
- (c) Be aware of their rights and responsibilities under this Policy.

2.9 Managers, Academic Staff and Unit Heads should contact the Office of Human Rights and Conflict Management and other administrative units as appropriate to receive advice and assistance in dealing with situations of concern.

2.10 Discipline may be implemented against any person whose behaviour is found to have caused or contributed to a Breach or other violation of this Policy and the Procedure.

### Awareness Building and Responsibilities

2.11 All members of the University Community have a responsibility to educate themselves as to expectations for respectful conduct and reporting requirements as outlined in this Policy and the Procedure.

2.12 All members of the University Community, especially those in an instructional, supervisory or managerial position, have a duty to educate those for whom they are responsible regarding expectations for respectful conduct which is harassment and discrimination-free, including this Policy and the Procedure. It is further the duty of such individuals to deal appropriately with allegations regarding Breaches or other violations of this Policy and the Procedure, and individuals should consult with the Office of Human Rights and Conflict Management in fulfilling this duty.

2.13 The University, through the Office of Human Rights and Conflict Management and other units as appropriate, will provide information to and respond to inquiries from the University Community regarding the University's expectations for respectful conduct that is harassment and discrimination-free and the rights and obligations of members of the University Community under this Policy and the Procedure.

### Annual Report

2.14 The OHRCM will produce and provide an annual report to the Designated Officer, outlining:

- (a) Information on activities undertaken to raise awareness and contribute to prevention including the type of activity and the number of students and staff who attend;
- (b) De-identified data regarding the number and types of Disclosures and Formal Complaints received;
- (c) De-identified data on process factors such as the number and types of Investigations conducted and whether they resulted in a finding of Breach or No Breach;
- (d) Aggregate anonymized data on Complainant and Respondent roles as either Faculty, Staff, Students, or Other at the University;
- (e) De-identified data on fairness factors such as time to process and the identity of investigators;
- (f) Information regarding observable trends and commentary on the implementation and effectiveness of the Policy; and
- (g) Other relevant information which may further the implementation of the Policy and its Procedures.

2.15 The annual report will be made available to the University Community.

### Balancing of Rights

2.16 Nothing in this Policy or the Procedure is intended to detract from the academic freedom of the University's Academic Staff.

2.17 Nothing in this Policy or the Procedure is intended to compromise the University's academic standards or the integrity of its programs. The University encourages diversity and Reasonable Accommodation, but will also vigorously defend bona fide academic requirements.

2.18 The University encourages informed debate which may, from time to time, include discussion of unpopular opinions or controversial material. Such material may be used to further scholarly pursuits, provided that the communication is compatible with the principles of human rights, the Criminal Code, and the principles of respectful behaviour embodied in this Policy and the Procedure. Opinions must be expressed in a manner which is not in Breach of this Policy or the Procedure.

2.19 This Policy and the Procedure applies to the general workplace, but is not intended to:

- (a) Regulate teaching techniques, pedagogy, research, and service; or
- (b) Limit the legitimate work of managers, supervisors and academic administrators to assign work and provide feedback on work or performance.

### Additional Protections

2.20 Confidentiality obligations required of and related to the University, Complainants, Respondents, and witnesses are found at sections 2.68 and 2.69, and sections 2.87 to 2.95 of the Procedure.

2.21 Nothing in this Policy or the Procedure is intended to discourage or prevent a member of the University Community, including students and employees, from filing a complaint with, for example, the Winnipeg Police Service, the Manitoba Human Rights Commission, professional regulatory bodies, or from exercising any other legal rights pursuant to any other law.

2.22 Nothing in this Policy or the Procedure is intended to limit the rights of an employee governed by a collective agreement. If there is any ambiguity or conflict between this Policy or the Procedure, and a collective agreement, the collective agreement will prevail.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Policy is required.

3.2 The Vice-President (Administration) is responsible for the implementation, administration and review of this Policy.

3.3 All members of the University Community are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Vice-President (Administration) may approve procedures, if applicable, which are secondary to and comply with this Policy, including but not limited to:

(a) A procedure to supplement existing policies, procedures or bylaws, by providing a mechanism for the Investigation of an alleged Breach, including regarding:

- (i) Receipt and review of Formal Complaints;
- (ii) The circumstances under which an Investigation should take place;
- (iii) Appointment of Investigators;
- (iv) Conduct of an Investigation, in accordance with the principles of procedural fairness;
- (v) Respecting the confidentiality of information collected in relation to Formal Complaints and Investigations;
- (vi) Protecting individuals against Reprisal;
- (vii) Protecting individuals against unfounded allegations of a Breach;
- (viii) Producing a report at the conclusion of an Investigation; and
- (ix) Providing information to appropriate disciplinary authorities, if necessary

(b) Generally defining the responsibility, authority and accountability of members of the University Community under this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Policy is September 29, 2023.

5.2 In the interim, this Policy may be revised or repealed by Approving Body if:

- (a) The Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;
- (b) The Policy is no longer legislatively or statutorily compliant; and/or
- (c) The Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) Comply with the revised Policy; or
- (b) Are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Respectful Work and Learning Environment Policy, dated September 1, 2016;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Disclosures and Complaints Procedure
- (b) Sexual Violence Policy
- (c) Academic Freedom and Responsibilities Policy
- (d) Access and Privacy Policy and Procedure
- (e) Definitions of Academic Units Policy
- (f) Records Management Policy and Procedure
- (g) Responsible Conduct of Research Policy
- (h) Student Discipline Bylaw
- (i) Student Non-Academic Misconduct and Concerning Behaviour Procedure
- (j) Student Discipline Appeal Procedure
- (k) Violent or Threatening Behaviour Policy and Procedure
- (l) Use of Computer Facilities Policy and Procedure
- (m) Criminal Code, RSC 1985, c C-46
- (n) The Human Rights Code, C.C.S.M. c. H175
- (o) Workplace Safety and Health Regulation, 217/2006
- (p) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175
- (q) The Personal Health Information Act, C.C.S.M. c. P33.5

## Disclosures and Complaints Procedure

### Part I: Reason for Procedure

1.1 The reason for this Procedure is to:

- (a) Promote and support a respectful work and learning environment at the University that is free from all forms of Discrimination, Harassment, and Sexual Violence;
- (b) Provide specific guidance to the University Community regarding expectations for appropriate conduct and behaviour;
- (c) Set out a fair and consistent process for responding to Disclosures or Formal Complaints of Harassment, Discrimination, Sexual Violence or Reprisal that ensures that all University Community Members will be treated with compassion, dignity, and respect; and
- (d) Ensure compliance with relevant legislation, including The Human Rights Code (Manitoba), The Advanced Education Administration Act (Manitoba) and The Workplace Health and Safety Regulation (Manitoba), The Personal Health Information Act, and The Freedom of Information and Protection of Privacy Act.

1.2 Nothing in this Procedure is intended to detract from the academic freedom of the University's Academic Staff.

1.3 Nothing in this Procedure is intended to detract from the rights and duties of those with supervisory authority to manage, and if necessary to discipline faculty, employees and students, in accordance with applicable legislation or common law, collective agreements or University policies, procedures or bylaws.

1.4 This Procedure is not intended to be an exhaustive list of all issues of conduct which may arise in the University Community.

## Part II: Procedural Content Definitions

2.1 The following terms are defined for the purpose of this Procedure:

(a) "**Academic Staff**" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or department head, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(b) "**Breach**" means any conduct, behaviour, action or omission that is prohibited under the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure, including but not limited to Discrimination, Harassment, Sexual Violence, and Reprisals.

(c) "**College**" means a Professional College as defined under the Definitions of Academic Units policy.

(d) "**Committee**" means the Human Rights Advisory Committee established pursuant to section 2.44 of this Procedure to hear appeals from Preliminary Assessment decisions.

(e) "**Complainant**" means the individual or individuals bringing forward a Formal Complaint of a Breach.

(f) "**Consent**" means the voluntary agreement to engage in physical contact or sexual activity and to continue to engage in the contact or activity. Consent means that all persons involved demonstrate, through words or actions, that they freely and mutually agree to participate in a contact or an activity. More specifically:

- (i) consent must be given at the outset and at all stages of physical contact or sexual activity;
- (ii) it is the responsibility of the initiator to obtain ongoing consent;
- (iii) consent can be withdrawn at any time by any participant;
- (iv) someone who is incapacitated cannot consent;
- (v) there is no consent where one person abuses a position of trust, power, or authority over another person;
- (vi) past consent does not imply future consent;
- (vii) a person cannot give consent on behalf of another person;
- (viii) silence or the absence of "no" is not consent;
- (ix) the absence of perceived resistance is not consent; and

(x) there is no consent when there is coercion, force, threats, or intimidation towards any person, or where there is fraud or withholding of critical information that could affect a person's decision to consent.

(g) "**Designated Officer**" means the Vice-President (Administration), or designate.

(h) "**Disclosure**" means telling someone about an instance of Discrimination, Harassment, or Sexual Violence. For the purpose of this Procedure, Disclosure means telling the Office of Human Rights and Conflict Management. Disclosure does not initiate an Investigation unless a Formal Complaint is made or the University initiates an Investigation in accordance with this Procedure.

(i) "**Discrimination**" has the same meaning as defined in section 2.5 of this Procedure.

(j) "**Faculty**" means a Faculty as defined under the Definitions of Academic Units policy.

(k) "**Formal Complaint**" means a complaint to the Office of Human Rights and Conflict Management under the Respectful Work and Learning Environment Policy or the Sexual Violence Policy that is in writing and contains, at minimum, the following information:

- (i) The name of the Complainant and contact information for the Complainant;
- (ii) A description of the alleged Breach;
- (iii) The approximate date of the alleged Breach;
- (iv) The name of the Respondent;
- (v) Contact information for the Respondent, if known;
- (vi) An indication that the Complainant desires the complaint to be the subject of an Investigation;

(l) "**Harassment**" refers to Personal Harassment or Human Rights Based Harassment, as defined in section 2.10 of this Procedure.

(m) "**Informal Resolution**" means the resolution of a Disclosure or Formal Complaint to the satisfaction of the Complainant and the Respondent, without an Investigation being completed, as per sections 2.23 to 2.32 of this Procedure.

(n) "**Interim Measures**" means changes to a University Member's living, working, or learning environment as per sections 2.49 to 2.55 of this Procedure. Interim Measures are non-disciplinary measures that may be imposed where there is reasonable cause to believe that such measures are necessary in order to protect the safety of the learning, working and living environment, discourage Reprisal, prevent further incidents, or preserve the University's ability to conduct a fair investigation. Where circumstances are urgent or immediate safety measures are required. Interim Measures may be imposed prior to the submission of a Formal Complaint.

(o) "**Intersectionality**" means a framework that promotes an understanding that individuals are shaped by interacting social locations and identities (e.g. race, sexuality, gender etc.).

(p) "**Investigation**" means a formal investigation of an alleged Breach conducted in accordance with this Procedure.

(q) "**Investigation Report**" means a report that is issued by the Investigator at the end of an Investigation, as defined at section 2.71 of this Procedure.

(r) "**Investigator**" means one or more persons appointed as the investigator of an alleged Breach, pursuant to section 2.59 of this Procedure.

(s) "**Office of Human Rights and Conflict Management**" or "**OHRCM**" means the unit appointed by the University of Manitoba to implement this Procedure and its related Policies.

(t) "**Preliminary Assessment**" means the initial review of a Formal Complaint, in accordance with sections 2.36 to 2.41 of this Procedure.

(u) "**Procedure**" refers to this Disclosures and Complaints Procedure.

(v) "**Protected Characteristic**" has the same meaning as defined in section 2.6 of this Procedure.

(w) "**Reasonable Accommodation**" means an accommodation of the special needs of any individual or group, if those special needs are based upon any Protected Characteristic, that is reasonable but not necessarily perfect in the circumstances, that does not cause undue hardship to the University, and does not compromise bona fide and reasonable requirements of the University.

(x) "**Reprisal**" means any of the following measures taken against a Complainant, Respondent, or any other person because they have asked for advice regarding the Respectful Work and Learning Environment Policy or the Sexual Violence Policy, brought forward allegations of a Breach or made a Formal Complaint, cooperated with an Investigation, or rejected a sexual solicitation or advance. Reprisal measures include, but are not limited to:

- (i) Discipline;
- (ii) Academic penalties (in the case of students);
- (iii) Demotion;
- (iv) Termination of employment;
- (v) Termination of an academic appointment;
- (vi) Any other measure which significantly adversely affects their working conditions or educational experience; and
- (vii) A threat to take any of the measures referred to above.

(y) "**Representative**" means:

- (i) in the case of a student, a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the student's immediate family, a lawyer, or support person as may be appropriate;
- (ii) in the case of an employee, a union representative, lawyer, or support person as may be appropriate; and
- (iii) In the case of another member of the University Community, a lawyer or support person as may be appropriate.

(z) "**Respondent**" means an individual or individuals accused of having caused or contributed to a Breach.

(aa) "**School**" means a "School of the University" or a "School of the Faculty", as those terms are defined under the Definitions of Academic Units policy.

(bb) "**Sexual Assault**" has the same meaning as defined in section 2.14 of this Procedure.

(cc) "**Sexual Harassment**" has the same meaning as defined in section 2.15 of this Procedure.

(dd) "**Sexual Violence**" has the same meaning as defined in section 2.13 of this Procedure.

(ee) "**Student Advocate**" is a member of the University's Student Advocacy Office who provides students with information on their rights and responsibilities, as well as assistance with resolving problems or concerns resulting from actions or decisions taken by the University.

(ff) "**Unit**" means a Faculty, College, School, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a Faculty or School is not a Unit as the term is used within this Procedure.

(gg) "**Unit Head**" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents, and Vice-Provosts with respect to their Units.

(hh) "**University**" means The University of Manitoba.

(ii) "**University Community**" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.

(jj) "**University Instituted Investigation**" means an Investigation initiated by the Designated Officer in consultation with the OHRCM as per section 2.56 to 2.58 of this Procedure.

(kk) "**University Matter**" has the same meaning as defined in section 2.3 of this Procedure.

### Scope

2.2 This Procedure applies to members of the University Community in relation to any University Matter.

2.3 "**University Matter**" means any activity, event, or undertaking in which a member of the University Community participates, which has a substantial connection to the University, such as:

(a) University-related activities or events, including but not limited to:

- (i) Any activity or event on property owned or controlled by the University;
- (ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;

- (iii) The offering of any service by the University, including educational services;
- (iv) Student placements, practica, or clinical training;
- (v) University research activities, whether on or off campus;
- (vi) Student and/or employee exchanges arranged in connection with the University;
- (vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;
- (viii) University field trips, travel-study tours, service-learning activities, and similar activities.

(b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:

- (i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;
- (ii) Participation on a committee or board as a representative of the University;
- (iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;
- (iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or
- (v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

### Prohibited Conduct Discrimination

2.4 Subject to section 2.8 of this Procedure, any member of the University Community who commits Discrimination in relation to a University Matter will be subject to discipline.

2.5 "**Discrimination**" means an intentional or unintentional act or omission resulting in:

- (a) Differential treatment of:
  - (i) An individual on the basis of the individual's actual or presumed membership in or association with some class or group of persons, rather than on the basis of personal merit;
  - (ii) an individual or group on the basis of any Protected Characteristic;

(iii) an individual or group on the basis of the individual or group's actual or presumed association with another individual or group whose identity or membership is determined by any Protected Characteristic;

(b) Failure to make Reasonable Accommodation for the special needs of an individual or group, if those needs are based upon a Protected Characteristic.

2.6 "**Protected Characteristic**" means those characteristics listed in The Human Rights Code (Manitoba) (as amended from time to time) as being protected, which at the time of approval of this Procedure include:

- (a) Ancestry, including colour and perceived race;
- (b) Nationality or national origin;
- (c) Ethnic background or origin;
- (d) Religion or creed, or religious belief, religious association or religious activity;
- (e) Age;
- (f) Sex, including sex-determined characteristics or circumstances, such as pregnancy, the possibility of pregnancy, or circumstances related to pregnancy;
- (g) Gender identity;
- (h) Sexual orientation;
- (i) Marital or family status;
- (j) Source of income;
- (k) Political belief, political association or political activity;
- (l) Physical or mental disability or related characteristics or circumstances, including reliance on a service animal, a wheelchair, or any other remedial appliance or device;
- (m) Social disadvantage.

2.7 Examples of Discrimination include, but are not limited to:

- (a) Systemic discrimination resulting from interrelated actions, policies, or rules which together have a discriminatory effect;
- (b) Evaluations of performance based on a Protected Characteristic;
- (c) Establishment of a scholarship, bursary, or other award which provides for differential treatment of a particular group, subject to 2.8 of this Procedure; or
- (d) Failure to provide a Reasonable Accommodation.

2.8 Acts or omissions are not Discrimination and are permitted under this Procedure where:

- (a) There is a bona fide and reasonable cause for the acts or omission.
- (b) The acts or omissions are intended and likely to:
  - (i) Make Reasonable Accommodation for the special needs of an individual or group; or

(ii) Ameliorate the conditions of disadvantaged individuals or groups, including those disadvantaged by a Protected Characteristic.

(c) The acts or omissions are in the context of a research project that has received all required research ethics approvals.

### Harassment

2.9 Any member of the University Community who commits Harassment in relation to a University Matter will be subject to discipline.

2.10 "Harassment" refers to:

(a) "Personal Harassment", which means offensive behaviour directed towards another person and not connected to a Protected Characteristic, including but not limited to:

(i) A severe single incident or a series of incidents of objectionable and unwelcome conduct or comments, directed toward a specific person or group, which does not serve a reasonable work or academic purpose, and objectively would have the effect of creating an intimidating, humiliating, hostile or offensive work or learning environment;

(ii) Verbal or written abuse, threats or intimidation that objectively is humiliating or demeaning;

(iii) Objectionable and unwelcome conduct or comments that objectively would have the effect of impacting the mental or physical health of another person;

(b) "Human Rights Based Harassment", which means offensive behaviour connected to a Protected Characteristic, including but not limited to:

(i) A severe single incident or a series of incidents of objectionable and unwelcome conduct or comments, directed toward a specific person or group, which objectively would have the effect of creating an intimidating, humiliating, hostile or offensive work or learning environment;

(ii) Verbal or written abuse, threats or intimidation that objectively is humiliating or demeaning;

(iii) Objectionable and unwelcome conduct or comments that objectively would have the effect of impacting the mental or physical health of another person;

(iv) Sexual Harassment as per section 2.15 of this Procedure.

2.11 It is not Harassment or otherwise a violation of this Procedure for:

(a) A supervisor or manager to engage in the legitimate evaluation of the performance of an employee or contractor, or otherwise overseeing their work;

(b) Academic Staff to engage in the academic evaluation of a student's work;

(c) A good faith and formal evaluation of an Academic Staff member or supervisor to be conducted;

(d) A legitimate peer review or other critique of research or academic work to be conducted;

(e) A Unit Head to take actions intended to address or deter violent, threatening, or intimidating behaviour, or behaviour which

significantly disrupts the University and members of the University Community.

### Sexual Violence

2.12 Any member of the University Community who commits Sexual Violence in relation to a University Matter will be subject to discipline.

2.13 "Sexual Violence" means any sexual act or act targeting a person's sexuality, gender identity or gender expression, whether the act is physical or psychological in nature, that is committed, threatened or attempted against a person without the person's consent, and includes, but is not limited to, Sexual Assault, Sexual Harassment, stalking, indecent exposure, voyeurism and sexual exploitation. Sexual Violence can occur in many contexts, including in person, in writing, online, on social media, through digital communications, or via other technology.

2.14 "Sexual Assault" means any type of unwanted sexual act done by one person to another that violates the sexual integrity of the victim. Sexual Assault is characterized by a broad range of behaviours that involve the use of force, threats or control towards a person, which makes that person feel uncomfortable, distressed, frightened, threatened, and is carried out in circumstances in which the person has not freely provided Consent, or is incapable of providing Consent.

2.15 "Sexual Harassment" refers to one serious incident or a course of objectionable and unwelcome sexual conduct or comments directed at an individual that includes, but is not limited to:

(a) Unwanted sexual attention, including persistent invitations for dates, by a person who knows or ought reasonably to know that such attention is unwanted or unwelcome;

(b) Gender-based abusive or unwelcome conduct or comments that would objectively have the effect of creating an intimidating, humiliating, hostile or offensive work or learning environment;

(c) Sexist jokes or remarks, including comments regarding a person's appearance or clothing;

(d) Leering, ogling, or other sexually oriented gestures;

(e) Questions about a person's sexual history, sexuality, sexual orientation, or sexual identity by a person who knows or ought reasonably to know that the questions are unwanted or unwelcome;

(f) Offensive physical contact by a person who knows or ought reasonably to know that the contact is unwanted or unwelcome;

(g) A single sexual solicitation or advance or a series of solicitations or advances made by a person who is in a position to confer any benefit on or deny any benefit to the recipient, and who knows or ought reasonably to know that the solicitation or advance was unwanted or unwelcome; or

(h) A Reprisal for rejecting a sexual solicitation or advance.

2.16 The University recognizes that those impacted by Discrimination, Harassment, or Sexual Violence may be reluctant to come forward for fear of being sanctioned for alcohol or other substance use. The University will not subject any individual who makes a Disclosure or files a Formal Complaint to disciplinary action for alcohol or substance use occurring at or near the time of the incident(s), save for remedial measures to assist a University Community Member struggling with responsible alcohol or substance use.

## Disclosures

2.17 University Community members impacted by Discrimination, Harassment, or Sexual Violence are encouraged to Disclose their experiences to the Office of Human Rights and Conflict Management. There is no time limit or limitation period for making a Disclosure. University Community members may choose to make Disclosures for a variety of reasons, including to access supports and resources. University Community members who make Disclosures will have access to supports and resources whether or not they choose to make a Formal Complaint. A Disclosure is not a Formal Complaint and will not ordinarily initiate an Investigation. However, the University may initiate an investigation in response to a Disclosure in accordance with section 2.56 of this Procedure.

2.18 When responding to Disclosures, the Office of Human Rights and Conflict Management will refrain from questions or comments that imply judgment or blaming of the person making the Disclosure (such as questions or comments about the dress, conduct, language, emotional disposition, past sexual history, consumption of alcohol or drugs, or about the timing of the Disclosure).

2.19 A person receiving a Disclosure may be required to share the information they receive if:

- (a) A person is at risk of self-harm or of harming others;
- (b) There is imminent risk of harm to the University Community and/or the broader community;
- (c) A minor or vulnerable person is endangered; or
- (d) Disclosing the information is otherwise required by law.

## Immediate Response to Disclosures

2.20 For students affected by Discrimination, Harassment or Sexual Violence, the University will:

- (a) Provide reasonable academic accommodations (such as extensions on assignments, deferrals of exams, leaves of absences, authorized withdrawals, etc.); and
- (b) Create a safety plan in consultation with the University's Student Support Case Manager, UMSS, and other offices as appropriate.

2.21 For employees affected by Discrimination, Harassment or Sexual Violence, the University will:

- (a) Provide reasonable work accommodations, in consultation with Human Resources; and
- (b) Create a safety plan in consultation with the Unit Head, UMSS, and other offices as appropriate.

2.22 The University will maintain online resources to support those affected by Discrimination, Harassment or Sexual Violence, with links to on-campus and off-campus supports and resources that may be accessed by members of the University Community.

## Informal Resolution

2.23 Subject to section 2.32 of this Procedure, the OHRCM will provide information to both the Complainant and Respondent regarding the opportunities and resources available to facilitate Informal Resolution of an alleged Breach.

2.24 After the OHRCM has received a Disclosure or Formal Complaint, the University may, on its own initiative or at the request of the

Complainant and/or the Respondent, explore proceeding by Informal Resolution. This process may occur before or during an Investigation.

2.25 In order to engage in Informal Resolution, the Complainant(s) and Respondent(s) must all voluntarily agree to the process.

2.26 The University retains the ability to conduct an Investigation even if a Complainant and/or Respondent requests Informal Resolution.

2.27 Informal Resolution may include but is not limited to: a restorative justice process, mediation or facilitated conversation between the participants, conflict coaching, an apology, a recognition of impact statement or letter, or an expectation letter or agreement.

2.28 Information disclosed by participants during the Informal Resolution process will not be made available to Investigators.

2.29 If the Informal Resolution process results in a resolution that the Complainant(s), the Respondent(s), and the University agree to, the terms of resolution will be put in writing. A copy of the terms of resolution will be confidentially retained by the University and will not be placed in official student or employment files except where necessary to enforce the terms of resolution.

2.30 Where an Informal Resolution is conducted during an Investigation and results in terms of resolution, the University will inform the Investigator and terminate the Investigation.

2.31 Where an Informal Resolution is conducted, but does not result in a resolution, a Complainant or the University may continue or pursue a Formal Complaint under this Procedure.

2.32 The OHRCM may decide not to facilitate an Informal Resolution process where:

- (a) Successful resolution is unlikely; or
- (b) A full Investigation would better serve the University and the purposes of the Respectful Work and Learning Environment Policy and/or the Sexual Violence Policy.

## Making a Formal Complaint

2.33 Any person, whether or not a member of the University Community, may contact the OHRCM to make a Formal Complaint regarding Discrimination, Harassment, Sexual Violence, or Reprisal. Any other concerns regarding conduct or conflict that is not supportive of a respectful work and learning environment should be addressed with the appropriate manager, Academic Staff, or Unit Head responsible for the affected environment, in accordance with section 2.6 of the Respectful Work and Learning Environment Policy.

2.34 If a Complainant wishes a Disclosure to be the subject of an Investigation, the Complainant will file a Formal Complaint with the Office of Human Rights and Conflict Management. Complainants are encouraged to file Formal Complaints as soon after the reported incident(s) as possible. Early disclosure can help the University provide Complainants with supports, preserve evidence, better ensure the integrity of an Investigation, and address community safety issues in a timely manner.

2.35 Where the Complainant is not the person against whom the Breach is alleged to have occurred, the OHRCM will have discretion:



(a) Not to accept the Formal Complaint unless the person against whom the Breach is alleged to have occurred consents to the filing of the Formal Complaint; or

(b) To conduct a Preliminary Assessment and/or recommend a University Instituted Investigation.

### **Preliminary Assessment of Formal Complaints**

2.36 The OHRCM or their delegate will conduct a Preliminary Assessment for each Formal Complaint to determine whether or not an Investigation should proceed in accordance with this Procedure. Except in extenuating circumstances, the OHRCM or their delegate will complete a Preliminary Assessment of a Formal Complaint within 30 working days of receiving the Formal Complaint. The person conducting a Preliminary Assessment may not be appointed as an Investigator in that same matter.

2.37 A Formal Complaint will not proceed to Investigation, and no further action is required by the OHRCM or the University, if the Formal Complaint does not meet the requirements of section 2.1(k) of this Procedure.

2.38 Notwithstanding section 2.37 of this Procedure, the OHRCM may exercise its discretion to accept a non-compliant Formal Complaint in extenuating circumstances or to bring a non-compliant Formal Complaint to the attention of the Designated Officer for consideration of a University Instituted Investigation.

2.39 In making their Preliminary Assessment, the OHRCM will consider whether:

(a) The Formal Complaint deals with a Breach to which the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure applies;

(b) The Formal Complaint appears credible and to have been made in good faith;

(c) The issues disclosed by the Formal Complaint have not been or are not in the process of being addressed pursuant to a collective agreement or University policy, procedure or bylaw, which would deal comprehensively with the alleged Breach;

(d) The issues disclosed by the Formal Complaint would more appropriately be dealt with in another forum or through another process;

(e) An Investigation would support the principles under the Respectful Work and Learning Environment Policy and/or the Sexual Violence Policy;

(f) Proceeding to an Investigation would create any issues regarding prejudice or fairness.

2.40 The OHRCM will advise the Complainant in writing of the decision on the Preliminary Assessment. Where the Formal Complaint will not proceed to an Investigation, the OHRCM will include brief reasons for the decision. Where the Preliminary Assessment was not completed within 30 working days, the Complainant will also be informed as to the reason for the delay.

2.41 A Formal Complaint that is not accepted to proceed to an Investigation after Preliminary Assessment and appeal of the Preliminary Assessment, if any, will require no further action by the OHRCM or by the University.

### **Appeal of Preliminary Assessment**

2.42 If a Formal Complaint is dismissed on Preliminary Assessment, the Complainant may appeal the decision by giving notice and submissions in writing to the Designated Officer within 10 working days from the date of receipt of the decision. The submissions must include:

(a) An explanation of the reasons for the appeal, with specific reference to section 2.43 of this Procedure;

(b) A copy of the letter of decision; and

(c) A copy of all of the documentation submitted with the Formal Complaint (no new documentation can be submitted at this time).

2.43 The reasons for an appeal of a Preliminary Assessment include:

(a) Failure to follow the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure;

(b) Failure to reasonably consider all factors relevant to the decision being appealed;

(c) Failure to comply with applicable legislation.

2.44 In the event of an appeal of a Preliminary Assessment, the University will establish the Human Rights Advisory Committee, with a membership consisting of:

(a) The Associate Vice-President (Human Resources) or designate;

(b) The Vice-Provost (Students) or designate; and

(c) The Vice-Provost (Academic Affairs) or designate, provided that the designate holds an academic appointment with the University.

2.45 Members of the Human Rights Advisory Committee will have training in the diverse ways in which trauma and Intersectionality affect individuals.

2.46 The Designated Officer will immediately forward the Complainant's notice and submissions to the Committee, who will make a decision based on the written submissions within 10 working days. The Committee may:

(a) Decide that the Formal Complaint proceed to Investigation; or

(b) Confirm the decision not to proceed to Investigation.

2.47 The Committee will provide brief written reasons for its decision to the OHRCM and the Complainant. The decision of the Committee will be final.

2.48 The Committee may develop and adopt additional guidelines and other documents secondary to and consistent with the Respectful Work and Learning Environment Policy, the Sexual Violence Policy and this Procedure for the process of appeal of a Preliminary Assessment.

### **Interim Measures**

2.49 Interim measures involve the University making changes to a University Member's living, working, and/or learning environment before an investigation is concluded in order to protect the health and safety of all University Community members.

2.50 The need for interim measures, and which measures are imposed, will be determined on a case-by-case basis. This determination will take into account the circumstances of each situation, and where practicable, may include separate consultations with the Respondent and the

Complainant on whether Interim Measures are required and, if so, what Interim Measures would be just and appropriate. This consultation may be conducted by telephone or email, and must proceed expeditiously.

2.51 Interim measures will not be construed as a decision or discipline against the Complainant or Respondent. Interim measures will not be weighed against the Respondent in a disciplinary process.

2.52 A Respondent shall provide in a timely manner to the Designated Officer all documents and any other information on any civil protection orders or criminal charges and conditions, including changes in these orders, charges and conditions such as bail or conditions of release, related to the incidents giving rise to Interim Measures or a Formal Complaint.

2.53 When warranted, the Violent or Threatening Behaviour Policy may be invoked either alone or in conjunction with Interim Measures under this Policy.

2.54 Where Interim Measures are just and appropriate, the University will advise the Complainant and Respondent in writing of the decision to impose Interim Measures and brief reasons for this decision.

2.55 The Complainant or Respondent may apply to the Designated Officer requesting that the Interim Measures be revised or withdrawn if reasonable cause to believe that such measures, as originally imposed, are no longer just and appropriate. The Designated Officer may revise or withdraw Interim Measures and the Complainant and Respondent shall be advised by the Designated Officer of any changes to Interim Measures.

### University Instituted Investigation

2.56 The Designated Officer may at their discretion initiate a University Instituted Investigation.

2.57 When initiating a University Instituted Investigation the Designated Officer will consider situations where:

- (a) A non-compliant Formal Complaint was received, but disclosed a risk to the safety and security of the University Community;
- (b) Matters come to the attention of the Designated Officer that lead them to believe there is risk to the safety and security of the University Community; or
- (c) It would be more practical to conduct a single broad Investigation rather than addressing a series of Formal Complaints from two or more individuals.

2.58 The Designated Officer will be deemed to be the Complainant for the purpose of the University Instituted Investigation. The University Instituted Investigation will proceed in the same manner as an Investigation under this Procedure, with methods of Investigation adapted as necessary to meet the circumstances.

### Appointment of Investigator

2.59 If a Formal Complaint proceeds to an Investigation, the OHRCM will arrange for the appointment of an Investigator. Having regard to the seriousness and nature of the Formal Complaint, the OHRCM may appoint either an employee of the University or an external party to act as the Investigator for a particular Formal Complaint, provided that the Investigator:

- (a) Has skills and/or experience desirable in the circumstances, including trauma-informed investigation training;

(b) Would be able to conduct the Investigation in an unbiased manner; and

(c) Would not be placed in a conflict of interest.

### Investigation

2.60 The Investigator may conduct the Investigation in any manner they deem appropriate, having regard to the nature of the particular Formal Complaint, and any admissions made during the Investigation. This may include some or all of:

- (a) Interviewing witnesses;
- (b) Reviewing documents and records (both paper and electronic);
- (c) Reviewing photographs, audio, and video recordings;
- (d) Examining physical evidence;
- (e) Arranging for testing of physical evidence;
- (f) With the consent of participants, arranging for medical or psychological evaluations; and/or
- (g) Submitting a Third Party Data Access Request Form to Information Services and Technology (IST) regarding accessing electronic systems in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act. IST will consult with Access and Privacy Office to facilitate the request.

2.61 The Complainant and Respondent will cooperate fully with the Investigator and provide any information reasonably required by the Investigator upon request. The Investigator may set reasonable timelines within which individuals must respond to requests for cooperation with the Investigation

2.62 Where an individual does not provide reasonable cooperation with the Investigation due to refusal, retirement, severance of the work or student relationship with the University, or termination of their status as a University Community Member, the Investigator will continue the Investigation and make a determination on the information available.

2.63 The Investigator will conduct the Investigation in accordance with section 2.94 of this Procedure and in accordance with the principles of procedural fairness. The Investigator will ensure that:

- (a) The Complainant is provided an opportunity to explain and provide evidence in support of the Formal Complaint;
- (b) The Respondent is informed of the alleged Breach and provided a copy of the Formal Complaint;
- (c) Complainants and Respondents are provided with a copy of all written replies to their own response, subject to section 2.94 of this Procedure;
- (d) The Respondent is provided a reasonable opportunity to respond to the allegations. The Respondent is provided access to documentary and other evidence as required to ensure procedural fairness, subject to section 2.94 of this Procedure;
- (e) The Respondent is informed that subject to section 2.94 of this Procedure, the Complainant will be provided with a copy of the Respondent's written reply for response;

(f) While strict rules of evidence do not apply, appropriate weight is given to evidence based on its credibility and reliability;

(g) Witnesses (including Complainants and Respondents) may consult with and be accompanied by a Representative; and

(h) No cross-examination is conducted as part of the Investigation.

2.64 An Investigation must normally be completed within 90 working days of the Formal Complaint being assigned to the Investigator. The OHRCM will at all times strive to oversee the completion of an Investigation within a timeline of no more than 90 working days, however in the event of extenuating circumstances the Investigator may make a request to the OHRCM for an extension of time of up to 30 working days. An Investigator may make multiple requests for extensions, but extensions may only be granted if reasonable in the circumstances and at a maximum of 30 working days at a time. The OHRCM will inform the Complainant and Respondent in writing of any extensions granted.

2.65 At the conclusion of an Investigation, the OHRCM will inform the Complainant, Respondent, and witnesses that the Investigation has concluded.

2.66 If, prior to or in the course of an Investigation:

(a) The Complainant, the Respondent, and the University engage in Informal Resolution and agree to signed terms of resolution, the University will inform the Investigator and terminate the Investigation;

(b) The Investigator discovers that another Breach may have occurred, that others may have been involved in the Breach or there has been an allegation or act of Reprisal, the Investigator may make a request to the OHRCM to expand the scope of the Investigation;

(c) A subsequent Formal Complaint, a cross-complaint, allegation or act of Reprisal, or other matters related to a violation of the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure is raised that would most efficiently be dealt with through the same Investigation, the OHRCM may expand the scope of the Investigation; or

(d) It becomes clear that a Formal Complaint would be most efficiently and thoroughly investigated jointly with another organization or institutional partner, the OHRCM may make arrangements for a joint Investigation, so long as reasonable provisions are made to respect confidentiality.

2.67 Nothing in this Procedure is intended to prevent any Unit Head, or member of the University Community in an instructional, supervisory or managerial position, from taking reasonable and immediate steps to:

(a) Address a situation dangerous to the health or safety of the University Community in accordance with University policy, procedure, bylaw, and/or applicable collective agreements;

(b) Protect University funds or assets;

(c) Take interim measures intended to facilitate a thorough Investigation, discourage Reprisal, or prevent future Breaches; and/or

(d) Manage, and if necessary discipline, employees or students in accordance with University policy, procedure, bylaw, and/or applicable collective agreements.

### Confidentiality During an Investigation

2.68 Confidentiality allows for the protection of the integrity of an Investigation, ensuring that it is free of bias. Confidentiality also provides an environment that allows for candid participation, while ensuring the protection of privacy, including the names of the Complainants and Respondents. During an Investigation, the Complainant (except where the Complainant is the Designated Officer), the Respondent, and witnesses involved must keep confidential:

(a) The existence and nature of the Investigation; and

(b) Any information or documentation obtained as a result of the Investigation; which information may only be disclosed to those who reasonably need to know. The confidentiality obligations in this section will continue until the Designated Officer has provided to the Complainant and the Respondent a summary of the Investigator's findings and/or the Investigation Report. This section is not intended to limit the distribution of Investigation Reports as contemplated by this Procedure.

2.69 Notwithstanding section 2.68, the Complainant, the Respondent, and witnesses involved in the Investigation may:

(a) Obtain confidential advice and/or direction in relation to the Formal Complaint from a Representative;

(b) Disclose information to others only to the extent reasonably necessary to gather evidence and, in the case of a Respondent, to make full answer and defense to the allegations; and

(c) Use information obtained independent of the Investigation in any other forum.

### Investigation Reports

2.70 At the conclusion of the Investigation, the Investigator will issue an Investigation Report to the Designated Officer and the OHRCM.

2.71 "**Investigation Report**" means a report that is issued by the Investigator at the end of an Investigation and contains, at a minimum, the following information:

(a) A summary of the Formal Complaint and the alleged Breach;

(b) A summary of the process and key timelines in the Investigation;

(c) A summary of the key evidence obtained through the Investigation, including a summary of the response of the Respondent;

(d) An indication of which key evidence was considered credible and reliable;

(e) A conclusion as to whether, on a balance of probabilities, a Breach has been committed, including identification of which individuals caused or contributed to the Breach;

(f) A summary of the Investigator's reasons for the conclusion. Finding of No Breach of Policy 2.72 If it is determined that no Breach has occurred, the Designated Officer will provide a summary and/or the Investigation Report (either in original or redacted form), within 30 working days of receiving the Investigation Report, to the Complainant and the Respondent and all such other individuals as the Designated Officer reasonably believes necessary to protect or restore the reputation of the Respondent.

2.73 No further action will be taken and no record of the Formal Complaint will be placed on the University's official employment file or student file for the Respondent.

2.74 No record of the Formal Complaint shall be kept in the Complainant's official employment file or student file unless it is determined that the Formal Complaint was frivolous or vexatious. The University may take disciplinary action against a Complainant in cases where frivolous or vexatious Formal Complaints are submitted. A Formal Complaint made in good faith is not frivolous or vexatious because it did not result in a finding of Breach.

#### Finding of Breach of Policy

2.75 If it is determined that a Breach has occurred, the Designated Officer will provide a summary and/or the Investigation Report (either in original or redacted form), within 30 working days of receiving the Investigation Report, to:

- (a) The Complainant;
- (b) The Respondent;
- (c) All such individuals as the Designated Officer believes necessary to decide upon and implement discipline, mitigation steps, or remedial measures, in accordance with section 2.80;
- (d) All such individuals as the Designated Officer believes necessary to implement due diligence to prevent similar or related Breaches in the future; and
- (e) Any other person required in order to comply with legal, regulatory, or contractual obligations.

2.76 When determining whether to provide an Investigation Report, a redacted Investigation Report, or a summary of an Investigation Report, the Designated Officer will consider whether the Investigation Report contains private information, including but not limited to personal health information, or sensitive content, including but not limited to the details of an incident of Sexual Violence.

2.77 In each case the summary or Investigation Report will include, at a minimum, a summary of any evidence provided by the recipient and enough information for the recipient to understand the essential nature of the Formal Complaint and whether or not a Breach was found to have occurred. Such information will be provided in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

#### Discipline

2.78 Individuals who are found in Breach of the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure will be subject to disciplinary action as follows:

- (a) Where the individual is an employee, the discipline will be implemented in accordance with applicable legislation, common law, collective agreements, and University policies, procedures or bylaws.
- (b) Where the individual is a student, the discipline will be implemented in accordance with the Student Discipline Bylaw and the Student NonAcademic Misconduct and Concerning Behaviour Procedure.
- (c) Where the individual is neither an employee nor a student, the VicePresident (Administration) or designate may make any

determination regarding the individual's continued access to the University in accordance with the Vice-President (Administration) Bylaw.

2.79 When an individual will be subject to discipline under this Procedure, the Designated Officer will deliver the Investigation Report to the appropriate disciplinary authority.

2.80 Before deciding on or implementing any discipline, mitigation steps or other remedial measures, the Designated Officer may seek advice and guidance from appropriate individuals, which may include: the Provost and Vice-President (Academic), the OHRCM, the Associate Vice-President (Human Resources), the Vice-Provost (Academic Affairs), the Director of Staff Relations, the Vice-Provost (Students), and legal counsel.

2.81 Anonymous material may only be considered in a disciplinary decision where it would not violate the principles of procedural fairness, and it would not conflict with an applicable collective agreement.

#### Appeal of Discipline

2.82 The Respondent may appeal a disciplinary decision made against them as follows:

- (a) If the Respondent is an employee, either in accordance with the appropriate grievance process defined by any applicable collective agreement, or via the Appeals by Academic or Support Staff Excluded From Bargaining Units Policy and Procedures;
- (b) If the Respondent is a student, in accordance with the Student Discipline Bylaw and the Student Discipline Appeal Procedure.

#### Protection from Reprisal, Retaliation or Threats

2.83 A Complainant, Respondent, witness, and/or any other person who has sought advice regarding the Respectful Work and Learning Environment Policy, the Sexual Violence Policy or this Procedure, who has brought forward allegations of a Breach, who has made a Formal Complaint, who has cooperated with an Investigation, or who has rejected a sexual solicitation or advance, is entitled to be protected from a Reprisal. An individual may complain about an alleged Reprisal, to the Investigator or to the OHRCM.

2.84 Upon observing or being notified of an alleged Reprisal the Investigator may:

- (a) Investigate and include in their Investigation Report information relating to the alleged Reprisal; and
- (b) If the matter is urgent, refer the information regarding an alleged Reprisal to the OHRCM.

2.85 Where the Investigator refers an urgent allegation of Reprisal to the OHRCM, the OHRCM will advise the Designated Officer and any such persons as believed necessary to discuss and implement Interim Measures. Interim Measures may be implemented by the Designated Officer or the Unit Head.

2.86 Notwithstanding the definition of Reprisal at section 2.1(x) of this Procedure, it is not a Reprisal for the University to implement discipline or take other measures against an individual if:

- (a) The individual has interfered or attempted to interfere with an Investigation;
- (b) The person made a Formal Complaint or allegations in bad faith;

(c) The individual has materially breached the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure; or

(d) Discipline is otherwise warranted against the individual under applicable legislation or common law, or University policies, procedures or bylaws.

### Confidentiality

#### Obligations of Confidentiality by University with respect to Allegations of Breach

2.87 The University will not disclose the name of a Complainant, Respondent, or witness or the circumstances related to a Formal Complaint of alleged Breach except in compelling circumstances where disclosure would not be unreasonable, such as when disclosure is:

(a) Necessary to investigate the Formal Complaint or take corrective or interim measures with respect to the Formal Complaint; or

(b) Required by law.

2.88 Notwithstanding section 2.87, in rare cases that involve groups or impact entire Faculties or Departments, the University may disclose limited information regarding the ongoing process to members of the impacted group, Faculty or Department.

#### Obligations of Confidentiality by University with respect to the Findings of an Investigation

2.89 The University will not disclose the name of a Complainant or the circumstances related to the findings of an Investigation except in compelling circumstances where disclosure would not be unreasonable, such as when disclosure is:

(a) Necessary to address a risk to the health or safety of an individual or group;

(b) Necessary to comply with insurance requirements; or

(c) Required by law.

2.90 The University may disclose the name of the Respondent or the circumstances related to the findings of an Investigation for the following purposes:

(a) In order to address a risk to the health or safety of an individual or group;

(b) In order to prevent further or continuing Breaches or other violations of the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure;

(c) In order to obtain confidential professional advice;

(d) In order to report a legal offense to appropriate authorities;

(e) In order to respond to legal or administrative proceedings;

(f) In order to comply with any legal or contractual requirement;

(g) In accordance with the Access and Privacy Policy; or

(h) As otherwise permitted or as necessary to give effect to the Respectful Work and Learning Environment Policy, the Sexual Violence Policy, or this Procedure.

#### Information to be minimum amount necessary for purpose

2.91 Personal information that is disclosed in respect of an alleged Breach or a finding of Breach will be the minimum amount necessary for the purpose.

#### Obligations of Confidentiality by the Complainant, Respondent, and Witnesses

2.92 During an Investigation, the Complainant, Respondent, and witnesses have confidentiality obligations as per section 2.68 of this Procedure.

2.93 Once the Investigation has been concluded, the Complainant, the Respondent, and witnesses involved in the Investigation remain subject to any confidentiality obligations as required by The Freedom of Information and Protection of Privacy Act.

#### Obligations of Confidentiality by the Investigator

2.94 The Investigator, in conducting the Investigation, will comply with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act with respect to personal information and personal health information collected, used and disclosed in the course of the investigation. Where the Investigator is unsure of whether they may disclose particular information, they may seek advice from the University's Access and Privacy Office. The Investigator will further ensure that individuals participating in the Investigation are only provided with such information as they may reasonably need to know to be effective witnesses, or in the case of a Respondent, to address the allegations in accordance with the principles of procedural fairness and natural justice. Subject to section 2.63 of this Procedure, individuals participating in the Investigation may not necessarily be provided with all information, documentation, the names of Complainants or other witnesses, or the full text of the Formal Complaint.

2.95 The Investigator will advise all persons involved with an Investigation as to their obligations regarding confidentiality, and the protections available to them under this Procedure.

#### Records Management

2.96 The University will maintain files with respect to each Formal Complaint in accordance with the Records Management policy and procedure.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Procedure is required.

3.2 The Vice-President (Administration) is responsible for the implementation, administration and review of this Procedure.

3.3 All members of the University Community are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Procedure is September 29, 2023.

4.2 In the interim, this Procedure may be revised or repealed if:

(a) the Approving Body deems it necessary or desirable to do so;

(b) this Procedure is no longer legislatively or statutorily compliant;

(c) this Procedure is now in conflict with another Governing Document; and/or

(d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

(a) RWLE and Sexual Assault Procedure, effective January 27, 2009, and revised September 1, 2016;

(b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and

(c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI : Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

(a) Respectful Work and Learning Environment Policy

(b) Sexual Violence Policy

(c) Definitions of Academic Units Policy

(d) Records Management Policy and Procedure

(e) Access and Privacy Policy and Procedure

(f) Third Party Data Access Request Form

(g) Student Discipline Bylaw

(h) Student Non-Academic Misconduct and Concerning Behaviour Procedure

(i) Student Discipline – Appeal Procedure

(j) Use of Computer Facilities Policy and Procedure

(k) Violent or Threatening Behaviour Policy and Procedure

(l) Vice-President (Administration) Bylaw

(m) The Human Rights Code, C.C.S.M. c. H175

(n) The Workplace Safety and Health Regulation 217/2006

(o) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175

(p) The Personal Health Information Act, C.C.S.M. c. P33.5

(q) The Advanced Education Administration Act, C.C.S.M. c. A6.3

experienced Sexual Violence or who have received a Disclosure of Sexual Violence;

(c) Set out a consistent process for responding to a Disclosure or Formal Complaint of Sexual Violence that ensures that:

(i) This Policy and the Procedure will be implemented with transparency and fairness;

(ii) Those impacted by Sexual Violence will be treated with respect and compassion, as part of a trauma-informed approach that is rooted in Intersectionality and that is culturally sensitive to a person's background, perceptions and experiences;

(iii) A clear explanation of the process, options available to Complainants, Respondents, and other participants, and potential outcomes of the process are made available through the Office of Human Rights and Conflict Management; and

(iv) Members of the University Community understand their respective rights and obligations when reporting or responding to Sexual Violence;

(d) Reduce instances of Sexual Violence through education and training;

(e) Set out the means by which this Policy will be reviewed and reported; and

(f) Ensure that the University is compliant with relevant legislation, including The Human Rights Code (Manitoba), The Workplace Health and Safety Regulation (Manitoba), The Freedom of Information and Protection of Privacy Act, The Personal Health Information Act, and The Advanced Education Administration Act (Manitoba).

1.2 Guiding Principles:

(a) Sexual Violence is a significant and systemic social issue that can affect anyone at the University. Anyone can experience Sexual Violence, regardless of a person's social position or position within the University structures, hierarchies, and power relations.

(b) Some individuals or groups experience Sexual Violence at higher rates and in different ways. Every effort to address Sexual Violence should be grounded in Intersectionality and an understanding that each person's experience will be affected by many factors.

(c) Sexual Violence does not exist or operate in isolation. Acts of Sexual Violence can also be acts of discrimination. University strategies to address Sexual Violence are therefore informed by broader equity, diversity and anti-discrimination initiatives and goals.

# Sexual Assault Policy

## Part I: Reason for Policy

1.1 The reason for this Policy is to:

(a) Articulate the University's Guiding Principles around Sexual Violence;

(b) Provide a framework for the provision of guidance, assistance and support to members of the University Community who have

## Part II: Policy Content

### Definitions

2.1 The following terms are defined for the purpose of this Policy:

(a) "**Breach**" means any conduct, behaviour, action or omission which is prohibited under this Policy or the Procedure, including but not limited to Sexual Violence and Reprisals.

(b) "**College**" means a Professional College as defined under the Definitions of Academic Units policy.

(c) "**Complainant**" means the individual or individuals bringing forward a Formal Complaint of a Breach.

(d) "**Consent**" means the voluntary agreement to engage in physical contact or sexual activity and to continue to engage in the contact or activity. Consent means that all persons involved demonstrate, through words or actions, that they freely and mutually agree to participate in a contact or activity. More specifically:

- (i) consent must be given at the outset and at all stages of physical contact or sexual activity;
- (ii) it is the responsibility of the initiator to obtain ongoing consent;
- (iii) consent can be withdrawn at any time by any participant;
- (iv) someone who is incapacitated cannot consent;
- (v) there is no consent where one person abuses a position of trust, power, or authority over another person;
- (vi) past consent does not imply future consent;
- (vii) a person cannot give consent on behalf of another person;
- (viii) silence or the absence of "no" is not consent;
- (ix) the absence of perceived resistance is not consent; and
- (x) there is no consent when there is coercion, force, threats, or intimidation towards any person, or where there is fraud or withholding of critical information that could affect a person's decision to consent.

(e) "**Designated Officer**" means the Vice-President (Administration), or designate.

(f) "**Disclosure**" means telling someone about an instance of Sexual Violence. For the purpose of this Policy and the Procedures, a Disclosure means telling the Office of Human Rights and Conflict Management. A Disclosure does not initiate an Investigation unless a Formal Complaint is made or the University initiates an Investigation in accordance with the Procedure.

(g) "**Faculty**" means a Faculty as defined under the Definitions of Academic Units policy.

(h) "**Formal Complaint**" means a complaint to the Office of Human Rights and Conflict Management that is in writing and contains, at minimum, the following information;

- (i) The name of the Complainant and contact information for the Complainant;
- (ii) A description of the alleged Breach;
- (iii) The approximate date of the alleged Breach;
- (iv) The name of the Respondent;
- (v) Contact information for the Respondent, if known; and
- (vi) An indication that the Complainant desires the Formal Complaint to be the subject of an Investigation.

(i) "**Informal Resolution**" means the resolution of an alleged Breach to the satisfaction of the Complainant and the Respondent, without

an Investigation being completed, as per sections 2.23 to 2.32 of the Procedure.

(j) "**Intersectionality**" means a framework that promotes an understanding that individuals are shaped by interacting social locations and identities (e.g. race, sexuality, gender etc.).

(k) "**Investigation**" means a formal investigation of an alleged Breach conducted in accordance with the Procedure.

(l) "**Investigator**" means one or more persons appointed as the investigator of an alleged Breach, pursuant to section 2.59 of the Procedure.

(m) "**Office of Human Rights and Conflict Management**" or "**OHRCM**" means the unit appointed by the University of Manitoba to implement this Policy and the Procedure.

(n) "**Policy**" means this Sexual Violence policy.

(o) "**Preliminary Assessment**" means the initial review of a Formal Complaint, in accordance with sections 2.36 to 2.41 of the Procedure.

(p) "**Procedure**" means the Disclosures and Complaints Procedure.

(q) "**Reprisal**" means any measures taken against a Complainant, Respondent, or any other person because they have asked for advice regarding this Policy or Procedure, brought forward allegations of a Breach or made a Formal Complaint, cooperated with an Investigation, or rejected a sexual solicitation or advance. Reprisal measures include, but are not limited to:

- (i) Discipline;
- (ii) Academic penalties (in the case of students);
- (iii) Demotion;
- (iv) Termination of employment;
- (v) Termination of an academic appointment;
- (vi) Any other measure which significantly adversely affects working conditions or educational experience; and
- (vii) A threat to take any of the measures referred to above.

(r) "**Respondent**" means an individual or individuals accused of having caused or contributed to a Breach.

(s) "**School**" means a "School of the University" or a "School of the Faculty", as those terms are defined under the Definitions of Academic Units policy.

(t) "**Sexual Assault**" means any type of unwanted sexual act done by one person to another that violates the sexual integrity of the victim. Sexual Assault is characterized by a broad range of behaviours that involve the use of force, threats or control towards a person, which makes that person feel uncomfortable, distressed, frightened, threatened, and is carried out in circumstances in which the person has not freely provided Consent, or is incapable of providing Consent.

(u) "**Sexual Harassment**" refers to one serious incident or a course of objectionable and unwelcome sexual conduct or comments directed at an individual that includes, but is not limited to:

- (i) Unwanted sexual attention, including persistent invitations for dates, by a person who knows or ought reasonably to know that such attention is unwanted or unwelcome;
- (ii) Gender-based abusive or unwelcome conduct or comments that would objectively have the effect of creating an intimidating, humiliating, hostile or offensive work or learning environment;
- (iii) Sexist jokes or remarks, including comments regarding a person's appearance or clothing;
- (iv) Leering, ogling, or other sexually oriented gestures;
- (v) Questions about a person's sexual history, sexuality, sexual orientation, or sexual identity by a person who knows or ought reasonably to know that the questions are unwanted or unwelcome;
- (vi) Offensive physical contact by a person who knows or ought reasonably to know that the contact is unwanted or unwelcome;
- (vii) A single sexual solicitation or advance or a series of solicitations or advances made by a person who is in a position to confer any benefit on or deny any benefit to the recipient, and who knows or ought reasonably to know that the solicitation or advance was unwanted or unwelcome; or
- (viii) A Reprisal for rejecting a sexual solicitation or advance.

(v) "**Sexual Violence**" means any sexual act or act targeting a person's sexuality, gender identity or gender expression, whether the act is physical or psychological in nature, that is committed, threatened or attempted against a person without the person's consent, and includes, but is not limited to, Sexual Assault, Sexual Harassment, stalking, indecent exposure, voyeurism and sexual exploitation. Sexual Violence can occur in many contexts, including in person, in writing, online, on social media, through digital communication or via other technology.

(w) "**UMSS**" means the University of Manitoba's Security Services.

(x) "**University**" means The University of Manitoba.

(y) "**University Community**" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.

(z) "**University Instituted Investigation**" means an Investigation initiated by the Designated Officer in consultation with the OHRCM, pursuant to sections 2.56 to 2.58 of the Procedure.

(aa) "**University Matter**" has the same meaning as defined in section 2.3 of the Procedure.

## Responsibilities of the University and University Community University Commitments

2.2 The University of Manitoba is committed to maintaining a healthy and safe work, learning, living and social environment for all members of the University Community. The University is therefore committed to:

- (a) Making available and actively promoting programs to educate and train University Community Members on the prevention of and response to Sexual Violence;
- (b) Encouraging individuals to bring concerns about an alleged Breach to an appropriate authority, and protecting those who bring forward such allegations against Reprisal;
- (c) Supporting those impacted by Sexual Violence through academic, nonacademic, workplace, medical and other supports or accommodations as required;
- (d) Ensuring a trauma-informed and Intersectional approach to the implementation of this Policy and the Procedure;
- (e) Ensuring barriers to the application of this Policy are reduced, including that individuals will not be asked to repeat their accounts more than is necessary for the implementation of this Policy or the Procedure;
- (f) Ensuring that following a Disclosure or Formal Complaint of Sexual Violence, all University Community members are treated with compassion, dignity and respect, and provided with support throughout the process;
- (g) Responding to Sexual Violence in a manner that minimizes retraumatization and promotes recovery, empowerment, and selfdetermination, subject to the limits of confidentiality and the University's community safety obligations as set out in this Policy and the Procedure. This includes providing options to those impacted by Sexual Violence on how to access supports, and allowing them to determine whether or not to proceed with a Formal Complaint process;
- (h) Providing information and exploring opportunities to engage in Informal Resolution where appropriate, and in matters involving members of a collective bargaining unit, where permissible under collective agreements.
- (i) Investigating Formal Complaints of Sexual Violence when appropriate, and ensuring that Investigations represent a fair process for all Complainants, Respondents and other participants; that they respect procedural fairness; and where applicable, are in accordance with the collective agreement provisions;
- (j) Respecting the privacy of those impacted by Sexual Violence in accordance with the Procedure;
- (k) Implementing appropriate interim measures that ensure fairness;
- (l) Monitoring and updating University Policies and protocols to ensure that they remain effective and in line with other existing Policies and best practices; and

(m) Implementing this Policy and the Procedure with transparency and accountability, including applying this Policy to all members of the University Community regardless of a person's social position, or position within the University structures or hierarchies.



### University Community Responsibilities

2.3 Promoting a safe work and learning environment is a responsibility of all members of the University Community. The University calls for all members of the University Community especially those in instructional, supervisory, or managerial positions to:

- (a) Practise consent and respect, and create a culture in which consent and respect are foundational principles and practices;
- (b) Bring forward evidence of a Breach of which they become aware to the OHRM;
- (c) Deal appropriately with allegations regarding Breaches or other violations of this Policy or Procedure;
- (d) Provide reasonable cooperation in an Investigation of a Breach;
- (e) Be aware of their responsibilities and educate themselves as to the expectations and reporting requirements under this Policy and the Procedure; and
- (f) Educate those for whom they are responsible regarding expectations for safe and respectful conduct, including this Policy and Procedure.

### Education, Training and Support Education and Training

2.4 Education is a fundamental aspect of the University's commitment to preventing and addressing Sexual Violence. The University will provide access to coordinated education and training programs pertaining to preventing, responding to, and raising awareness about Sexual Violence. Proactive measures that will be taken by the University will be grounded in the Guiding Principles of this Policy, and include implementing and actively promoting education, awareness, prevention, and training programs, in multiple fully accessible formats and tailored to multiple audiences.

### Sexual Violence Steering Committee

2.5 The University will establish an institution-wide committee comprising representatives from various stakeholder groups within the University Community in order to advise the University on issues relating to Sexual Violence, including training programs and educational initiatives.

### Supports

2.6 The University will communicate and provide resources to support Complainants, Respondents, witnesses, and those affected by Sexual Violence, including online resources with links to on-campus and off-campus supports and resources that may be accessed by members of the University Community.

### Autonomy in Disclosure and/or Formal Complaints

2.7 A person who has made a Disclosure and/or Formal Complaint of Sexual Violence has autonomy in decision-making, and in particular with respect to whom to Disclose, whether to make a Formal Complaint, whether to pursue recourse to the criminal or civil justice systems, and whether to access available supports and accommodations.

2.8 Notwithstanding section 2.7, the University also has an obligation to protect the University Community from harm. The University reserves the right to initiate a University Instituted Investigation in accordance with the Procedure, and/or to report the incident to local police services, even without the consent of the Complainant, if it believes that the safety of the University Community is at risk or if reporting is required by law (for example, in the case of a minor). In cases where actions are

taken without the consent of the Complainant, reasonable efforts will be made to preserve the anonymity of the Complainant. In addition, the Complainant will be notified of the actions the University intends to take in order that the Complainant can work with the University to take any additional safety precautions that may be required as a result of the University's actions.

### Investigations and Discipline Investigation

2.9 The University will investigate allegations of Sexual Violence in relation to a University Matter in accordance with the Procedure.

### Discipline

2.10 Any member of the University Community who breaches this Policy or the Procedure in relation to a University Matter will be subject to discipline under the Procedure.

### Annual Report

2.11 The OHRM will produce and provide an annual report to the Designated Officer, outlining:

- (a) Information on activities undertaken to raise awareness and contribute to prevention, including the type of activity and the number of students and staff who attend;
- (b) De-identified data regarding the number and types of Disclosures and Formal Complaints received;
- (c) De-identified data on process factors such as the number and types of Investigations conducted and whether they resulted in a finding of Breach or No Breach;
- (d) Aggregate anonymized data on Complainant and Respondent roles at the University;
- (e) De-identified data on fairness factors such as time to process and the identity of investigators;
- (f) Lessons learned flowing from after-action reviews;
- (g) Information regarding observable trends and commentary on the implementation and effectiveness of the Policy; and
- (h) Other relevant information which may further the implementation of the Policy and its Procedures.

2.12 The annual report will be made available to the University Community.

### Additional Protections

2.13 The OHRM will provide Complainants with a clear explanation of the available processes and options. Nothing in this Policy or the Procedure is intended to discourage or prevent a member of the University Community, including students and employees, from filing a complaint with, for example, the Winnipeg Police Service, the Manitoba Human Rights Commission, professional regulatory bodies, or from exercising any other legal rights pursuant to any other law.

2.14 In addition, nothing in this Policy or the Procedure is intended to limit the rights of an employee governed by a collective agreement. If there is any ambiguity or conflict between this Policy or the Procedure, and a collective agreement, the collective agreement will prevail.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Policy is required.

3.2 The Vice-President (Administration) is responsible for the implementation, administration and review of this Policy.

3.3 All members of the University Community are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Vice-President (Administration) may approve procedures, if applicable, which are secondary to and comply with this Policy, including but not limited to:

(a) A procedure to supplement existing policies, procedures or bylaws, by providing a mechanism for the Investigation of an alleged Breach, including regarding:

- (i) Receipt and review of complaints;
- (ii) The circumstances under which an Investigation should take place;
- (iii) Appointment of Investigators;
- (iv) Conduct of an Investigation, in accordance with the principles of procedural fairness and natural justice;
- (v) Respecting the confidentiality of information collected in relation to Formal Complaints, Disclosures and Investigations;
- (vi) Protecting individuals against Reprisal;
- (vii) Protecting individuals against unfounded allegations of a Breach;
- (viii) Producing a report at the conclusion of an Investigation; and
- (ix) Providing information to appropriate disciplinary authorities, if necessary.

(b) Generally defining the responsibility, authority and accountability of members of the University Community under this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Policy is September 29, 2023.

5.2 In the interim, this Policy may be revised or repealed by the Approving Body if:

- (a) The Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;
- (b) The Policy is no longer legislatively or statutorily compliant; and/or
- (c) The Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) Comply with the revised Policy; or

- (b) Are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Sexual Assault Policy effective September 1, 2016;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Disclosures and Complaints Procedure
- (b) Respectful Work and Learning Environment Policy
- (c) Definitions of Academic Units Policy
- (d) Access and Privacy Policy and Procedure
- (e) Records Management Policy and Procedure
- (f) Student Discipline Bylaw
- (g) Student Non-Academic Misconduct and Concerning Behaviour Procedure
- (h) Student Discipline Appeal Procedure
- (i) Use of Computer Facilities Policy and Procedure
- (j) Violent or Threatening Behaviour Policy and Procedure
- (k) Criminal Code, RSC 1985, c C-46
- (l) The Human Rights Code, C.C.S.M. c. H175
- (m) The Workplace Safety and Health Regulation 217/2006
- (n) The Advanced Education Administration Act, C.C.S.M. c. A6.3
- (o) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175
- (p) The Personal Health Information Act, C.C.S.M. c. P33.5

## Responsibilities of Academic Staff with Regard to Students Policy and Procedure

## Responsibilities of Academic Staff with Regard to Students Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

## Part I: Reason for Policy

1.1 The purpose of this Policy is to identify the responsibilities and the discharge of responsibilities of Academic Staff with regard to Students.

1.2 Some of the responsibilities and discharge of responsibilities with regard to Students will rest with the individual Academic Staff member, while others are collective responsibilities to be exercised at the Unit level.

1.3 This Policy and its related Procedures will identify and differentiate the responsibilities and discharge of responsibilities of Academic Staff at the individual and at the Unit level.

## Part II: Policy Content

### Definitions

2.1 The following terms are defined for the purpose of this Policy and related Procedures:

(a) "Academic Administrator(s)" refers to the senior academic administrative positions having direct management authority over a Unit and the primary responsibility for the management functions of planning, directing, controlling and evaluating a large group of the University's resources within that Unit, including people, budgets and facilities. This category includes, without limitation, a dean, director, associate dean, assistant dean, chair or head of department, insofar as they perform managerial duties.

(b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(c) "Policy" means this Responsibilities of Academic Staff with regard to Students Policy.

(d) "Procedure" means the Responsibilities of Academic Staff with regard to Students Procedure.

(e) "Student" or "Students" refer to any person or group of people registered as a student at the University of Manitoba.

(f) "Unit" refers to a department, centre, institute, college, faculty, school, or other academic division to which Academic Staff is assigned to teach Students.

(g) "University" refers to the University of Manitoba.

### Individual Responsibilities of Academic Staff

2.2 The responsibilities of Academic Staff with regard to Students are primarily instructional and scholarly, and secondarily administrative. They may include:

- (a) Undergraduate, graduate, and continuing education instruction;
- (b) Scholarly attainment through personal study and research, including:

- (i) study for purposes of academic self-improvement or course improvement; and

- (ii) keeping abreast of new developments, and research that leads to a useful or original contribution toward the advancement of knowledge and understanding;

- (c) Administrative work as required for instructional and scholarly activities including committee work at various levels (departmental, faculty, university) as it pertains directly or indirectly to Students.

2.3 In discharging their instructional responsibilities, Academic Staff shall act with academic integrity, scholarly competence and pedagogic effectiveness by providing Students with pertinent materials in a timely manner, by maintaining familiarity with current policies and responsibilities regarding privacy, copyright and human rights, and by adhering to regulations pertaining to instruction, reporting and evaluation at the University.

2.4 Academic Staff are to provide an effective learning environment and to endeavor to ensure fair and consistent treatment of Students by periodically reviewing and updating all course content and outlines.

### Collective Responsibilities of Academic Staff

2.5 The collective responsibilities of the Academic Staff shall be exercised through the actions of the Unit's administrators and councils, including:

- (a) Periodically reviewing all courses and programs, including course descriptions, to ensure that the material to be presented is current and appropriate and the academic calendar information is clear and accurate;

- (b) Ensuring that the Unit's policies, regulations and procedures provide for fair and consistent treatment of Students;

- (c) Ensuring the academic calendar reflects any Unit-specific policies that may affect the Student's academic progress;

- (d) Making available on the University's website and providing for convenient student access to information on supplemental Unit-specific regulations, policies and procedures; and

- (e) Providing the names of instructors assigned to teach particular courses and sections at the earliest possible opportunity.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) is responsible for the implementation, administration and review of this Policy.

3.3 Academic Staff and Academic Administrators are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) or the Approving Body may approve Procedures, if applicable, which are secondary to and comply with this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Responsibilities of Academic Staff with Regard to Students Policy, revised June 25, 1998;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Responsibilities of Academic Staff with Regard to Students Procedure;
- (b) Conflict of Interest Policy;
- (c) Conflict of Interest between Evaluators and Students due to Close Personal Relationships Policy;
- (d) Electronic Communication with Students Policy;
- (e) Final Examination and Final Grades Policy;
- (f) Grade Point Averages Policy;
- (g) Intellectual Property Policy
- (h) Multi-Sectioned Courses Policy;
- (i) Respectful Work and Learning Environment Policy;
- (j) Sexual Assault Policy;
- (k) Responsible Conduct of Research Policy;
- (l) Student Advocacy Office Policy;
- (m) Student Discipline Bylaw;
- (n) Student Academic Misconduct Procedure;

(o) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(p) Student Discipline Appeal Procedure;

(q) Teaching Evaluation Policy;

(r) The University of Manitoba Accessibility Policy;

(s) University Health Services Policy;

(t) Voluntary Withdrawal Policy.

# Responsibilities of Academic Staff with Regard to Students Procedure

## Part I: Reason for Policy

1.1 To set out Procedures secondary to the Policy entitled "Responsibilities of Academic Staff with Regard to Students".

## Part II: Procedural Content

### Definitions

2.1 These procedures are to be read in conjunction with the Responsibilities of Academic Staff with regard to Students policy, and all capitalized terms used herein shall have the meaning given to them in the Policy. In addition, the following definitions shall apply:

(a) "Academic Administrator(s)" refers to the senior academic administrative positions having direct management authority over a Unit and the primary responsibility for the management functions of planning, directing, controlling and evaluating a large group of the University's resources within that Unit, including people, budgets and facilities. This category includes, without limitation, a dean, director, associate dean, assistant dean, chair or head of department, insofar as they perform managerial duties.

(b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(c) "Calendar" means the University of Manitoba's official Academic Calendar under which the course is taught.

(d) "Policy" means the Responsibilities of Academic Staff with regard to Students policy.

(e) "Procedure" means this Responsibilities of Academic Staff with regard to Students procedure.

(f) "Student" or "Students" refer to any person or group of people registered as a student at the University of Manitoba.

(g) "Unit" refers to a department, centre, institute, college, faculty, school, or other academic division to which Academic Staff is assigned to teach Students.

(h) "Working Days" will mean Monday through Friday excluding days in which the University is closed.

## Individual Responsibilities of Academic Staff

### 2.2 Course Content

Academic Staff shall teach their courses with due alignment to Calendar descriptions.

### 2.3 Policies

Academic Staff will maintain familiarity with current University, faculty, school, college and/or department policies regarding plagiarism and cheating, examination impersonations, student access to final examination scripts, student discipline, grade appeals, copyright and intellectual property, and the University policy regarding the respectful work and learning environment, as posted on the University's "Governing Documents" website;

### 2.4 Regulations

Academic Staff will adhere to regulations pertaining to the format, content and conduct of courses and laboratories, including regulations pertaining to examinations, term work, grades, and related matters as outlined in University and Unit guidelines.

### 2.5 Course Outline

Academic Staff shall provide a course outline to every Student registered in their class and review its content within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time). The course outline will contain at minimum the following information:

- (a) Name of Academic Staff;
- (b) Office number, telephone number and email address;
- (c) A list of the learning materials that the Student is required to obtain including the appropriate referencing style guide(s) acceptable to the Academic Staff and/or discipline in courses where it is relevant;
- (d) A course description outlining the topics to be covered and goals of the course, which could include the bona fide academic requirements and learning outcomes for the course;
- (e) Expectations for class attendance and penalties, if any, for non-compliance;
- (f) A description of the evaluation procedure and methods that will be used, including:
  - (i) The weighting of the components that will contribute to the final grade;
  - (ii) A description of how the numeric grade will be converted to the University's letter grade system; and
  - (iii) An indication of whether specific assignment instructions, grading rules, or rubrics will be provided.

**Note:** It is understood by Senate that the provision of this information is not intended to affect the question of equity in multi-sectioned courses in any way.
- (g) An indication of how evaluative feedback will be given to the student, including:

(i) The form of evaluative feedback [formative (e.g. comments) or summative (e.g. grade)];

(ii) When summative feedback will be distributed in relation to the voluntary withdrawal deadline, Unit guidelines, and section 2.9(f) of this Procedure; and

(iii) The method in which evaluative feedback will be delivered (for example, via paper or electronic method);

(h) A schedule of the Academic Staff member's availability for individual student consultation, in accordance with section 2.9(d);

(i) A schedule of term assignments and tests;

(j) A statement of the practice to be followed regarding late submission of assignments and missed term tests;

(k) A statement outlining parameters for the use of electronic and mechanical devices and course technology that may be required (for example, cellphones, laptops, tablets);

(l) A statement regarding recording of classes, with reference to any University policies that might apply;

(m) A statement referring Students with disabilities to Student Accessibility Services to facilitate the implementation of accommodations, and a statement communicating willingness to meet with Students to discuss the accommodations recommended by Student Accessibility Services; and

(n) A statement regarding academic integrity, including "plagiarism and cheating" and "examination impersonation" as described in the Calendar and, where appropriate, references to specific course requirements for individual work and group work, such as:

(i) Group projects are subject to the rules of academic dishonesty;

(ii) Group members must ensure that a group project adheres to the principles of academic integrity.

(iii) Students should also be made aware of any specific instructions concerning study groups and individual assignments;

(iv) The limits of collaboration on assignments should be defined as explicitly as possible; and

(v) All work is to be completed independently unless otherwise specified.

### 2.6 Policy and Resource Document

Academic Staff shall provide to every student the information on University support offices and policies outlined in Schedule "A" to this Procedure, within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time).

### 2.7 Learning Materials

Academic Staff shall specify learning materials in accordance with announced purchasing deadlines.

## 2.8 Changes to Course Outline and Timing Requirements

Academic Staff who wish to make changes to the method of evaluation or format of assignments in the course outline after it has been distributed to the class shall proceed as follows:

- (a) Academic Staff shall, in a timely fashion:
  - (i) Discuss the proposed changes (e.g. in the class and/or through UM Learn) and encourage Students to provide feedback to the Academic Staff if there are any issues with the proposed changes;
  - (ii) Provide the revised outline to the Academic Administrator of the Unit; and
  - (iii) Confirm the changes in writing by providing the revised course outline to every Student registered in the course within the first week following the change, either through a paper copy and via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by University administration from time to time).
- (b) In circumstances where weighting of assignments is changed retroactively, a Student who wishes to be graded according to the original course outline must advise the Academic Staff within at least five (5) Working Days of receiving the revised outline, failing which the Student will be graded according to the revised outline. Academic Staff shall advise Students of the deadline when they provide the revised outline.

## 2.9 Interactions with Students

In their interactions with Students, Academic Staff shall:

- (a) not deny registration for instruction in those courses for which the permission of the Academic Staff is required, except where the Student lacks appropriate qualifications or where an approved policy on limited enrolment is in effect;
- (b) comply with existing human rights legislation;
- (c) not accept money or other goods or services from Students for assistance with any course offered by the University. This clause, however, shall not prevent student teaching assistants or other Academic Staff from accepting payment for tutoring in courses/sections which do not fall within the scope of their University employment;
- (d) be available for a reasonable amount of time, on a known and posted basis, for individual consultation with Students registered in their courses or laboratories;
- (e) evaluate student academic performance in a fair and reasonable manner, and by means of appropriate academic criteria;
- (f) provide early evaluative feedback as specified in the course outline (see section 2.5(g));
- (g) foster an exchange of ideas between themselves and their Students in the classroom and allow Students the freedom to take legitimate exception to the data, views, or methods presented;
- (h) respect the confidentiality of information about Students;
- (i) keep confidential any information about the academic performance of a Student, unless release is authorized by the

Student, required by his/her instructional team, or requested by an administrative officer in accordance with the University policy on the release of information;

- (j) explicitly acknowledge in written or oral presentations any contribution of student research or assistance;
- (k) not obtain any improper personal advantage from a Student or Student work; and
- (l) not retaliate against a student who has filed a complaint, whether the complaint was substantiated or unsubstantiated.

## 2.10 Instruction

Academic Staff are responsible for:

- (a) the organization, preparation and delivery of course material, the evaluation of student academic progress;
- (b) the reporting of such evaluation in accordance with approved policies and schedules; and
- (c) consultation with Students out of class or laboratory hours, and supervision of student research and thesis preparation.

## 2.11 Scheduled Classes

Academic Staff shall not cancel, miss, terminate or shorten scheduled instruction except for good reasons. Whenever a scheduled period of instruction is cancelled, the Academic Staff shall:

- (a) inform the class at the earliest possible time;
- (b) inform the Academic Administrator of his/her Unit at the earliest possible time; and
- (c) where possible, ensure that appropriate substitution or make-up instruction is provided.

## 2.12 Evaluation

Academic Staff shall adhere to the relevant Senate-approved policy regarding professor-course evaluation.

## 2.13 Reporting Student Grades

Academic Staff who provide instruction shall comply with the schedules and formats for reporting student grades, as established by their Unit and the Registrar's Office. Where such grades are reviewed by Unit committees, Academic Staff should be available for the duration of the committees' work. Academic Staff must also correct any grade errors of which they become aware in a timely manner and notify the Student accordingly.

## 2.14 Term Work

Academic Staff shall adhere to Unit-specific policies regarding return and/or retention of term work. In the absence of Unit-specific policies, all term work shall be returned to the Student. Any unclaimed term work will be held by the Unit for 4 months from the end of the term in which the work was assigned. At the conclusion of this time, all unclaimed term work will become property of the Unit and be destroyed according to the University's common records schedule, using confidential measures for disposal.

## 2.15 Class Size

Where necessitated by large class sizes or other circumstances, the Unit shall ensure that Academic Staff and/or designated substitutes are available for individual consultation with Students for a reasonable amount of time on a known and posted basis.

## Collective Responsibilities of Academic Staff

### 2.16 Course Descriptions

Through their Unit councils, Academic Staff members should review program and course descriptions periodically to ensure that the material to be presented is current and appropriate and that the Calendar information is clear and accurate.

### 2.17 Materials

The following material must be kept on file in the Unit's general offices and made available to Students:

- (a) University and Unit policy and procedures regarding class attendance and penalties, if any, for non-compliance;
- (b) the information described in section 2.5 of this Procedure in regards to materials to be provided to Students by the Academic Staff of each course section;
- (c) University and Unit policy and procedures regarding the evaluation of professors and courses by Students;
- (d) University and Unit policy and procedures regarding student access to final examination scripts;
- (e) University policy and procedures on student discipline;
- (f) University and Unit policy and procedures regarding grade appeals;
- (g) University policy and related procedures on the Responsibilities of Academic Staff with regard to Students;
- (h) University policy and protocol regarding responding to sexual assault;
- (i) University policy and related procedures on Respectful Work and Learning Environment;
- (j) University policy and related procedures on Accessibility for Students with Disabilities; and
- (k) University policy and related procedures on Intellectual Property.

### 2.18 Instruction

The Unit should ensure the provision of names of Academic Staff assigned to teach particular courses and sections at the earliest possible opportunity;

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Procedure is required.

3.2 The Vice-Provost (Academic Affairs) is responsible for the implementation, administration and review of this Procedure.

3.3 Academic Staff and Academic Administrators are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2026.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or Approving Body deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) Responsibilities of Academic Staff with regard to Students Policy, effective July 4, 1979 and revised June 25, 1998;
- (b) Cancellation of Scheduled Classes Policy, effective November 30, 1971 and revised November 29, 1988;
- (c) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (d) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Responsibilities of Academic Staff with Regard to Students Policy;
- (b) Schedule "A": Policy and Resource Document;
- (c) Conflict of Interest Policy;
- (d) Conflict of Interest between Evaluators and Students due to Close Personal Relationships Policy;
- (e) Electronic Communication with Students Policy;
- (f) Final Examination and Final Grades Policy;
- (g) Grade Point Averages Policy;
- (h) Intellectual Property Policy;
- (i) Multi-Sectioned Courses Policy;
- (j) Respectful Work and Learning Environment Policy;
- (k) Sexual Assault Policy;
- (l) Responsible Conduct of Research Policy;
- (m) Student Advocacy Office Policy;
- (n) Student Discipline Bylaw;
- (o) Student Academic Misconduct Procedure;
- (p) Student Non-Academic Misconduct and Concerning Behaviour Procedure;
- (q) Student Discipline Appeal Procedure;
- (r) Teaching Evaluation Policy;

- (s) The University of Manitoba Accessibility Policy;
- (t) University Health Services Policy;
- (u) Voluntary Withdrawal Policy.

## Schedule "A": Policies and Resources

1. In accordance with section 2.6 of the Responsibilities of Academic Staff with Regard to Students procedure, Academic Staff shall provide the following information to every student within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time):

- (a) A list of academic supports available to Students, such as the Academic Learning Centre, Libraries and other supports as may be appropriate;
- (b) A statement regarding mental health that includes referral information to resources and student supports, such as Student Counselling Centre, University Health Services and other supports as may be appropriate;
- (c) A notice to respect copyright, with a reference directing Students to the University's Copyright Office;
- (d) A statement directing the Student to University and Unit policies, procedures and supplemental regulations available online, with special direction to review the University's policies and procedures regarding:
  - (i) Academic Dishonesty: plagiarism, cheating and examination impersonation;
  - (ii) Student access to final examination scripts;
  - (iii) Student discipline;
  - (iv) Grade appeals;
  - (v) Student advocacy;
  - (vi) Respectful Work and Learning Environment;
  - (vii) Sexual Assault; and
  - (viii) Intellectual Property.

2. The University's Centre for Advancement Teaching and Learning will compile sample language and templates for Academic Staff to use in fulfilling the above requirements.

## Student Discipline Bylaw and Procedure

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

Students are expected to conduct themselves responsibly with due regard for the rights of others and to maintain a high level of personal and academic integrity. Students who transgress these standards, whether expressed in policy or implied in generally accepted codes of conduct, can expect disciplinary action. Penalties arising from disciplinary actions

may include fines, withholding of student privileges, suspension or expulsion from programs, or some other action specific to the situation. Penalties may also affect student eligibility to continue in their programs or to graduate.

## Student Discipline Bylaw

### Part I: Reason for Bylaw

1.1 The reason for this Bylaw is to outline the Disciplinary Actions available to Disciplinary Authorities and the subsequent appeal process available to Students for findings of Academic Misconduct and Non-Academic Misconduct.

### Part II: Policy Content

#### Definitions

2.1 The following terms are defined for the purpose of this Bylaw:

- (a) "Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Academic Misconduct Procedure.
- (b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.
- (c) "Appeal Procedure" means the Student Discipline – Appeal Procedure.
- (d) "Bylaw" means the Student Discipline Bylaw.
- (e) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (f) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3: Disciplinary Actions and Disciplinary Authorities.
- (g) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline under:
  - (i) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct; or
  - (ii) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct.
- (h) "Expulsion" has the same meaning as defined under section 2.16 of this Bylaw.
- (i) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.
- (j) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Non-Academic Misconduct and Concerning Behaviour Procedure.
- (k) "Reprimand" has the same meaning as defined under section 2.6 of this Bylaw.



(l) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(m) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving Suspension due to academic or discipline;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(n) "Suspension" has the same meaning as defined in section 2.8 of this Bylaw.

(o) Table 1" refers to Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct, which follows the Bylaw.

(p) "Table 2" refers to Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct, which follows the Bylaw.

(q) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(r) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a Faculty/College/School is not a Unit as the term is used within this Bylaw.

(s) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(t) "University" means The University of Manitoba.

(u) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers.

(v) "UDC" means the University Discipline Committee composed under section 2.53 of the Appeal Procedure.

## Disciplinary Actions

2.2 Students will be subject to Disciplinary Action under this Bylaw for acts of Academic Misconduct and for acts of Non-Academic Misconduct.

2.3 The Disciplinary Actions available to a Disciplinary Authority are set out in Table 3.

2.4 Once a Disciplinary Action has been implemented, no further Disciplinary Action may be imposed for the same matter except as a result of an appeal by the Student.

## Student Academic History/Transcript with regard to Disciplinary Actions

2.5 Disciplinary Actions implemented shall not ordinarily be recorded on the Student's academic history / transcript except in the following:

(a) if the Student receives Suspension or Expulsion under sections 16, 17, 20 or 26 of Table 3; or

(b) a Reprimand has been ordered recorded on a Student's academic history / transcript under section 2 of Table 3.

## Reprimand

2.6 "Reprimand" means an action intended to convey stern disapproval to a Student by means of recording their Academic Misconduct or Non-Academic Misconduct on their Student's academic history / transcript for a period of up to five (5) years.

2.7 Where a Reprimand has been ordered to be recorded on the Student's academic history / transcript (see section 2 of Table 3), the Reprimand shall be removed:

(a) Following the elapse of the specified period of time, upon the written request of the Student to the Registrar; or

(b) Earlier, upon a written order from the Disciplinary Authority that implemented the Disciplinary Action.

## Suspensions

2.8 "Suspension" means any withdrawal of one or more rights or privileges for a definite or indefinite period of time.

2.9 A Student may receive Suspension from the following:

(a) a particular course or courses;

(b) a department;

(c) a Faculty/College/School;

(d) the University; or

(e) a Residence.

2.10 Students who have been suspended for a definite period of time shall, upon the lifting of the Suspension, have the rights or privileges that were suspended automatically reinstated, subject to any conditions attached to the Disciplinary Action proscribing future conduct.

2.11 Suspension for an indefinite period of time shall be dealt with as follows:

(a) In the case of Suspension for an indefinite time by the Executive Director of Enrolment Services, the Suspension may be lifted by the Executive Director of Enrolment Services upon consideration at the written request of the Student, after consultation with the Unit Head(s) of the Unit(s) concerned.

(b) In the case of Suspension for an indefinite period of time by a Disciplinary Authority other than the Executive Director of Enrolment Services, the Student may apply to the Disciplinary Authority that imposed the final penalty for a lifting of the Suspension. If the Suspension is lifted, the Student will have the rights or privileges that were suspended automatically reinstated, subject to any conditions attached to the Disciplinary Action proscribing future conduct.

2.12 Where a Student has received a Suspension pursuant to sections 2.9(c) or 2.9(d) of this Bylaw, any academic credits earned by the Student at the University or at any academic institution during the period of Suspension shall not be counted as credit toward any degree or program offered by the University, unless at the time of the imposition of the Suspension, the Disciplinary Authority stipulates otherwise.

2.13 Where the Student has received Suspension from a Faculty/College/School of the University, any other Faculty/College/School may refuse to register the Student for any course or courses or refuse to accept the Student into their programs, provided that prior to such refusal, the other Faculty/College/School has:

- (a) obtained and considered a written report from the Disciplinary Authority that implemented the Suspension, outlining the circumstances surrounding the Disciplinary Action;
- (b) provided the Student a copy of the report; and
- (c) given the Student an opportunity to respond to the report.

2.14 A Suspension will appear on the Student's academic history / transcript until such time as the Suspension period has elapsed, when it shall be removed upon the written request of the Student to the Registrar.

2.15 In the case of Suspension for supplying false or misleading information in connection with an application for admission (see sections 23 and 24 of Table 3), any notation on the Student's academic history / transcript may only be removed:

- (a) For undergraduate students, by the Registrar upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.
- (b) For graduate students, by the Registrar in consultation with the Dean, Faculty of Graduate Studies, upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.

### Expulsions

2.16 "Expulsion" means a withdrawal of all rights or privileges available to Students for either a definite or indefinite period of time.

2.17 A Student may receive Expulsion from the following:

- (a) a Faculty/College/School;
- (b) the University; or
- (c) a Residence.

2.18 In the case of an Expulsion for a definite period of time, upon expiration of such time, in order to be readmitted, the Student must reapply for admission through normal channels to the appropriate authority having jurisdiction over admission.

2.19 In the case of an Expulsion for an indefinite period of time the Student may apply to the Disciplinary Authority that imposed the final penalty for a lifting of the Expulsion. If the Expulsion is lifted, the Student, in order to be readmitted, must reapply for admission through normal channels to the authority having jurisdiction over admission.

2.20 Where a Student has received an Expulsion pursuant to sections 2.17(a) or 2.17(b) of this Bylaw, any academic credits earned by the Student at the University or at any academic institution during the period of Expulsion shall not be counted as credit toward any degree or program

offered by the University, unless at the time of the imposition of the Expulsion, the Disciplinary Authority stipulates otherwise.

2.21 Where the Student has received Expulsion from a Faculty/College/School of the University, any other Faculty/College/School may refuse to register the Student for any course or courses or refuse to accept the Student into their programs, provided that prior to such refusal, the other Faculty/College/School has:

- (a) obtained and considered a written report from the Disciplinary Authority that implemented the Expulsion, outlining the circumstances surrounding the Disciplinary Action;
- (b) provided the Student a copy of the report; and
- (c) given the Student an opportunity to respond to the report.

2.22 An Expulsion shall appear on the Student's academic history / transcript and may only be removed by the Registrar upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.

### Appeals

2.23 Students have a right to appeal decisions made by a Disciplinary Authority, excluding the following decisions which are final:

- (a) Any decision of the UDC.
- (b) The discretionary decision of a Disciplinary Authority to lift a suspension or an expulsion under section 2.11 or section 2.19 of this Bylaw;
- (c) The decision of a Faculty/College/School to refuse a Student under section 2.21;
- (d) Any finding of fact under the Respectful Work and Learning Environment Policy or the Sexual Violence Policy.

2.24 Appeals shall be conducted in accordance with the Appeal Procedure.

2.25 Subject to section 2.26 of this Bylaw, no Disciplinary Action shall be implemented and Students shall be permitted to continue in their courses or program until the time for appeal has elapsed or until the Student has waived in writing the right to appeal, whichever occurs first. The Disciplinary Authority must ensure that the Student's work continues to be graded normally and is unaffected until the appeal period has lapsed or the appeal process is complete.

2.26 Section 2.25 of this Bylaw does not apply in the following circumstances:

- (a) Where the Disciplinary Action would be entered on the academic history / transcript of the Student, the Registrar shall be notified by the Disciplinary Authority implementing such Disciplinary Action, and shall not issue any academic transcripts until the appeal period has elapsed or the appeal process is complete;
- (b) Where the Disciplinary Action relating to academic dishonesty or academic fraud may result in a change to the Student's transcript, the Registrar shall be notified by the Disciplinary Authority implementing such Disciplinary Action, and shall not issue any transcripts until the appeal period has elapsed or the appeal process is complete;

(c) Where changes in the Student's courses and/or program are directly related to the matter under disciplinary consideration, such changes shall not be permitted;

(d) Where if the Disciplinary Action were not implemented, the safety of members of the University Community would be compromised.

### Confidentiality

2.27 All matters relating to student discipline or appeal must be kept confidential in accordance with applicable University policies and procedures, and The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

### Annual Reports

2.28 The Annual Report of the UDC will contain all the disciplinary matters that have occurred on campus from September 1 to the following August 31 of each Calendar year.

2.29 Academic Staff and department heads who have dealt with a disciplinary matter shall report to the Dean/Director of the Faculty/ College/School to which each Student belongs, setting out the nature of the offence and particulars of the penalty and the Student's identification number if applicable. The Student's identification number is only used for administrative purposes to reduce the possibilities of errors in duplicate reporting and will not be included in the Annual Report.

2.30 Disciplinary Authorities, except members of the Academic Staff and department heads, shall report all disciplinary matters considered by or reported to them to the Chair of the UDC by October 1 of each year. The report shall contain the number of disciplinary matters referred to such person or body, the nature of the offences and particulars of the dispositions, and such further matters as may be required by the UDC.

2.31 The recording secretary of the UDC shall prepare and the Chair shall submit a report to the University President by December 1 in each year setting out both a summary of the reports submitted to the Chair of the UDC as well as particulars of the number, nature and disposition of cases appealed to the UDC.

2.32 Members of the University Community, shall be kept informed of the nature and disposition of cases dealt with under this Bylaw as the Annual Report shall be presented to the both the Senate and the Board of Governors annually. The names of Students disciplined shall not normally be made public.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Policy is required.

3.2 The President is responsible for the implementation, administration and review of this Policy.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Policy.

## Part IV: Secondary Documents

4.1 The President or Approving Body may approve Regulations, Policies and Procedures which are secondary to and comply with this Bylaw.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Bylaw is September 1, 2026.

5.2 In the interim, this Bylaw may be revised or repealed if:

(a) The President or Approving Body deems it necessary or desirable to do so;

(b) The Bylaw is no longer legislatively or statutorily compliant; and/or

(c) The Bylaw is now in conflict with another Governing Document.

5.3 If this Bylaw is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:

(a) comply with the revised Bylaw; or

(b) are, in turn, rescinded.

## Part VI: Effect on Previous Statements

6.1 This Bylaw supersedes:

(a) Student Discipline Bylaw, dated January 1, 2009;

(b) all previous Board/Senate Bylaws, Regulations, Rules, Policies and Procedures, and resolutions on the subject matter contained herein; and

(c) the previous Faculty/College/School Council Bylaw, Regulations, Procedures, and resolutions on the subject matter contained herein.

## Part VII Cross References

7.1 Cross referenced to:

(a) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;

(b) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;

(c) Table 3: Disciplinary Actions and Disciplinary Authorities;

(d) Student Discipline – Appeal Procedure;

(e) Student Academic Misconduct Procedure;

(f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(g) Definitions of Academic Units Policy;

(h) Final Examinations and Final Grades Policy and Procedures;

(i) Respectful Work and Learning Environment Policy;

(j) Sexual Assault Violence Policy;

(k) Disclosures and Complaints Procedure;

(l) Use of Computer Facilities Policy and Procedure;

(m) Violent or Threatening Behaviour Policy and Procedure;

(n) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175;

(o) The Personal Health Information Act, C.C.S.M. c. P33.5

# Student Discipline Appeal Procedures

## Part I: Reason for Procedures

1.1 These Appeal Procedures are secondary to the Student Discipline Bylaw and are intended to establish a process for appeals to be heard, and to provide guidance to the members of appeal panels, to the student and to the Faculty/College/School representatives in relation to appeal hearings.

## Part II: Procedures

### Definitions

2.1 The following terms are defined for the purpose of this Bylaw and related Procedures:

(a) "Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Academic Misconduct Procedure.

(b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(c) "Appeal Body" means the appropriate persons or bodies as identified in sections 2.9 to 2.14.

(d) "Appeal Procedure" means this Student Discipline – Appeal Procedure.

(e) "Appellant" means the Student appealing a Disciplinary Action taken against him or her.

(f) "Bylaw" means the Student Discipline Bylaw.

(g) "College" means a Professional College as defined under the Definitions of Academic Units Policy.

(h) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3 of this Bylaw.

(i) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Academic Misconduct or Non-Academic Misconduct.

(j) "Discrimination" has the same meaning as defined under the Respectful Work and Learning Environment Policy.

(k) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(l) "Local Disciplinary Committee" or "LDC" means the standing or, from time to time, ad hoc committee appointed to hear and determine disciplinary matters under section 2.24 of this Appeal Procedure.

(m) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(n) "Notice of Appeal" means the appeal documentation that must be filed by the Student under section 2.16.

(o) "Respondent" means the Disciplinary Authority whose decision is being appealed.

(p) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(q) "Sexual Assault" has the same meaning as defined under the Sexual Assault Policy.

(r) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension due to academic or discipline;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(s) "Student Advocate" is a member of the University's Student Advocacy Office who provides students with information on their rights and responsibilities, as well as assistance with resolving problems or concerns resulting from actions or decisions taken by the University.

(t) "Table 3" means Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(u) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a faculty or school is not a Unit as the term is used within this Procedure.

(v) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(w) "University" means The University of Manitoba.

(x) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, Students, volunteers, external parties, contractors and suppliers.

(y) "UDC" means the University Discipline Committee composed under section 2.53 of this Appeal Procedure.

### Appeals Generally

2.2 Students have a right to appeal Disciplinary Actions made by a Disciplinary Authority, subject to section 2.23 of the Bylaw.

2.3 Only the Student who has been the subject of a Disciplinary Action has the right to appeal.

2.4 An Appeal Body may dispose of the matter by instituting any Disciplinary Action authorized to it under Table 3. The resulting disposition may be the same, more severe or less severe than the original Disciplinary Action and the Appellant must be so informed of this possibility prior to the commencement of an appeal hearing.

2.5 When an appeal is heard by an Appeal Body, the Appellant must be invited to attend the hearing and, if in attendance, be permitted to ask questions and offer an explanation. Every reasonable attempt should be made to schedule the hearing at a time and place that permits the Appellant's participation.

2.6 If the Appellant, Respondent or their respective representatives are unable to attend the hearing in person, the use of a digital communication, such as audio or video conferencing, may be used with prior consent of the chair of the Appeal Body, provided that such means enable all parties to clearly communicate. A request for such a meeting must be made at least one week in advance of the hearing date.

2.7 Subject to sections 2.40 and 2.74 of this Appeal Procedure, the Appellant may appear in person and be represented by a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, or a member of the Appellant's immediate family. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.8 Subject to sections 2.40, 2.45, 2.76, and 2.83 of this Appeal Procedure, a representative designated in writing by the Appellant may:

- (a) attend any disciplinary hearing; and
- (b) participate in any disciplinary hearing to the extent of asking questions of anyone in attendance and making submissions to any Appeal Body.

### Appeal Routes

2.9 If the Appellant wishes to appeal the Disciplinary Action of a member of the Academic Staff (except for suspension from attendance for the balance of the meeting of one class), or the decision of a department head, the Notice of Appeal must be delivered to the appropriate Unit Head in the Unit offering course(s) and the Unit Head in the Unit in which the Appellant is registered, with a copy to the Academic Staff or department head, as the case may be.

2.10 If an Appellant is appealing within a Unit that does not have department heads, then the first level of decision will be the Unit Head of that respective Unit and the next level of appeal will be as set out in section 2.11 of this Procedure.

2.11 If the Appellant wishes to appeal the Disciplinary Action of a Unit Head, or the Director of Student Residences, the Notice of Appeal must be delivered to the appropriate Local Disciplinary Committee in care of the respective Unit Head or Director of Student Residence.

2.12 If the Appellant wishes to appeal the Disciplinary Action of the University Librarian (other than as a delegate of the President), a delegate of the University Librarian, or an ad hoc committee appointed by the University Librarian, the Notice of Appeal must be delivered to the Chair of the Senate Committee on Libraries, with a copy to the person or ad hoc committee which made the initial disciplinary decision. Within ten (10)

working days of receipt of the Notice of Appeal, the Chair of the Senate Committee on Libraries will appoint a Library Appeals Committee to hear the appeal.

2.13 If the Appellant wishes to appeal the disciplinary decision of any of the following Disciplinary Authorities or appeal any Disciplinary Action related to Sexual Violence or Discrimination, the Notice of Appeal must be delivered to the UDC in care of the Secretary of the UDC (University Secretary):

- (a) the decision of an LDC or the Library Appeals Committee;
- (b) the decision of the Executive Director of Enrolment Services;
- (c) the decision of the Dean of the Faculty of Graduate Studies in relation to fraudulent documents submitted for admission to the Faculty;
- (d) the decision of the Executive Director of Enrolment Services or the Associate Vice-President (Administration) or an ad hoc committee appointed by either of these persons;
- (e) the decision of the Chief Information Officer of Information Services and Technology (IST);
- (f) the decision of the Registrar;
- (g) the decision of the Vice-President (Administration);
- (h) the decision of the Vice-Provost (Students); or
- (i) the decision of the President or delegate.

2.14 If the disciplinary matter involved two or more Students and two or more Students appeal:

- (a) The Students must have separate hearings, but the members of the Appeal Body may be the same for each hearing, subject to sections 2.33 and 2.67 of this Procedure;
- (b) The Respondents may bring in relevant information on the other Student(s) as it pertains to each appeal; and
- (c) Every effort must be made to protect the identity of the other Student(s).

### Filing an Appeal

2.15 The Appellant must deliver the Notice of Appeal to the appropriate Appeal Body within ten (10) working days as of the date on the letter notifying the Appellant of the Disciplinary Action from the lower body.

2.16 The Notice of Appeal must include:

- (a) such appeal application form, with current mailing address and telephone numbers, as may be required by the Appeal Body;
- (b) copies of such written materials as the Appellant wishes considered in connection with the appeal;
- (c) copies of the letter indicating the lower level decision, if not a first level appeal;
- (d) A letter clearly outlining the reason for the appeal and the remedy sought, including an indication of whether the Appellant is appealing the decision on:

(i) the finding of facts; where permitted subject to s. 2.23 of the Student Discipline Bylaw;

(ii) the Disciplinary Action imposed by the Disciplinary Authority; or

(iii) both the facts and the Disciplinary Action, where permitted subject to s. 2.23 of the Student Discipline Bylaw; and

(e) the name and contact information of any representative that the Appellant wishes to have present at the appeal hearing, subject to subject to sections 2.7, 2.39 and 2.74 of this Appeal Procedure.

(f) In the case of an appeal to the LDC or UDC, a listing of all resources or witnesses the Appellant wants in attendance at the hearing and their relevance. The scheduling of witnesses and resource people is the responsibility of the Appellant.

2.17 Subject to section 2.18, if an appeal is not received by the next level Appeal Body by the deadline set out in section 2.15, the Disciplinary Action against the Student will be implemented.

2.18 The time for delivery of a Notice of Appeal may be extended by the Appeal Body, or by the chair of the Appeal Body where the Appeal Body is the LDC or the UDC.

2.19 The Disciplinary Action implemented may be put on hold if the Appeal Body receiving the next level of appeal deems the lateness acceptable and grants the Appellant permission to proceed with the appeal after deadline.

2.20 The Appellant and the designated representative of the Appellant must receive the same notices of hearings held by the LDC and the UDC as the Respondents.

### Responsibilities of Respondents

2.21 The Respondent will be given ten (10) working days to respond to the Notice of Appeal.

2.22 Respondents must submit the following:

(a) A written response to the Appellant's Notice of Appeal;

(b) All relevant documentation the Respondents will rely on as support for their position regarding the appeal; and

(c) In the case of an appeal to the LDC or UDC, a listing of all resource people or witnesses they want in attendance at the hearing and their relevance. The scheduling of witnesses and resource people is the responsibility of the Respondent.

(d) All the above documents must be filed within the time set out in section 2.21. If the Respondent had not received permission for an extension, a written request must be submitted to the Appeal Body to determine whether the Respondent's submission will be accepted.

2.23 If no response is received from the Respondent by the date requested by the office coordinating the appeal, a hearing may be set.

### Local Discipline Committee (LDC)

#### LDC Jurisdiction

2.24 Each Faculty/College/School, and the University Student Residences under the jurisdiction of the Office of Student Residences, must establish a standing or, from time to time, ad hoc committee to hear and determine disciplinary matters appealed to it by Students from a decision of the

Dean/Director of that Faculty/College/School, or the Director of Student Residences for the University Residences under the Office of Student Residences' jurisdiction.

2.25 The LDC and the hearing panels thereof must exercise disciplinary authority on all Students that are appealing a decision from the Dean or Director of the Faculty/College/School or University Student Residence.

2.26 The Disciplinary Actions available to the LDC are set out in Table 3.

#### LDC Composition

2.27 In Faculties/Colleges/Schools, the LDC must be composed of an equal number of faculty members and students with a minimum of eight (8) members.

2.28 In the case of University Student Residences, the LDC must be composed of an equal number of residence staff and students with a minimum of eight (8) members. Members must be appointed by the Director of Student Residences with the advice of the appropriate Residence Students' Association.

2.29 The chair of the LDC must be elected by and from the membership of the LDC.

2.30 A quorum must be half the members, with a minimum of four (4) members, ensuring at least one (1) student and one (1) faculty member are present.

2.31 Where the Disciplinary Action relates to two (2) or more Faculties, Colleges or Schools, the LDC hearing panel must contain at least one (1) student and one (1) faculty member from each Faculty/College/School.

2.32 The chair must only vote in the case of a tie.

2.33 The Appellant, or the Appellant's representative, if any, and Respondent must have the right to challenge for cause any member of the LDC, the validity of the challenge to be judged by the remainder of the LDC. Such cause may include current teacher-student relationship, bias, or any factor likely to prejudice a fair hearing. Any person, who was directly involved in the original Disciplinary Action, either as a principal in the case or as a Disciplinary Authority, must be automatically removed from any hearing panel regarding the appeal.

#### LDC Hearing Procedures

2.34 The Appellant must be presumed innocent until the evidence presented indicates that, on the balance of probabilities Disciplinary Action is warranted. The LDC, in weighing the balance of probabilities, must consider the severity of the alleged incident.

2.35 The hearing must be by way of a trial de novo unless the appeal has been made only in relation to the severity of the Disciplinary Action imposed.

2.36 Hearings must be closed unless the Appellant requests in writing at least forty-eight (48) hours before the hearing that a hearing be open and there is no reasonable objection to an open hearing.

2.37 If the appeal hearing is in closed session, no observers may be present in the room. If the appeal hearing is in open session, any observers present will not be allowed to contribute in any way to the proceedings. Regardless of open or closed status, no electronic or other recording devices will be permitted.

2.38 Regardless of section 2.36, hearings related to discipline under the Respectful Work and Learning Environment Policy and/or discipline under the Sexual Violence Policy must be closed.

#### **Representatives at LDC Hearing**

2.39 At the LDC hearing, the Appellant may appear in person and be represented by a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, or a member of the Student's immediate family. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.40 If the Appellant or the Respondent wishes to have a lawyer present, the lawyer(s) present may only be a non-participating observer(s) at hearings of the LDC, but may represent the Appellant or Respondent at hearings of the UDC.

#### **Failure to Attend LDC Hearing**

2.41 An Appellant who fails to attend a scheduled appeal hearing may have the appeal considered on the basis of the Appellant's written submission, the presentation of the Appellant's designated representative, if any, and the verbal and written submissions made by the Respondent.

2.42 The Appellant shall be advised that the LDC has made a decision regarding the appeal and that the Appellant has ten (10) days to provide reasons for missing the hearing prior to the implementation of the decision. The LDC Chair will determine whether the hearing should be re-scheduled based on any submission from the Appellant. A reasonable attempt will be made to reconvene the same members should the hearing be re-scheduled.

#### **Evidence at LDC Hearing**

2.43 The Appellant and the Appellant's designated representative, if any, and the Respondent or the Respondent's representative, will receive in writing, at least five (5) working days before the date set for the hearing, the names of the members of the LDC hearing panel who will hear the appeal and the information that has been submitted to the LDC hearing panel by both relevant parties, in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

2.44 The Appellant, or the Appellant's designated representative, if any, and the Respondent, or the Respondent's representative, if any, may call witnesses and submit other evidence. The Appellant, the Appellant's representative, if any, and the Respondent, or Respondent's representative, if any, are responsible for arranging their own witnesses. If witnesses are to be called, a witness list must be provided by the Appellant or the Appellant's representative, if any, in their original appeal package provided to the Chair and a witness list must be provided by the Respondent or the Respondent's representative, if any, with their response to the appeal.

2.45 The Appellant must not be required to testify, but if the Appellant elects to do so, then the Appellant may be cross-examined by the Respondent, or the Respondent's representative, if any.

2.46 The Appellant or the Appellant's designated representative, if any, and the Respondent, must have the right to cross-examine witnesses.

2.47 The LDC may consider confidential information from the University Health Service, Counselling Service, University Chaplains and other similar services which are submitted by these services to the LDC at the

request of the Appellant. Such confidential information submitted to the LDC may only be used for the purpose of the appeal.

#### **Adjournments of LDC Hearing**

2.48 Requests for adjournment must be granted within reason.

#### **Disposition of LDC Hearing**

2.49 A decision to uphold or deny an appeal, in whole or in part, and a decision to take different Disciplinary Action, in whole or in part, requires a simple majority of LDC Committee members present and voting. The results of the hearing must be conveyed in writing, in a timely fashion, by the Chair of the LDC to the Appellant or the Appellant's designated representative, if any and to the Respondent or the Respondent's designated representative, as the case may be.

2.50 If, after hearing all the evidence, the LDC is satisfied on the evidence presented that the Appellant has committed Academic Misconduct or Non-Academic Misconduct, the LDC may dispose of the matter by instituting any Disciplinary Action set out in the column entitled "Deans, Directors or LDC" in Table 3.

#### **University Discipline Committee (UDC) UDC Terms of Reference**

2.51 The UDC must:

- (a) Report annually to the President.
- (b) Establish procedures, consistent with this Bylaw, for hearing panels.
- (c) Hear appeals, either as a committee of the whole or through a hearing panel, from decisions of Disciplinary Authorities.
- (d) Review the Bylaw and related procedures periodically and, if necessary, to recommend changes to them.

#### **UDC Jurisdiction**

2.52 The UDC and the hearing panels thereof shall exercise Disciplinary Authority on behalf of the Board of Governors on all Students that are appealing a decision from the Disciplinary Authorities that are set out in section 2.13 of this document.

#### **UDC Composition**

2.53 The UDC shall be composed of nineteen (19) members. The nineteen (19) shall include:

- (a) eight (8) faculty members nominated by the Senate Nominating Committee and appointed by the Board of Governors;
- (b) seven (7) students nominated by the Student Senate Caucus and appointed by the Board of Governors;
- (c) the President of the University of Manitoba (or designate), as an ex-officio member;
- (d) the President of the University of Manitoba Students' Union (or designate), as an ex-officio member;
- (e) the President of the University of Manitoba Graduate Students' Association (or designate), as an ex officio member; and
- (f) the Chair appointed pursuant to section 2.57. The Chair must only vote in the event of a tie.

2.54 Positions for which no nomination had been received from the Student Senate Caucus by September 15th shall be nominated by the Senate Nominating Committee.

2.55 The terms of office shall be three (3) years for academic staff, and one (1) year for students, from June 1 to May 31 (academic staff), and October 14 to October 13 (students). A member whose term of office has expired in any year shall continue in office until a successor has been appointed and shall be eligible for reappointment.

2.56 A quorum must be nine (9) the members, where a minimum of one (1) student and one (1) academic are present.

2.57 A Chair will be appointed by the Board of Governors for a three (3) year term.

2.58 The Vice-Chair shall be elected from and by the members of the UDC for a three (3) year term.

#### UDC Hearing Panels

2.59 When a matter has been appealed to the UDC, the Chair must either convene the UDC or convene a hearing panel thereof to hear the appeal.

2.60 A quorum shall be a minimum of four (4) members, ensuring at least one (1) student and one (1) faculty member are present including the Chair.

2.61 The Chair may vote only if there is a tie.

2.62 UDC members who have a conflict of interest in a particular case, or have a temporary work conflict, or are otherwise unable to sit, may disqualify themselves from hearing an appeal.

2.63 Notwithstanding the foregoing, the Chair of the UDC may, in a particular case, require that a larger hearing panel be convened to consider the matter, provided that such a larger hearing panel maintains the proportional representation as set out in section 2.60.

2.64 The Chair of the UDC may use his/her discretion to reject an appeal if the appeal appears to be clearly outside the jurisdiction of the UDC, (for example, matters not dealing with discipline nor related Disciplinary Actions taken by a lower Appeal Body).

2.65 When an appeal is received based on a fine or the amount ordered, the only decision from which an appeal is taken is the amount levied by way of fine or the amount ordered to be paid by way of restitution; then, if such fine or restitution does not exceed \$500.00, the Chair may, at the Chair's discretion, personally decide the matter, or may convene a hearing panel to hear the appeal.

2.66 A staff member from the Office of the University Secretary, will serve as recording secretary for the hearings.

2.67 The Appellant, or the Appellant's representative, if any, and the Respondent must have the right to challenge for cause any member of the UDC hearing panel, the validity of the challenge to be judged by the remainder of the UDC hearing panel if such a challenge is made at this time. Such cause may include current teacher-student relationship, bias, or any other factor likely to prejudice a fair hearing. Any person who was directly involved in the original Disciplinary Action, either as a principal in the case or as a Disciplinary Authority, must be automatically removed from any hearing panel regarding the appeal. The Office of the University Secretary after consultation with the Chair will make every reasonable attempt to address any concerns made prior to the hearing date regarding bias by either the Appellant or the Respondent.

#### UDC Hearing Procedures

2.68 The Appellant must be presumed innocent until the evidence presented indicates that, on the balance of probabilities Disciplinary Action is warranted. The UDC, in weighing the balance of probabilities, must consider the severity of the alleged incident.

2.69 The hearing before the UDC hearing panel must be by way of a trial de novo except where the appeal has been made only in relation to the severity of the Disciplinary Action imposed, such as appeals of Disciplinary Action imposed in relation to the Respectful Work and Learning Environment Policy or the Sexual Violence Policy.

2.70 After an appeal hearing has commenced, the appeal may be withdrawn by the Appellant only with leave of the UDC hearing panel.

2.71 Hearings must be closed unless the Appellant requests in writing at least forty-eight (48) hours before the hearing that a hearing be open and there is no reasonable objection to an open hearing.

2.72 If the appeal hearing is in closed session, no observers may be present in the room. If the appeal hearing is in open session, any observers present will not be allowed to contribute in any way to the proceedings. Regardless of open or closed status, no electronic or other recording devices will be permitted.

2.73 Regardless of section 2.71, hearings related to discipline under the Respectful Work and Learning Environment Policy and/or discipline relating to Sexual Violence must be closed.

#### Representatives at UDC Hearing

2.74 At the UDC hearing, the Appellant may appear in person and may be represented by a Student Advocate, a representative from the University of Manitoba Student's Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, a member of the Appellant's immediate family, or a lawyer. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.75 At the UDC hearing, the Respondent may be represented by a lawyer from the University of Manitoba's Office of Legal Counsel.

2.76 If any party intends to have a lawyer present at the hearing, that party must notify the Chair of the UDC at least seven (7) working days prior to the hearing. In that event, the UDC hearing panel may also retain the services of legal counsel. A rescheduling of the hearing may be required for all parties to retain legal counsel.

2.77 Subject to the notice provision in section 2.76, a representative designated in writing by any party may:

- (a) attend the disciplinary hearing; and
- (b) participate in any disciplinary hearing to the extent of asking questions of anyone in attendance and making submissions to the UDC.

2.78 The Appellant and the Appellant's designated representative, if any, and the Respondent and the Respondent's representative, if any, shall be entitled to receive in writing, at least five (5) working days before the date set for the hearing, the information that has been submitted to the previous Appeal Body by the parties in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.



**Failure to Attend UDC Hearing**

2.79 An Appellant who fails to attend a scheduled appeal hearing may have the appeal considered on the basis of the Appellant's written submission, the presentation of the Appellant's designated representative, if any, and the verbal and written submissions made by the Respondent.

2.80 The Appellant must be advised that the UDC has made a decision regarding the appeal and that the Appellant has ten (10) days to provide reasons for missing the hearing prior to the implementation of the decision. The Chair must determine whether the hearing should be re-scheduled based on any submission from the Appellant. A reasonable attempt will be made to reconvene the same members should the hearing be re-scheduled.

**Evidence at UDC Hearing**

2.81 The Appellant, or the Appellant's representative, if any, and the relevant Respondent, or the Respondent's representative, if any, may call witnesses and submit other evidence. The Appellant, or the Appellant's representative, if any, and the relevant Respondent, or the Respondent's representative, if any, are responsible for arranging their own witnesses. If witnesses are to be called, a witness list must be provided by the Appellant or the Appellant's representative, if any, in their original appeal submission provided to the Chair and a witness list must be provided by the relevant Respondent, or the Respondent's representative, if any, with their response to the appeal.

2.82 The Appellant or the Appellant's designated representative, if any, and the Respondent, or the Respondent's representative, if any, must have the right to cross-examine witnesses.

2.83 The Appellant must not be required to give testimony but if the Appellant elects to do so, the Appellant may be cross-examined.

2.84 The UDC may consider confidential information from the University Health Service, Counselling Service, University Chaplains and other similar services which are submitted by these services to the UDC at the request of the Appellant. Such confidential information submitted to the UDC may only be used for the purpose of the appeal and will be treated as other documentation submitted for the appeal hearing as set out in section 2.87.

2.85 Appellants may not appeal the disposition of a finding under the Respectful Work and Learning Environment Policy or under the Sexual Violence Policy, but may appeal disciplinary action based on that finding. Where an appeal of disciplinary action has been initiated and upon the written request of the Chair of the UDC, the Vice-President (Administration) shall forward to the UDC the report of the investigator for consideration in the disposition of the appeal. Such confidential information submitted to the UDC may only be used for the purpose of the appeal and will be treated as other documentation submitted for the appeal hearing as set out in section 2.87.

2.86 Subject to section 2.78, the Appellant, the Appellant's representative and the relevant Disciplinary Authority normally must have the right to receive a copy of any university document that the UDC or hearing panel considers in relation to the appeal. The Chair of the Committee must make the final determination on this matter.

2.87 All members of the UDC and/or hearing panel will keep all materials and information used for the appeal in strict confidence and surrender such materials to the recording secretary who will have the materials destroyed by way of confidential shredding.

**Adjournments**

2.88 Requests for adjournment shall be granted within reason.

**Disposition**

2.89 A decision to uphold or deny an appeal, in whole or in part, and a decision to take different Disciplinary Action, in whole or in part, requires a simple majority.

2.90 If, after hearing all the evidence, the UDC is satisfied on the evidence presented that the Appellant has committed Academic Misconduct or Non-Academic Misconduct, the UDC may dispose of the matter by instituting any Disciplinary Action set out in the column entitled "UDC" in Table 3.

2.91 The Chair of the UDC or hearing panel must, after a decision has been made, report the results of that decision in writing to:

- (a) the Appellant or the designated representative of the Appellant, if any;
- (b) the Respondent, or the Respondent's representative, if any, from whose decision the appeal has been heard;
- (c) the Dean/Director of the Faculty/College/School involved; or the Associate Vice-President (Administration), the Director of Student Residences, or the Chief Information Officer (CIO) of IST, as the case may be;
- (d) the Registrar;
- (e) the Vice-President (Administration);
- (f) the Vice-Provost (Students); or
- (g) any others as deemed relevant.

**Part III: Accountability**

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Appeal Procedure is required.

3.2 The President or his or her delegate is responsible for the implementation, administration and review of this Appeal Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Appeal Procedure.

**Part IV: Review**

4.1 Governing Document reviews must be conducted every ten (10) years. The next scheduled review date for this Appeal Procedure is September 1, 2026.

4.2 In the interim, this Appeal Procedure may be revised or repealed if:

- (a) the Approving Body deems it necessary or desirable to do so;
- (b) the Appeal Procedure is no longer legislatively or statutorily compliant;
- (c) the Appeal Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

**Part V: Effect on Previous Statements**

5.1 This Appeal Procedure supersedes all of the following:

(a) Student Discipline Procedure, effective January 1, 2009, revised January 26, 2010.

(b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and

(c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Appeal Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

(a) Student Discipline Bylaw;

(b) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;

(c) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;

(d) Table 3: Disciplinary Actions and Disciplinary Authorities;

(e) Student Academic Misconduct Procedure;

(f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(g) Definitions of Academic Units Policy;

(h) Final Examinations and Final Grades Policy and Procedures;

(i) Respectful Work and Learning Environment Policy;

(j) Sexual Violence Policy;

(k) Disclosures and Complaints Procedure;

(l) Use of Computer Facilities Policy and Procedure;

(m) Violent or Threatening Behaviour Policy and Procedure;

(n) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175;

(o) The Personal Health Information Act, C.C.S.M. c. P33.5.

# Student Academic Misconduct Procedure

## Part I: Reason for Procedure

1.1 The University of Manitoba emphasizes the importance of academic integrity and works diligently to uphold a rigorous and ethical academic environment.

1.2 The reason for this Procedure is to:

(a) Articulate the University's expectation that all Students maintain the highest standards of integrity;

(b) Outline the jurisdiction for each Disciplinary Authority dealing with the Academic Misconduct of Students; and

(c) Provide a fair and thorough investigation process into allegations of Academic Misconduct.

## Part II: Procedure Content

### Definitions

2.1 The following terms are defined for the purpose of this Procedure:

(a) "Academic Misconduct" has the same meaning as defined in section 2.5 of this Procedure.

(b) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.

(c) "Appeal Procedure" means the Student Discipline – Appeal Procedure.

(d) "Bylaw" means the Student Discipline Bylaw.

(e) "College" means a Professional College as defined under the Definitions of Academic Units Policy.

(f) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3.

(g) "Disciplinary Authority" means the disciplinary authority designated to determine a matter of student discipline for Academic Misconduct under Table 1.

(h) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.

(i) "Procedure" means this Student Academic Misconduct Procedure.

(j) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(k) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(l) "Student Advocate" is a member of the University's Student Advocacy Office who provides Students with information on their rights and responsibilities, as well as assistance with resolving problems or concerns resulting from actions or decisions taken by the University.

(m) "Table 1" refers to Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct, which follows the Bylaw.

(n) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(o) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a Faculty/College/School is not a Unit as the term is used within this Procedure.

(p) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(q) "University" refers to the University of Manitoba.

(r) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers.

(s) "UMSS" means the University of Manitoba Security Services.

## Scope

2.2 This Procedure applies to Student's academic conduct in relation to any University Matter.

2.3 "University Matter" means any activity, event, or undertaking in which a member of the University Community participates which has a substantial connection to the University, such as:

(a) University-related activities or events, including but not limited to:

- (i) Any activity or event on property owned or controlled by the University;
- (ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;
- (iii) The offering of any service by the University, including educational services;
- (iv) Student placements, practica, or clinical training;
- (v) University research activities, whether on or off campus;
- (vi) Student and/or employee exchanges arranged in connection with the University;
- (vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;
- (viii) University field trips, travel-study tours, service-learning activities, and similar activities;

(b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

## Academic Misconduct

2.4 As members of the University Community, Students have an obligation to act with academic integrity. Any Student who engages in Academic Misconduct in relation to a University Matter will be subject to discipline.

2.5 "Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the academic integrity of the University, including but not limited to:

- (a) Plagiarism – the presentation or use of information, ideas, sentences, findings, etc. as one's own without appropriate attribution in an assignment, test or final examination.
- (b) Cheating on Quizzes, Tests or Final Examinations – the circumventing of fair testing procedures or contravention of exam regulations. Such acts may be premeditated/planned or may be unintentional or opportunistic.
- (c) Inappropriate collaboration – when a Student and any other person work together on assignments, projects, tests, labs or other work unless authorized by the course instructor.
- (d) Duplicate Submission – cheating where a Student submits a paper/assignment/test in full or in part, for more than one course without the permission of the course instructor.
- (e) Personation – writing an assignment, lab, test, or examination for another Student, or the unauthorized use of another person's signature or identification in order to impersonate someone else. Personation includes both the personator and the person initiating the personation.
- (f) Academic Fraud – falsification of data or official documents as well as the falsification of medical or compassionate circumstances/documentation to gain accommodations to complete assignments, tests or examinations.

2.6 Students will be subject to Disciplinary Action for any instance of Academic Misconduct, regardless of whether such behaviour is covered by other University policies, procedures or bylaws. Matters relating to certain Academic Misconduct may also be subject to additional policies, such as the Responsible Conduct of Research Policy and related procedures.

### Jurisdiction of Disciplinary Authority

2.7 The specific jurisdiction of each Disciplinary Authority designated to determine an allegation of Academic Misconduct is set out in Table 1.

2.8 For matters involving the Academic Misconduct of an undergraduate Student, the Disciplinary Authority with the closest connection to the particular alleged Academic Misconduct has jurisdiction over the matter, subject to section 2.10 of this Procedure. However, the Disciplinary Authority must inform the Unit Head of the Student's home Faculty/ College/School prior to any investigation.

2.9 Matters involving Academic Misconduct of a graduate Student must be referred directly to the Dean of the Faculty of Graduate Studies who shall, in turn, inform the department head or Unit Head of the Student's home department or Unit prior to any investigation and Disciplinary Action.

2.10 When the alleged Academic Misconduct, if proven on a balance of probabilities, would:

- (a) Constitute a second instance of Academic Misconduct by the Student; or
- (b) Be of such severity as to warrant a Disciplinary Action that is not available to the Disciplinary Authority with the closest connection to the matter under Table 1 (e.g. Department Head); the matter shall be referred to the next appropriate Disciplinary Authority under Table 1 (e.g. Dean/Director) for investigation and decision.

2.11 If a question arises as to which Disciplinary Authority should hear a particular case, the question must be referred to the President for resolution.

2.12 If the Academic Misconduct relates to a criminal offence, the Disciplinary Authority must provide relevant information to UMSS for potential follow-up by the appropriate policing authority.

### Notice to the Student

2.13 If the Disciplinary Authority determines that there is sufficient evidence to initiate an investigation into the allegation of Academic Misconduct under this Student Academic Misconduct Procedure, the Student who is the subject of a disciplinary matter will be informed in writing by the Disciplinary Authority (with a copy to the University's Registrar) that:

- (a) An investigation is proceeding in accordance with this Procedure, the nature of the matter being investigated, that the Student may be subject to Disciplinary Action and that a hold will be placed on the Student's record in accordance with section 2.14 of this Procedure until the allegation is investigated;
- (b) The Student will be given an opportunity to respond to the allegation and, if a meeting is scheduled, notice will be provided as to who will be present on behalf of the University at the meeting;
- (c) The Student may seek advice and representation from a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students'

Association, a member of the University Community not receiving payment for appearing, a member of the Student's immediate family or other support person as may be appropriate. It is the sole responsibility of the Student to determine the adequacy of the Student's representation;

(d) Failure to respond by a specified date will result in the matter being considered without the Student's response;

(e) The Student may obtain a copy of this Procedure, the Bylaw and related procedures. These documents are available online or from the Office of the University Secretary or the Student Advocacy office;

(f) The Student has a right to appeal in accordance with the Bylaw and Appeal Procedure.

### Student Records

2.14 The Disciplinary Authority will request that the Registrar place a hold on the Student's record to prevent the issuance of transcripts, transfers between Faculty/College/School and changes in registrations until the alleged Academic Misconduct is investigated. Until a decision has been made and any appeal process available under the Bylaw has concluded, the Student shall be permitted to continue in the course or program until the case is heard and the Disciplinary Authority must ensure the Student's work continues to be graded normally and is unaffected by the allegation of Academic Misconduct, subject to sections 2.25 and 2.26 of the Bylaw.

### Investigation Procedure

2.15 Subject to section 2.16 of this Procedure, the Disciplinary Authority will, either personally or through a designate, conduct an investigation into the allegations of Academic Misconduct in any manner that he or she deems appropriate to the nature of the circumstances and the seriousness of the issues involved and any admissions made during the investigation. This may include some or all of:

- (a) Interviewing witnesses;
- (b) Reviewing documents and records (both paper and electronic);
- (c) Reviewing photographs, audio, and video recordings;
- (d) Examining physical evidence;
- (e) Arranging for testing of physical evidence;
- (f) With the consent of participants, arranging for medical or psychological evaluations; and/or
- (g) Submitting a Third Party Data Access Request Form to IST regarding accessing electronic systems and consulting with Access and Privacy Office as required to facilitate the request.

2.16 The Disciplinary Authority may choose not to personally investigate where the issue has been or may be investigated pursuant to another University policy, procedure or bylaw.

2.17 The Disciplinary Authority will conduct the investigation in accordance with the principles of procedural fairness and natural justice. In particular, the Disciplinary Authority will ensure that:

- (a) The Student must be informed of the allegations against him or her, including, subject to section 2.26 of this Procedure, having

access to all documentary and other evidence relied upon by the Disciplinary Authority and knowing the identity of the complainant;

(b) The Student must be provided an opportunity to respond to the allegations;

(c) While strict rules of evidence do not apply, appropriate weight must be given to evidence based on its credibility and reliability; and

(d) Witnesses may wish to consult with or respond through an advocate (which may include legal counsel, a union representative, or a Student Advocate, as may be appropriate).

2.18 The Disciplinary Authority (or designate) may meet with the Student to present the facts/evidence concerning the allegation and to give the Student an opportunity to respond to the allegation and present his/her explanation of the matter. The Disciplinary Authority will give notice to the Student as to who will be present on behalf of the University at such a meeting.

### Decision

2.19 The Disciplinary Authority will inform the Student that a written decision letter will be sent normally within five (5) working days of receiving the Student's response. If the Student does not respond within a reasonable time, the Disciplinary Authority will consider the matter and make a decision in the absence of the Student's response and based on the information that is available.

2.20 At the conclusion of the investigation, the Disciplinary Authority will inform the Student of his or her decision in writing and will include, at minimum, the following:

- (a) A summary of the allegation of Academic Misconduct;
- (b) A summary of the process and key timelines in the investigation;
- (c) A summary of the key evidence obtained through the investigation, including the response of the Student to the allegation;
- (d) An indication of which key evidence was considered credible and reliable;
- (e) A conclusion as to whether, on a balance of probabilities, the Academic Misconduct occurred;
- (f) A summary of the reasons for the conclusion;
- (g) A summary of any Disciplinary Action instituted in accordance with the Bylaw and section 2.21 of this Procedure; and
- (h) If Disciplinary Action is taken, information about the right to appeal, the time period for appeal, and the person and contact information for the submission of an appeal, in accordance with the Bylaw.

2.21 Where there is a finding of Academic Misconduct, the Disciplinary Authority will consider any previous findings of Academic Misconduct before determining the appropriate Disciplinary Action under the Bylaw.

In the case where the Disciplinary Authority is not the Unit Head of the Faculty/College/School in which the Student is registered, the Disciplinary Authority will determine the appropriate Disciplinary Action in consultation with the Unit Head of that Faculty/College/School.

2.22 The Disciplinary Authority will send a copy of their decision to the Registrar and to the Unit Head of the Faculty/College/School in which the Student is registered.

### Appeals

2.23 Students have a right to appeal Disciplinary Actions in accordance with the Bylaw and Appeal Procedure.

### Obligations of Confidentiality by the University

2.24 In respect of an incidence of Academic Misconduct, the University will not disclose the name of the complainant, the Student, or the circumstances related to the complaint to any person, other than where the disclosure is:

- (a) Necessary to investigate the complaint or take corrective action with respect to the complaint; or
- (b) Required by law.

2.25 Personal information that is disclosed under section 2.24 above in respect of an incidence of Academic Misconduct will be the minimum amount necessary for the purpose.

### Obligations of Confidentiality by the Disciplinary Authority

2.26 The Disciplinary Authority, in conducting the investigation, will comply with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act with respect to personal information and personal health information collected, used and disclosed in the course of the investigation. Where a Disciplinary Authority is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.27 The Disciplinary Authority will advise all persons involved with an investigation as to their obligations regarding confidentiality, and the protections available to them under this Procedure.

### Obligations of Confidentiality by the Others

2.28 All persons involved in an investigation of an incident of Non-Academic Misconduct or Concerning Behaviour, whether as a witness or retrieving relevant information or documents, must keep confidential:

- (a) The existence and nature of the investigation; and
- (b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.29 Notwithstanding section 2.28, the Complainant, the Respondent, and witnesses involved in the investigation may:

- (a) Obtain confidential advice (including advice from a Student Advocate or lawyer, as may be appropriate);
- (b) Disclose information to others only to the extent reasonably necessary to gather evidence and, in the case of an accused Student, to make full answer and defense to the allegations; and
- (c) Use information obtained independent of the investigation in any other forum.

## Records Management

2.30 The Disciplinary Authority will maintain files with respect to each complaint in accordance with the Records Management Policy and Procedure.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Procedure is required.

3.2 The President is responsible for the implementation, administration and review of this Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2026.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the President or the Approving Body deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Student Discipline Bylaw;
- (b) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;
- (c) Table 3: Disciplinary Actions and Disciplinary Authorities;
- (d) Student Discipline - Appeal Procedure;
- (e) Definitions of Academic Units Policy;
- (f) Responsible Conduct of Research Policy and Procedures;
- (g) Records Management Policy and Procedure;
- (h) Use of Computer Facilities Policy and Procedure;
- (i) Third Party Data Access Request Form;
- (j) Student Advocacy Office Policy;

(k) The Freedom of Information and Protection of Privacy Act, CCSM c. F175;

(l) The Personal Health Information Act, CCSM c. P33.5.

# Student Non-Academic Misconduct and Concerning Behaviour Procedures

## Part I: Reason for Procedure

1.1 The reason for this Procedure is to:

- (a) Articulate the University's expectation that all Students act in a fair and reasonable manner toward their peers, the faculty, staff, administration and the physical property of the University;
- (b) Outline the jurisdiction for each Disciplinary Authority dealing with the Non-Academic Misconduct of Students;
- (c) Provide a fair and thorough investigation process for allegations of Non-Academic Misconduct;
- (d) Coordinate an action plan for Students exhibiting Concerning Behaviour that includes supports and a clear referral mechanism for members of the University Community.

## Part II: Procedure Content

### Definitions

2.1 The following terms are defined for the purpose of this Procedure:

- (a) "Academic Staff" refers to all individuals whose primary assignment is instruction, research, and/or service/academic administration. This includes employees who hold an academic rank such as professor, associate professor, assistant professor, instructor, lecturer, librarian, or the equivalent of any of those academic ranks. The category also includes a dean, director, associate dean, assistant dean, chair or head of department, visiting scholars, senior scholars, and those holding unpaid academic appointments, insofar as they perform instructional, research, and/or service/academic administrative duties.
- (b) "Appeal Procedure" means the Student Discipline – Appeal Procedure.
- (c) "Bylaw" means the Student Discipline Bylaw.
- (d) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (e) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3.
- (f) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Non-Academic Misconduct under Table 2.
- (g) "Discrimination" has the same meaning as defined in section 2.3 of the Disclosures and Complaints Procedure.
- (h) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.
- (i) "Harassment" refers to Personal Harassment, Human Rights Based Harassment, and/or Sexual Harassment as defined in section 2.10 of the Disclosures and Complaints Procedure.

(j) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of this Procedure.

(k) "Procedure" means this Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(l) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(m) "Sexual Violence" has the same meaning as defined in the Sexual Violence Policy.

(n) "STATIS" means the Student/Staff Threat Assessment Triage Intervention Support team established pursuant to section 2.11 of the Violent or Threatening Behaviour Procedure.

(o) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(p) "Student Advocate" is a member of the University's Student Advocacy Office who provides Students with information on their rights and responsibilities, as well as assistance with resolving problems or concerns resulting from actions or decisions taken by the University.

(q) "Table 2" refers to Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct, which follows the Bylaw.

(r) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(s) "UMSS" means the University of Manitoba's Security Services.

(t) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a Faculty/College/School is not a Unit as the term is used within this Procedure.

(u) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(v) "University" refers to the University of Manitoba.

(w) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers.

(x) "University Matter" has the same meaning as defined in section 2.3 of this Procedure.

(y) "Violence" means:

(i) The attempted or actual exercise of physical force against a person; or

(ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

### Scope

2.2 This Procedure applies to a Student's non-academic conduct in relation to any University Matter.

2.3 "University Matter" means any activity, event, or undertaking in which a member of the University Community participates which has a substantial connection to the University, such as:

(a) University-related activities or events, including but not limited to:

(i) Any activity or event on property owned or controlled by the University;

(ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;

(iii) The offering of any service by the University, including educational services;

(iv) Student placements, practica, or clinical training;

(v) University research activities, whether on or off campus;

(vi) Student and/or employee exchanges arranged in connection with the University;

(vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;

(viii) University field trips, travel-study tours, service-learning activities, and similar activities;

(b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper

functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

### Non-Academic Misconduct

2.4 Any Student who engages in Non-Academic Misconduct in relation to a University Matter will be subject to discipline.

2.5 "Non-Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the integrity or proper functioning of the University or the health, safety, rights or property of the University or members of the University Community, such as:

(a) Threats of harm or actual harm by any means (including electronic means) to another person, including but not limited to:

- (i) Discrimination;
- (ii) Hazing;
- (iii) Harassment;
- (iv) Possession or use of dangerous objects, in violation of any applicable law;
- (v) Sexual Violence;
- (vi) Stalking behaviour, including repetitive behaviour directed at a specific person which reasonably causes that person alarm, distress, fear or a change of normal behavior;
- (vii) Violence;

(b) Property-related misconduct, including but not limited to:

- (i) Theft;
- (ii) Threats to or damage of University property;
- (iii) Vandalism;

(c) Inappropriate or disruptive behavior, including but not limited to:

- (i) Actions which habitually interfere with the learning environment or requires the inordinate time and attention of faculty and staff;
- (ii) Alcohol or substance abuse;
- (iii) Disorderly behaviour;
- (iv) Indecent exposure;
- (v) Unprofessional conduct;

(d) Abuse of the process of University policies, procedures or regulations, including but not limited to:

- (i) Abuse of computer privileges;
- (ii) Breach of student residence rules or regulations;

(iii) Failure to comply with a previously imposed Disciplinary Action;

(iv) Frivolous or vexatious complaints or appeals.

2.6 Students will be subject to Disciplinary Action for any instance of Non-Academic Misconduct, regardless of whether such behaviour is covered by other University policies, procedures or bylaws. Matters relating to certain Non-Academic Misconduct may also be subject to additional policies, such as:

(a) The Respectful Work and Learning Environment Policy and the Complaints and Disclosures Procedure when the matter relates to Discrimination, or Harassment;

(b) The Sexual Violence Policy and the Complaints and Disclosures Procedure when the matter relates to Sexual Violence;

(c) The Violent or Threatening Behaviour Policy and Procedure when the matter relates to Violence, hazing, stalking behaviour, or the possession or use of dangerous objects in violation of any applicable law;

(d) The Use of Computer Facilities Policy and Procedure when the matter relates to abuse of computer privileges;

(e) The Campus Alcohol Policy and Procedure when the matter relates to alcohol or substance abuse;

(f) The student Residence Contract when the matter relates to a breach of student residence rules or regulations.

### Jurisdiction of Disciplinary Authority

2.7 The specific jurisdiction of each Disciplinary Authority designated to determine an allegation of Non-Academic Misconduct is set out in Table 2.

2.8 For matters involving the Non-Academic Misconduct of an undergraduate Student, the Disciplinary Authority with the closest connection to the particular alleged Non-Academic Misconduct has jurisdiction over the matter, subject to section 2.10 of this Procedure.

However, the Disciplinary Authority must inform the Unit Head of the Student's home Faculty/College/School, and the Vice-Provost (Students), prior to any investigation.

2.9 Matters involving Non-Academic Misconduct of a graduate Student must be referred directly to the Dean of the Faculty of Graduate Studies who shall, in turn, inform the department head of the Student's program, and the Vice-Provost (Students), prior to any investigation.

2.10 When the alleged Non-Academic Misconduct, if proven on a balance of probabilities, would:

(a) Constitute a second instance of Non-Academic Misconduct by the Student; or

(b) Be of such severity as to warrant a Disciplinary Action that is not available to the Disciplinary Authority with the closest connection to the matter under Table 2 (e.g. Department Head); the matter shall be referred to the next appropriate Disciplinary Authority under Table 2 (e.g. Dean/Director) for investigation and decision.

2.11 If a question arises as to which Disciplinary Authority should hear a particular case, the question must be referred to the President for resolution.



2.12 If the Non-Academic Misconduct relates to a criminal offence, the Disciplinary Authority must provide relevant information to UMSS for potential follow-up by the appropriate policing authority.

#### **Notice to Vice-Provost (Students)**

2.13 Before initiating an investigation, the Disciplinary Authority will advise the Vice-Provost (Students) of the following:

- (a) An allegation of Non-Academic Misconduct has been received;
- (b) The nature of the Non-Academic Misconduct;
- (c) The name of the Student alleged to have committed the Non-Academic Misconduct; and
- (d) The intention of the Disciplinary Authority to initiate an investigation in accordance with this Procedure.

2.14 The Vice-Provost (Students) will review this information and advise the Disciplinary Authority if he or she feels the matter should be referred to STATIS before the investigation is conducted.

#### **Notice to the Student**

2.15 After consultation with the Vice-Provost (Students), the Student who is the subject of a disciplinary matter will be informed in writing by the Disciplinary Authority (with a copy to the University's Registrar) that:

- (a) An investigation is proceeding in accordance with this Procedure, the nature of the matter being investigated, that the Student may be subject to Disciplinary Action, and that a hold will be placed on the Student's record in accordance with section 2.16 of this Procedure until the allegation is investigated;
- (b) The Student will be given an opportunity to respond to the allegation and, if a meeting is scheduled, notice will be provided as to who will be present on behalf of the University at the meeting;
- (c) The Student may seek advice and representation from a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, a member of the Student's immediate family, or other support person as may be appropriate. It is the sole responsibility of the Student to determine the adequacy of the Student's representation;
- (d) Failure to respond by a specified date will result in the matter being considered without the Student's response;
- (e) The Student may obtain a copy of this Procedure, the Bylaw and related procedures. These documents are available online or from the Office of the University Secretary or the Student Advocacy office;
- (f) The Student has a right to appeal in accordance with the Bylaw and Appeal Procedure.

#### **Student Records**

2.16 The Disciplinary Authority will request that the Registrar place a hold on the Student's record to prevent the issuance of transcripts, transfers between Faculty/College/School and changes in registrations until the alleged Non-Academic Misconduct is investigated. Until a decision has been made and any appeal process available under the Bylaw has concluded, the Student shall be permitted to continue in the course or program and the Disciplinary Authority must ensure the Student's work continues to be graded normally and is unaffected by the allegation of

Non-Academic Misconduct, subject to sections 2.25 and 2.26 of the Bylaw.

#### **Investigation Procedure**

2.17 Subject to section 2.18 of this Procedure, the Disciplinary Authority will, either personally or through a designate, conduct an investigation into the allegations of Non-Academic Misconduct in any manner that he or she deems appropriate to the nature of the alleged Non-Academic Misconduct, the seriousness of the issues involved, and any admissions made during the investigation. This may include some or all of:

- (a) Interviewing witnesses;
- (b) Reviewing documents and records (both paper and electronic);
- (c) Reviewing photographs, audio, and video recordings;
- (d) Examining physical evidence;
- (e) Arranging for testing of physical evidence;
- (f) With the consent of participants, arranging for medical or psychological evaluations; and/or
- (g) Submitting a Third Party Data Access Request Form to IST regarding accessing electronic systems and consulting with Access and Privacy Office as required to facilitate the request.

2.18 The Disciplinary Authority may choose not to personally investigate where the issue has been or may be investigated pursuant to another University policy, procedure or bylaw.

2.19 The Disciplinary Authority will conduct the investigation in accordance with the principles of procedural fairness and natural justice. In particular, the Disciplinary Authority will ensure that:

- (a) The Student must be informed of the allegations against him or her, including, subject to section 2.34 of this Procedure, having access to all documentary and other evidence relied upon by the Disciplinary Authority and knowing the identity of the complainant;
- (b) The Student must be provided an opportunity to respond to the allegations;
- (c) While strict rules of evidence do not apply, appropriate weight must be given to evidence based on its credibility and reliability; and
- (d) Witnesses may wish to consult with or respond through an advocate (which may include legal counsel, a union representative, or a Student Advocate, as may be appropriate).

2.20 The Disciplinary Authority (or designate) may meet with the Student to present the facts/evidence concerning the allegation and to give the Student an opportunity to respond to the allegation and present his/her explanation of the matter. The Disciplinary Authority will give notice to the Student as to who will be present on behalf of the University at such a meeting.

#### **Decision**

2.21 The Disciplinary Authority will inform the Student that a written decision letter will be sent normally within five (5) working days of receiving the Student's response. If the Student does not respond within a reasonable time, the Disciplinary Authority will consider the matter and make a decision in the absence of the Student's response and based on the information that is available.

2.22 At the conclusion of the investigation, the Disciplinary Authority will inform the Student of his or her decision in writing and will include, at minimum, the following:

- (a) A summary of the allegation of Non-Academic Misconduct;
- (b) A summary of the process and key timelines in the investigation;
- (c) A summary of the key evidence obtained through the investigation, including the response of the Student to the allegation;
- (d) An indication of which key evidence was considered credible and reliable;
- (e) A conclusion as to whether, on a balance of probabilities, the Non-Academic Misconduct occurred;
- (f) A summary of the reasons for the conclusion;
- (g) A summary of any Disciplinary Action instituted in accordance with the Bylaw and section 2.23 of this Procedure; and
- (h) If Disciplinary Action is taken, information about the right to appeal, the time period for appeal, and the person and contact information for the submission of an appeal, in accordance with the Bylaw.

2.23 Where there is a finding of Non-Academic Misconduct, the Disciplinary Authority will consider any previous findings of Non-Academic Misconduct before determining the appropriate Disciplinary Action under the Bylaw. In the case where the Disciplinary Authority is not the Unit Head of the Faculty/College/School in which the Student is registered, the Disciplinary Authority will determine the appropriate Disciplinary Action in consultation with the Unit Head of that Faculty/College/School.

2.24 The Disciplinary Authority will send a copy of their decision to the Registrar, to the Vice-Provost (Students), and to the Unit Head of the Faculty/College/School in which the Student is registered.

### Appeals

2.25 Students have a right to appeal Disciplinary Actions in accordance with the Bylaw and the Appeal Procedure.

### Concerning Behaviour

2.26 "Concerning Behaviour" means any behaviour that, while not indicative of a clear immediate threat, gives rise to a reasonable apprehension that the Student may engage in conduct harmful to him- or herself or to others, including but not limited to:

- (a) Threats of self-harm;
- (b) Worrisome behavioral changes in an individual, such as changes in appearance, social withdrawal or isolation, apparent detachment from reality, or inordinate interest in or discussion of violent themes or events.

2.27 Where a Student is exhibiting Concerning Behaviour, members of the University Community must report such behaviour to their Unit Head, a member of STATIS, and/or UMSS. The Unit Head of the Student's Faculty/College/School of registration must be consulted and that Unit Head should, where appropriate:

- (a) Ensure the Student receives timely voluntary counselling referrals through existing support services at the University, such

as the Student Support Case Manager, Student Counselling Centre, University Health Services, and/or the Faculty Counselling Services (College of Medicine);

- (b) Use this Procedure, the Student Discipline Bylaw and other policies, procedures and bylaws as appropriate where additional action is necessary to deal with Concerning Behaviour.

2.28 Members of the University Community must report incidents of Concerning Behaviour to UMSS and STATIS where a Student's Concerning Behaviour is affecting the various services and administration offices of the University, or where the Concerning Behaviour is of a nature or quality that likely will result in:

- (a) Serious harm to the Student or substantial deterioration of the Student's health; or
- (b) Serious harm to another person or property;

2.29 When reporting concerns to STATIS or UMSS, individuals should attempt to provide the following information:

- (a) Description of the Concerning Behaviour;
- (b) Name of the Student exhibiting the Concerning Behaviour; and
- (c) Indication of what action has been taken to date (if applicable), including a description of any meetings with the Student and any assistance provided, including referrals.

2.30 Information regarding Concerning Behaviour that is received during the Student application process must be referred to the Executive Director of Enrolment Services or the Dean of Graduate Studies, as appropriate. If the information is of serious concern to the respective Executive Director of Enrolment Services or the Dean of Graduate Studies, he/she may seek the advice of the University Legal Counsel and may initiate a staff conference of STATIS.

2.31 If a Student does not accept personal responsibility for their Concerning Behaviour or will not accept appropriate referral for voluntary counselling, the Unit Head should proceed as follows:

- (a) Advise the Student to seek professional help; and
- (b) Contact the Executive Director of Student Support if the Student refuses to voluntarily seek professional help. The Executive Director of Student Support may consult with colleagues to determine whether or not an involuntary psychiatric assessment is advisable according to mental health legislation and regulations.

### Confidentiality

#### Obligations of Confidentiality by the University

2.32 In respect of an incidence of Non-Academic Misconduct or Concerning Behaviour, the University will not disclose the name of the complainant, the Student, or the circumstances related to the complaint to any person, other than where the disclosure is:

- (a) Necessary to investigate the complaint or take corrective action with respect to the complaint;
- (b) Necessary to coordinate an action plan for a Student exhibiting Concerning Behaviour that includes supports and a clear referral mechanism for the Student; or
- (c) Required by law.

2.33 Personal information that is disclosed under section 2.32 above in respect of an incidence of Non-Academic Misconduct or Concerning Behaviour will be the minimum amount necessary for the purpose.

#### **Obligations of Confidentiality by the Disciplinary Authority**

2.34 The Disciplinary Authority, in conducting the investigation, will comply with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act with respect to personal information and personal health information collected, used and disclosed in the course of the investigation. Where a Disciplinary Authority is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.35 The Disciplinary Authority will advise all persons involved with an investigation as to their obligations regarding confidentiality, and the protections available to them under this Procedure.

#### **Obligations of Confidentiality by the Others**

2.36 All persons involved in an investigation of an incident of Non-Academic Misconduct or Concerning Behaviour, whether as a witness or retrieving relevant information or documents, must keep confidential:

- (a) The existence and nature of the investigation; and
- (b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.37 Notwithstanding section 2.36, the Complainant, the Respondent, and witnesses involved in the investigation may:

- (a) Obtain confidential advice (including advice from a Student Advocate or lawyer, as may be appropriate);
- (b) Disclose information to others only to the extent reasonably necessary to gather evidence and, in the case of an accused Student, to make full answer and defense to the allegations; and
- (c) Use information obtained independent of the investigation in any other forum.

#### **Records Management**

2.38 The Disciplinary Authority will maintain files with respect to each complaint in accordance with the Records Management Policy and Procedure.

### **Part III: Accountability**

3.1 The Office of Legal Counsel is responsible for advising the President that a formal review of this Procedure is required.

3.2 The President is responsible for the implementation, administration and review of this Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Procedure.

### **Part IV: Review**

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is September 1, 2026.

4.2 In the interim, this Procedure may be revised or repealed if:

- (a) the President or the Approving Body deems it necessary or desirable to do so;
- (b) the Procedure is no longer legislatively or statutorily compliant;
- (c) the Procedure is now in conflict with another Governing Document; and/or
- (d) the Parent Policy is revised or repealed.

### **Part V: Effect on Previous Statements**

5.1 This Procedure supersedes all of the following:

- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (b) all previous Administration Governing Documents on the subject matter contained herein.

### **Part VI: Cross References**

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Student Discipline Bylaw;
- (b) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;
- (c) Table 3: Disciplinary Actions and Disciplinary Authorities;
- (d) Student Discipline - Appeal Procedure;
- (e) Respectful Work and Learning Environment Policy;
- (f) Sexual Violence Policy;
- (g) Complaints and Disclosures Procedure;
- (h) Residence Contract;
- (i) Violent or Threatening Behaviour Policy and Procedure;
- (j) Campus Alcohol Policy and Procedure;
- (k) Definitions of Academic Units Policy;
- (l) Records Management Policy and Procedure;
- (m) Use of Computer Facilities Policy and Procedure;
- (n) Third Party Data Access Request Form;
- (o) Student Advocacy Office Policy;
- (p) The Freedom of Information and Protection of Privacy Act, CCSM c. F175;
- (q) The Personal Health Information Act, CCSM c. P33.5.

## **University Parking Regulations**

The Policy and Procedure is available online at [http://umanitoba.ca/admin/governance/governing\\_documents#university-community](http://umanitoba.ca/admin/governance/governing_documents#university-community) ([http://umanitoba.ca/admin/governance/governing\\_documents/#university-community](http://umanitoba.ca/admin/governance/governing_documents/#university-community)).

# Parking

## Part I: Reason for Regulation

1.1 The University of Manitoba recognizes that at any given time there is a large number of Motor Vehicles driving and parking on campus. In order for the University to maintain orderly conduct of parking of Motor Vehicles, Parking Regulations must be established. Furthermore, as an ancillary service, parking must be operated on a cost recovery basis. These regulations set out the rules, fees and remedies available in association with parking on University Property, and they apply to all staff, students, and the general public. The University of Manitoba Act, which is an act of legislature, empowers the University of Manitoba to govern parking on University Property and to make parking regulations. This includes fees and charges for parking violations and actions taken for failure to pay fees and charges.

## Part II: Regulation Content

### Introduction

2.1 Responsibility for the overall administration and implementation of the Parking Regulations (the "Regulations") of the University of Manitoba (the "University") rests with the Vice-President (Administration), who may from time to time delegate to others aspects of the administration or implementation of the Regulations.

2.2 All members of the University community and persons attending on University Property are required to familiarize themselves and comply with the Regulations.

2.3 The Regulations are in addition to any bylaws of the City of Winnipeg and any legislation and regulations of the Province of Manitoba regulating the operation or use of Motor Vehicles or regulating the crossing of or walking upon roadways by pedestrians.

2.4 Nothing contained in these Regulations shall be deemed to limit the University's remedies or actions, either at law or through the University's policies, in respect of any matter arising under these Regulations.

### General Definitions

2.5 The following terms have the following defined meaning for the purpose of this Regulation:

- (a) Designated Accessible Parking Area means a parking space designated for individuals with physical disabilities.
- (b) Event means any event being held at the Investors Group Field with an expected attendance of 15,000 or more individuals.
- (c) Event Day shall mean the date on which there is a scheduled Event at the Investors Group Field.
- (d) Investors Group Field Event Designated Parking Lots shall mean any parking lot on University Property, on Event Day, designated and posted by the University as such, and shall not include University Designated Parking Lots.
- (e) Motor Vehicles includes reference to motorcycles, mopeds and scooters, and where appropriate, snowmobiles, bicycles, golf carts and all-terrain vehicles.
- (f) Parkade means a multilevel structure located on University property designed for the parking of Motor Vehicles

(g) Parking Fee means the fee corresponding to the rates set annually by the Vice-President (Administration) or designate for all available parking permits.

(h) Parking Services means the persons or administrative unit of the University to whom the Vice-President (Administration) may from time to time delegate responsibility for administration of parking permits and for the designation and assigning of parking areas.

(i) Public Pay Parking Area means any parking area on University Property, excluding the Parkade, designated by the University with signage as visitor or casual parking with a parking meter, pay and display dispenser, pay-by-plate parking meter, or mobile payment application, or such other similar technology as may become available.

(j) Reserved Parking Areas means areas designated by the University as reserved 24 hour parking areas located in various parking lots on University Property.

(k) University Designated Parking Lots shall mean any parking lot on University Property, on Event Day, designated and posted by the University as such, and all shall not include Investors Group Field Event Designated Parking Lots.

(l) University Property means property owned and occupied or under the charge or control of the University, including roadways and including property at Investors Group Field and SmartPark.

(m) University Security Services means the administrative unit of the University, the members of which are provincially licensed security guards and may include others contracted by the Vice-President (Administration) from time to time to assist in the implementation of the Regulations.

(n) Violation Notice means a notice or form issued by the University to any operator or owner charged with violation of any of the provisions of this Regulation.

### Headings of Paragraphs

2.6 All headings in the Regulations are inserted solely for convenience of reference and shall not be deemed in any way to limit or affect the provisions to which they relate.

### Scope of Regulations

2.7 The Regulations, without any exceptions, apply to:

- (a) all persons who park, stop or leave a Motor Vehicle on University Property; and
- (b) all owners of Motor Vehicles which are parked, stopped or left on University Property.

### Procedure Where No Assigned Parking Space Available

2.8 Subject to sections 2.36-2.38 on Event Parking, holders of a valid staff parking permit who find their assigned parking area fully occupied may park in the next most convenient parking area (other than a reserved parking area, an accessible parking area, a residence student parking area, a metered parking area, a Public Pay Parking Area or a Parkade) and must immediately report the matter to Parking Services. The report should include the Motor Vehicle license number and staff permit number.

2.9 Subject to sections 2.36-2.38 on Event Parking, holders of any other valid parking permit who find their assigned parking area fully occupied

should contact Parking Services for directions on where to park without penalty.

### **Rates**

2.10 Rates for all forms of available parking permits at the University (including rates for parking permit replacements) are set annually by the Vice-President (Administration) or designate and are posted at [umanitoba.ca/parking](https://umanitoba.ca/parking) (<https://umanitoba.ca/parking/>).

### **Parking Permits – General Eligibility and Priority**

2.11 All persons are eligible to apply for a parking permit as hereinafter provided. Priority in allocation of parking permits will be given to full-time staff members and students of the University. Any person applying for a parking permit may be required to provide identification in order to establish eligibility.

### **Authorization**

2.12 On Monday to Friday from 7:30 a.m. to 4:30 p.m., a parking permit is required for any Motor Vehicle parked or left on University Property in an assigned parking area, unless the Motor Vehicle is otherwise parked at a meter, Public Pay Parking Area or Parkade in compliance with the Regulations. A parking permit conveys the authorization by the University for a specific Motor Vehicle, registered with Parking Services, to be parked in an assigned parking area. Registration includes an application form and payment of the Parking Fee. Each permit will indicate the category of parking authorized and, if appropriate, the area on campus where that Motor Vehicle is authorized to park.

### **Reserved Twenty-Four (24) Hour Parking**

2.13 Subject to sections 2.36-2.38 on Event Parking, certain areas in various parking lots will be designated by the University as Reserved Parking Areas. Parking in a Reserved Parking Area is limited to Motor Vehicles displaying a valid parking permit for that specific Reserved Parking Area. Reserved Parking Areas are appropriately signed and identified.

### **Alternate Parking Permit**

2.14 Effective September 13, 2013, alternate parking permits will no longer be issued by Parking Services. All current alternate permit holders may keep their eligibility until such time as they cancel their parking privileges or their termination of employment with the University. Eligible staff members who may be using an alternate vehicle on University Property and previously applied for alternate parking permits may retain their alternate permit upon payment of the appropriate fee in effect at the time of application and provided the second Motor Vehicle is registered and the staff member complies with any University policies, procedures, regulations and other rules then in effect. Where an alternate parking permit has been issued, only one (1) registered Motor Vehicle at any time is authorized to park on University Property at any given time (unless the second registered Motor Vehicle is otherwise parked at a metered or Public Pay Parking Area or Parkade in compliance with the Regulations).

### **Affixing or Displaying Parking Permits**

2.15 Parking permits must be properly affixed or displayed on the Motor Vehicle as follows:

- (a) parking permit decals issued by the University must be affixed on the lower corner of the front windshield on the driver's side of the Motor Vehicle. The backing must be removed from the permit and the permit affixed to the glass using the adhesive which is on the permit; and,

- (b) parking permit hang tags issued by the University must be displayed according to directions printed on the permit.

2.16 Expired, invalid and cancelled parking permits must be removed from Motor Vehicles immediately after the expiry, invalidation or cancellation date and not displayed in conjunction with a valid parking permit.

### **Parking Permit Replacement**

2.17 Parking permit replacements may be issued, at a predetermined rate, to eligible permit holders when parking permits have been lost or stolen.

2.18 Parking permit replacements may be issued, at no cost, to eligible permit holders where parking permits, through weather damage or fading, are in need of replacement, as determined by Parking Services.

2.19 Where a parking permit replacement is issued, the original parking permit must be returned to Parking Services, unless lost or stolen. If the parking permit has been lost or stolen, an affidavit will be required from the permit holder.

### **Term of Permit**

2.20 Parking permits are issued for a specified period of time, but immediately become invalid upon the happening of any of the following events:

- (a) on the date of expiration shown on the parking permit (if applicable);
- (b) when the parking permit is displayed on a Motor Vehicle other than the Motor Vehicle for which it was issued;
- (c) when the parking permit is not legible or has been altered;
- (d) when the parking permit has been cancelled or revoked;
- (e) when the parking permit is lost or stolen;
- (f) when the Motor Vehicle for which the parking permit is issued has been placed on the University's tow away list;
- (g) when the applicant for a parking permit gives false or incorrect information at the time of application; and
- (h) when a residence student of the University vacates or is required to vacate a residence located on University Property (even if the property is leased from the University).

### **Permits Not Transferable**

2.21 Parking permits are not transferable and may be used only for the Motor Vehicle in which the permit was issued unless otherwise authorized in writing by Parking Services. Parking permits remain the property of the University and must be destroyed when the permit expires or becomes invalid.

### **Permits for Persons with Physical Disabilities**

2.22 Any persons with physical disabilities may apply to Parking Services for a parking permit for Designated Accessible Parking Areas as determined by Parking Services. In order to qualify for a parking permit for Designated Accessible Parking Areas, a valid Society for Manitobans with Disabilities ("SMD") parking permit must be presented by the permit applicant. The SMD permit expiry date will be relied upon by Parking Services to determine the length of time for which the parking permit for Designated Accessible Parking Areas is required.

2.23 Holders of valid University accessible parking permits who find no signed Designated Accessible Parking Area is available, may park in the next most convenient parking area (other than a residence student parking area, or parking lots N, O and V, as designated by the University) and must immediately report the matter to Parking Services. The report should include the vehicle license number and accessible parking permit number.

### Bicycles

2.24 Bicycles should be parked only in proper University bicycle racks or the University Parkade Bike Station. Parking and storing of bicycles inside any University building, or in any manner which may create a problem related to pedestrian safety, building access or maintenance, as determined by the University, is prohibited. Bicycles parked in such a fashion are subject to removal by the University and their owners may be subject to a fee or charge, at rates established by the University, from time to time.

### Rights of Cancellation

2.25 Notwithstanding any other provision of these Regulations, the University may withdraw areas normally used for parking and cancel any parking permit if the parking area referred to therein is required for construction or other purposes. If the assigned parking area or any portion thereof for which the parking permit is valid is deemed by the University to be required for other purposes and if alternative parking is not provided by the University, the unearned portion of the Parking Fee, minus any amounts due and owing to the University as fees or charges incurred as a result of parking or leaving Motor Vehicles on University Property in contravention of the Regulations, will be refunded to the registered parking permit holder.

### Staff and Student Parking

#### Application for Parking

2.26 Staff members intending to park a Motor Vehicle, other than a bicycle, on University Property must apply for assigned parking at Parking Services, unless the Motor Vehicle is otherwise parked at a metered parking area, Public Pay Parking Area or Parkade in compliance with the Regulations.

2.27 Students intending to park a Motor Vehicle on University Property must apply for assigned parking at Parking Services or through any other valid registration system authorized by the University, unless the Motor Vehicle is otherwise parked at a metered parking area, Public Pay Parking Area or Parkade in compliance with the Regulations.

#### Conditions of Parking

2.28 Parking permits authorize the registered permit holder to park in the parking area designated by the parking permit in accordance with the terms and conditions displayed on the parking permit or in the parking contract signed by the permit holder.

2.29 In some parking areas, electricity is supplied to electrical outlets depending on climatic conditions.

#### Summer Parking Permits

2.30 Summer parking permits may be issued upon application and authorize the registered permit holder to park in the parking area designated by the parking permit during the period of May 1 to August 31 upon payment of fees, to be set by the University and posted on [www.umanitoba.ca/parking](http://www.umanitoba.ca/parking) (<http://www.umanitoba.ca/parking/>).

#### Residence Student Parking

2.31 Residence student parking areas are reserved on a twenty-four (24) hour basis for residence students of the University. Residence students

who own and operate a Motor Vehicle, while maintaining approved residence on University Property, may apply for available residence parking permits and must submit proof of ownership of the Motor Vehicle acceptable to Parking Services. These permits will be withdrawn by the University if the residence student vacates or is required to vacate residence on University Property, and the unearned portion of the Parking Fee, minus any amounts due and owing to the University as fees or charges incurred as a result of parking or leaving Motor Vehicles on University Property in contravention of the Regulations, will be refunded to the registered parking permit holder.

### Visitor Parking

#### Visitors

2.32 Subject to sections 2.36-2.38 on Event Parking, and unless otherwise posted by the University, visitors may park in metered and Public Pay Parking Areas or a Parkade at the posted rate, on Monday to Friday from 7:30 a.m. to 4:30 p.m. Monday to Friday from 4:30 p.m. to 7:30 a.m. and on Saturdays and Sundays, visitors may park in all parking areas without charge, unless otherwise posted by the University. Visitors must at all times comply with the Regulations.

2.33 Any visitor (including contractors, trades people, and persons attending conferences and seminars) who wishes to park other than at a metered parking area, Public Pay Parking Area or Parkade must obtain written parking authorization through Parking Services in advance and must comply with the Regulations.

2.34 On an Event Day, visitors may not park or leave a Motor Vehicle in any parking area or parkade, except as designated by the University with signage and/or on [www.umanitoba.ca/parking](http://www.umanitoba.ca/parking) (<http://www.umanitoba.ca/parking/>), beginning ninety (90) minutes before an Event until one (1) hour after an Event.

#### Couriers

2.35 Courier companies making deliveries to the University are to use designated building loading zones and must comply with the Regulations. Parking is not to exceed the posted allowable time in duration and courier vehicles must be visibly identified as such.

### Event Day Parking

#### Investors Group Field event Designated Parking Lots

2.36 Notwithstanding anything else in these Regulations, beginning ninety (90) minutes before the scheduled start of an Event and until one (1) hour after the end of any Event, no person shall stop, park or leave any Motor Vehicle in any Investors Group Field Event Designated Parking Lot, except in accordance with the authorization granted by a valid Investor's Group Field parking pass or paid Event parking ticket.

#### University Designated Parking Lots

2.37 Notwithstanding anything else in these Regulations, beginning ninety (90) minutes before the scheduled start of an Event and until one (1) hour after the end of any Event, no person shall stop, park or leave any Motor Vehicle in any University Designated Parking Lot without displaying a valid University of Manitoba parking permit. University Designated Parking Lots will be available to University of Manitoba parking permit holders on a first-come, first served basis and space will not be guaranteed.

#### Visitor Parking on Event Day

2.38 Notwithstanding anything else in these Regulations, visitor parking areas at the University of Manitoba during Events will be temporarily unavailable except as designated by the University with signage and/or

on [www.umanitoba.ca/parking](http://www.umanitoba.ca/parking) (<http://www.umanitoba.ca/parking/>). This will include all Public Pay Parking Areas, metered areas and Parkades.

### Stalls Equipped With Heater Plugs

#### Restriction on Use of Power

2.39 No person shall use any plug except for the sole purpose of drawing power for a Motor Vehicle block heater or to charge an electric vehicle in the appropriately designated stall and no device may be used to supply power to another Motor Vehicle.

#### Faulty Heater Plugs

2.40 Faulty plugs should be reported as soon as possible to the University's Physical Plant Department, or such other or substitute office as may be instituted in its place by the University from time to time.

#### Liability

2.41 The University, its employees, servants and agents assume no responsibility for any inconvenience, loss of, or damage to, a Motor Vehicle or its contents while on University Property, including, but not limited to any inconvenience, loss or damage caused by or attributable to fire, theft, collision electrical surges or interruptions of the supply of electricity or otherwise.

### Parking and Operation of Motor Vehicles

#### Prohibitions

2.42 No person shall stop, park or leave any Motor Vehicle, except for bicycles, upon any part of University Property except in accordance with the authorization granted by a valid parking permit and the Regulations provided that, bicycles shall remain subject to all other Regulations and policies of the University.

2.43 Except as specifically authorized by a valid parking permit, no person shall stop, park or leave a Motor Vehicle alongside any building on University Property.

2.44 No person shall stop, park, leave or operate a Motor Vehicle on sidewalks, paths, loading zones, landscaped areas or within three (3) meters of a fire hydrant on University Property except in the course of the performance of essential University business.

2.45 No person shall stop, park or leave a Motor Vehicle in specific areas and roadways on University Property identified and signed as fire lanes.

2.46 No person shall stop, park or leave a Motor Vehicle in a metered space on University Property when the meter at that space is hooded.

2.47 No person shall stop, park or leave a Motor Vehicle idling in an area designated by the University as a "No Idling" Zone, on University Property as indicated by appropriate signage.

2.48 No person shall stop, park or leave a Motor Vehicle in a metered space, Public Pay Parking Area, Parkade or in any parking stall on University Property in such a manner that the Motor Vehicle is not wholly within the metered space or parking stall.

2.49 No person shall move, disfigure, or in any way tamper with any parking control signs posted or erected on University Property.

2.50 No person shall stop, park, leave or operate a snowmobile on University Property, unless specifically authorized by the Vice-President (Administration), or designate, who may set terms and conditions in connection with such authorization wherever appropriate.

2.51 No person shall stop, park or leave a Motor Vehicle in a reserved parking area, a signed Designated Accessible Parking Area or a residence

parking area at any time without a valid parking permit for that area unless otherwise posted.

2.52 No person shall permit a Motor Vehicle to be stopped, parked or left in a metered space on University Property when the violation signal of the meter indicates a violation or when the pay parking ticket has expired.

2.53 No person shall stop, park or leave a Motor Vehicle within a Public Pay Parking Area, a metered space or a Parkade, without purchasing parking from a pay & display parking dispenser, parking meter, or mobile payment application on University Property.

2.54 No person shall stop, park or leave a Motor Vehicle from 7:30 a.m. to 4:30 p.m., Monday through Friday, in a signed parking area on University Property, without displaying a valid parking permit for that area.

2.55 Prohibitions 2.42 through 2.50 and 2.56 through 2.59 shall be in effect at all times. Prohibitions 2.51 through 2.54 shall apply at all times except on Saturday, Sunday and holidays, unless otherwise posted or noted in the Regulations.

#### Theft of Service

2.56 No person shall deposit or cause to be deposited in a single or multi-space parking meter, parking pay station or pay & display machine, any substitute for a coin of Canada; or, deface, damage, tamper or impair the working of any single or multi-space parking meter, meter pole, electronic parking pay station, pass card reader, transponder or reader, Parkade ticket terminal, pay & display machine or pay parking lot gate.

2.57 No operator of a Motor Vehicle shall, during the hours of operation, on entry into a Parkade, proceed without first obtaining a pay parking ticket from either the attendant or the automated ticket dispenser for that Parkade. On exiting from that Parkade, no Motor Vehicle operator shall proceed to exit without stopping and submitting the pay parking ticket to either the attendant or an automated pay station or terminal and paying the required fee.

2.58 No operator of a Motor Vehicle shall, during the hours of operation, as posted by the University, on entry into a Public Pay Parking Area, or a multi-space meter area, park without first paying for parking from either the attendant or the automated machine for that area.

2.59 No operator of a Motor Vehicle shall, during the hours of operation, display an altered, forged, copied or stolen parking permit and/or pay & display receipts or any other type of ticket normally issued for parking on University Property.

#### Parking Signs

2.60 Operators of Motor Vehicles shall obey any parking signs on University Property erected by either the University or with the consent of the University.

#### Temporary "No Parking" Signs

2.61 Where it is necessary to erect temporary "No Parking" signs in areas normally allotted for parking under the Regulations for such reasons as snow removal, cleaning, construction, special events or other good reasons, as same may be deemed by the University, such "No Parking" signs shall be observed and have priority over normal parking privileges. Wherever possible, persons temporarily displaced by the erection of such emergency signs will be assigned to other locations.

#### Fees and Charges

2.62 Authority. Pursuant to subsection 16(1) of The University of Manitoba Act, the University is authorized to impose fees and charges to

be paid by owners or operators of Motor Vehicles stopped, parked in or left on University Property in contravention of the Regulations.

2.63 Notice of Parking Violation. A Violation Notice may be issued by the University to any operator or owner charged with violation of any of the provisions hereof. The owner of a Motor Vehicle may be responsible for payment of any fees or charges in connection with the Violation Notice issued to that vehicle unless the owner can prove to the satisfaction of the University that the Motor Vehicle was not being operated by and/or was not parked or left by the owner or by any other person with the owner's express or implied consent

2.64 Failure to Pay Fees or Charges. Violation Notices must be settled within ten (10) days from the date of issue, failing which the University shall proceed to take all necessary legal action to receive payment of such fees and charges together with any costs incurred by the University in taking such legal action.

2.65 Service of Violation Notices. A Violation Notice shall be sufficiently served if served in any of the following ways:

- (a) by being handed to the operator of the Motor Vehicle;
- (b) by being mailed ,either by regular mail or by electronic mail, to the address of the person registered as the owner of the Motor Vehicle concerned; or,
- (c) by such violation notice being attached to, or left under, the windshield wiper or attached to the windshield of the Motor Vehicle.

2.66 Content of Violation Notice. The Violation Notice shall have endorsed thereon the following:

- (a) "This parking violation is issued pursuant to section 16 of The University of Manitoba Act by authority of the Board of Governors of the University, or such other substitute office as may be instituted in its place by the University, from time to time, for a contravention of the Parking Regulations".

2.67 Amount of Fees and Charges. Fees and charges for parking violations are as follows:

- (a) for all violations other than those listed in subsections (b) to (h):
  - (i) Option "A" – **Thirty Five Dollars (\$35.00)** if paid within ten (10) days of the date the contravention occurred; and
  - (ii) Option "B" – **Seventy Dollars (\$70.00)** if paid thereafter.
- (b) for possession and/or display of a stolen altered, copied or forged parking permit or pay & display parking ticket or receipt or any other type of ticket normally issued for parking on University Property – **Three Hundred and Fifty Dollars (\$350.00)** and a charge in an amount equal to the costs that would have been incurred for the purchase of a parking permit or pay parking ticket for the period during which the stolen or forged parking permit or pay parking ticket was being used upon order of the Vice-President (Administration) under section 2.74;
- (c) for a violation of sections 2.56 through 2.58 - **Three Hundred and Fifty Dollars (\$350.00)** and such amount as the University may deem appropriate in order to compensate the University for losses suffered as a result of damage to property caused by the person, upon order of the Vice-President (Administration) under section 2.75;

(d) for stopping or parking in an Accessible Parking Space:

- (i) Option "A" – **One Hundred and Fifty Dollars (\$150.00)** if paid within ten (10) days of the date the contravention occurred; and
- (ii) Option "B" – **Three Hundred Dollars (\$300.00)** if paid thereafter;

(e) for stopping or parking in a fire lane:

- (i) Option "A" – **Fifty Dollars (\$50.00)** if paid within ten (10) days of the date the contravention occurred; and
- (ii) Option "B" – **One Hundred Dollars (\$100.00)** if paid thereafter; and

(f) for violations of sections 2.36 and/or 2.37:

- (i) Option "A" – **Fifty Dollars (\$50.00)** if paid within ten (10) days of the date the contravention occurred; and
- (ii) Option "B" **Seventy Five Dollars (\$75.00)** if paid thereafter.

(g) for displaying an invalid permit or pay parking ticket:

- (i) Option "A" – **Seventy Five Dollars (\$75.00)** if paid within ten (10) days of the date the contravention occurred; and
- (ii) Option "B" **One Hundred and Fifty Dollars (\$150.00)** if paid thereafter.

(h) for violations of section 2.48:

- (i) Option "A" – **Twenty Dollars (\$20.00)** if paid within ten (10) days of the date the contravention occurred; and
- (ii) Option "B" – **Forty Dollars (\$40.00)** if paid thereafter.

The University may require payment of fees and/or charges for parking violations under more than one of the above noted subsections, with respect to a single incident, as the University, within its sole discretion may determine is appropriate.

2.68 Voluntary Payment. Any fees or charges issued under sections 2.42-2.59 on Prohibitions may be paid within the time limit indicated on the notice thereof as follows:

- (a) by on-line payment, on a twenty-four (24) hour basis, by visiting the University's website at [www.umanitoba.ca/parking](http://www.umanitoba.ca/parking) (<http://www.umanitoba.ca/parking/>);
- (b) by mail or after hours deposit (cheques only) at Parking Services at the Welcome Centre, 423 University Crescent, or such other location as the office may be located in from time to time;
- (c) in person Monday to Friday, between the hours of 8:00 a.m. and 4:30 p.m. at Parking Services at the Welcome Centre, 423 University Crescent, or such other location as the office may be located in from time to time.

2.69 An administration fee will be assessed by the University for all returned NSF cheques and stop payments.

2.70 Stolen, Altered, Copied or Forged Parking Permits and Pay Parking Tickets. Where a person has been found in possession of and/or displaying a stolen, altered, copied or forged parking permit or pay



parking ticket any other type of ticket normally issued for parking on University Property:

- (a) the unauthorized parking permit or pay parking ticket shall be confiscated;
- (b) the person shall pay a fine in accordance with section 2.67 of:
  - (i) Option "A" - **Seventy Five Dollars (\$75.00)** if paid within ten (10) days of the date the contravention occurred; and
  - (ii) Option "B" – **One Hundred and Fifty Dollars (\$150.00)** if paid thereafter; and
- (c) upon the order of the Vice-President (Administration), the person:
  - (i) shall pay a fee of **Three Hundred and Fifty Dollars (\$350.00)**;
  - (ii) shall be required to make payment to the University in an amount equal to the costs that would have been incurred for the purchase of a parking permit or pay parking ticket for the period during which the stolen or forged parking permit or pay parking ticket was being used or in order to compensate the University for losses suffered as a result of damage to property caused by the person that violated one or more of sections 2.56-2.59; and
  - (iii) shall not be entitled to, and shall be prohibited from, parking a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be towed away and impounded under Sections 2.76-2.79 on Removal, Impoundment and Liability.

2.71 Violation of Sections 2.56 - 2.59. Where a person has violated one or more of sections 2.56 – 2.59:

- (a) the person shall pay a fine in accordance with section 2.67 of:
  - (i) Option "A" - **Seventy Five Dollars (\$75.00)** if paid within ten (10) days of the date the contravention occurred; and
  - (ii) Option "B" – **One Hundred and Fifty Dollars (\$150.00)** if paid thereafter; and
- (b) upon the order of the Vice-President (Administration), the person:
  - (i) shall pay a fee of **Three Hundred and Fifty Dollars (\$350.00)**;
  - (ii) shall pay such amount as the University may deem appropriate in order to compensate the University for losses suffered as a result of damage to property caused by the person that violated one or more of sections 2.56-2.59; and
  - (iii) shall not be entitled to, and shall be prohibited from, parking a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be towed away and impounded under Sections 2.76-2.79 on Removal, Impoundment and Liability.

### Appeals and Extenuating Circumstances

2.72 Those persons wishing to appeal and outline extenuating circumstances, or appeal a Parking Fee or Violation Notice issued under section 2.67 (excluding clauses e-f of section 2.73), may do so as follows:

- (a) with respect to fees or charges for parking in contravention of the Regulations – attend to Parking Services at the Welcome Centre, 423 University Crescent, (or such other location as the office may be located in from time to time), Monday through Friday, 8:00 a.m. to 4:30 p.m. respecting a fee or charge; or
- (b) with respect to appeals of decisions under (a) above and with respect to the other decisions issued under sections 2.71 through 2.73 inclusive – appeal to the Vice-President (Administration) or such person or body designated by the Vice-President (Administration) in accordance with procedures established from time to time.

### Revocation of Parking Permits

2.73 Revocation of Parking Permit. In addition to any other fees or charges provided by the Regulations, a parking permit of an individual violating the Regulations, may be revoked by the Vice-President (Administration) at his/her sole discretion.

2.74 Prohibition from Parking on University Property. Any person whose parking permit is revoked may also be prohibited by the Vice-President (Administration) from parking, stopping or leaving a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be removed and impounded under sections 2.76-2.79 on Removal, Impoundment and Liability.

### Failure to Pay

2.75 Failure to Pay Fees or Charges. Where a person does not pay the fees or charges owing under sections 2.67, 2.70 or 2.71, any one (1) or more of the following actions may be taken by the University:

- (a) discipline (including dismissal) of faculty and staff members;
- (b) discipline of students under the Student Discipline Bylaw;
- (c) withholding of examination marks, transcripts, diplomas, or denying registration and registration materials until the outstanding fees or charges have been paid in full or other arrangements have been made which are satisfactory to the University;
- (d) revocation of a parking permit under section 2.71 and prohibition from parking on University Property under section 2.72;
- (e) withholding of the issuance of any new parking permits;
- (f) removal and impoundment of a Motor Vehicle under sections 2.76-2.79 on Removal, Impoundment and Liability; and
- (g) collection activities by the University or by others at the request of the University, including the issuance of a Statement of Claim in a civil court against the owner or operator of a Motor Vehicle for the amount of the fee or charge and all costs relating to and including the costs of removal, impoundment and storage of the Motor Vehicle, as well as any legal costs incurred by the University in taking such collection activities and/or legal action.

### Removal, Impoundment and Liability

2.76 Motor Vehicles parked or left on University Property may be removed, impounded and stored if such Motor Vehicles are considered by the University to be impeding snow removal operations or any other

essential operation whatsoever or where removal or impoundment of the Motor Vehicle is deemed to be reasonable in the sole discretion of the University.

2.77 Motor Vehicles parked or left on University Property on an Event Day may be removed, impounded and stored if such Motor Vehicles are parked in in contravention of these Regulations, as determined by the University in its sole discretion.

2.78 In addition to any other fee, charge or consequence provided by these Regulations, a Motor Vehicle removed and impounded under these Regulations shall be at the owner's risk. The owner or operator shall be responsible for the charges incurred for removal, impoundment and storage, which charges must be paid before the Motor Vehicle will be released.

2.79 Neither the University, nor its employees, servants or agents, shall be liable in any way whatsoever for such damage or inconvenience in the event of any damage or inconvenience caused by reason of any Motor Vehicle being towed away, removed, stored or impounded in accordance with these Regulations.

#### Liability for Lost, Stolen or Damaged Property

2.80 Neither the University, nor its employees, servants or agents, shall be liable in any way whatsoever for any lost, stolen or damaged property contained within the Motor Vehicle or any loss, damage or theft to the Motor Vehicle, notwithstanding that the loss, theft or damage may have occurred while on University Property.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Vice-President (Administration) that a formal review of this Regulation is required.

3.2 The Manager, Parking Services is responsible for the implementation, administration and review of this Regulation.

3.3 Students, External Parties and All Employees are responsible for complying with this Regulation.

### Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Regulation is March 20, 2022.

4.2 In the interim, this Regulation may be revised or repealed if:

- (a) the Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;
- (b) the Regulation is no longer legislatively or statutorily compliant; and/or
- (c) the Regulation is now in conflict with another Governing Document.

4.3 If this Regulation is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Regulation; or
- (b) are in turn repealed.

### Part V: Effect on Previous Statements

5.1 This Regulation supersedes all of the following:

(a) Parking for Invited Guests, Visitors, Conference and Special Events Policy;

(b) Parking Regulations (2011)

(c) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and

(d) all previous Administration Governing Documents on the subject matter contained herein.

### Part VI: Cross References

6.1 This Regulation should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

(a) <http://www.umanitoba.ca/parking> (<http://www.umanitoba.ca/parking/>)

## Violent or Threatening Behaviour Policy and Procedure

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#students](http://umanitoba.ca/admin/governance/governing_documents#students). ([http://umanitoba.ca/admin/governance/governing\\_documents/#students](http://umanitoba.ca/admin/governance/governing_documents/#students))

## Violent or Threatening Behaviour Policy

### Part I: Reason for Policy

1.1 The purpose of this Policy is to:

- (a) Outline the University's commitment to creating and maintaining a safe, positive and productive work and learning environment that is free of Violence; and
- (b) Set out the actions and measures that the University will take to address the risk of Violence within the University.

### Part II: Policy Content

#### Definitions

2.1 The following terms are defined for the purpose of this Policy and related Procedures:

- (a) "Policy" means this Violent or Threatening Behaviour Policy.
- (b) "Procedure" means the Violent or Threatening Behaviour Procedure.
- (c) "University" means The University of Manitoba.
- (d) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.
- (e) "University Matter" has the same meaning as defined in section 2.3 of this Policy.
- (f) "Violence" means:
  - (i) The attempted or actual exercise of physical force against a person; or

(ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

### Scope

2.2 This Policy applies to members of the University Community in relation to any University Matter. Nothing in this Policy is intended to detract from the academic freedom of the University's academic staff.

2.3 "University Matter" means any activity, event, or undertaking in which a member of the University Community participates, which has a substantial connection to the University, such as:

- (a) University-related activities or events, including but not limited to:
  - (i) Any activity or event on property owned or controlled by the University;
  - (ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;
  - (iii) The offering of any service by the University, including educational services;
  - (iv) Student placements, practica, or clinical training;
  - (v) University research activities, whether on or off campus;
  - (vi) Student and/or employee exchanges arranged in connection with the University;
  - (vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;
  - (viii) University field trips, travel-study tours, service-learning activities, and similar activities;
- (b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:
  - (i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;
  - (ii) Participation on a committee or board as a representative of the University;
  - (iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;
  - (iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or
  - (v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper

functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

### Policy Statement

2.4 Individuals who commit Violence in relation to a University Matter will be subject to discipline under the Procedure.

2.5 The University will establish a protocol in accordance with the Procedure for reporting and responding to incidents of Violence and to provide a mechanism to support the maintenance of a safe work and learning environment. The University will make the protocol easily and readily available to the University Community.

2.6 This Policy and the Procedure are not intended to discourage or prevent a complainant from reporting instances of Violence to the police or exercising any other rights, actions or remedies that may be available to him or her under any other law.

### Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Vice-President (Administration) that a formal review of this Policy is required.

3.2 The Vice-President (Administration) is responsible for the implementation, administration and review of this Policy.

3.3 Board of Governors members, Senate members, faculty/college/school councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers are responsible for complying with this Policy.

### Part IV: Authority to Approve Procedures

4.1 The Vice-President (Administration) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

### Part V: Review

5.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Policy is June 22, 2019.

5.2 In the interim, this Policy may be revised or repealed by the Approving Body if:

- (a) the Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

### Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Violent or Threatening Behaviour Policy, effective March 22, 2006;

(b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and

(c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

6.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Violent or Threatening Behaviour Procedure;
- (b) Sexual Assault Policy;
- (c) RWLE and Sexual Assault Procedure;
- (d) Vice-President (Administration) Bylaw;
- (e) Student Discipline Bylaw;
- (f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;
- (g) Use of Computer Facilities Policy and Procedure;
- (h) The Workplace Safety and Health Act, C.C.S.M. c. W210; and
- (i) The Workplace Safety and Health Regulation, W210 – 217/2006.

## Violent or Threatening Behaviour Procedure

### Part I: Reason for Procedure

1.1 The reason for this Procedure is:

- (a) To establish a protocol for reporting and responding to incidents of Violence that occur with respect to University Matters and to provide a mechanism to support the maintenance of a safe, positive and productive work and learning environment; and
- (b) To comply with The Workplace Safety and Health Regulation, W210 – 217/2006.

1.2 The Policy and this Procedure are not intended to discourage or prevent a complainant from exercising any other rights, actions or remedies that may be available to him or her under any other law.

### Part II: Procedural Content

#### Definitions

2.1 The following terms are defined for the purpose of this Procedure:

- (a) "Bylaw" means the Student Discipline Bylaw.
- (b) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Non-Academic Misconduct under the Student Discipline Bylaw, the Student Non-Academic Misconduct and Concerning Behaviour Procedure, and Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct.
- (c) "LASH" means the Local Area Safety and Health committee established by the University of Manitoba in accordance with the provisions of The Workplace Safety and Health Act (Manitoba).
- (d) "OSHA" means the Organizational Safety and Health Advisory committee established by the University that will look at safety

and health issues that cross department/faculty lines or affect the University as a whole.

(e) "Policy" means the Violent or Threatening Behaviour Policy.

(f) "Procedure" means this Violent or Threatening Behaviour Procedure.

(g) "STATIS" means the Student/Staff Threat Assessment Triage Intervention Support team comprised of the following representatives:

- (i) Vice-Provost (Students);
- (ii) Associate Vice-President (Human Resources);
- (iii) Director, Security Services;
- (iv) Executive Director, Student Support;
- (v) Student Support Case Manager; and
- (vi) Legal Counsel.

(h) "UMSS" means the University of Manitoba's Security Services.

(i) "Unit" means a faculty, school, college, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a faculty or school is not a Unit as the term is used within these Procedures.

(j) "Unit Head" refers to the individual with direct supervisory authority over a Unit, including Deans, Directors, the University Librarian, the President, Vice-Presidents, Associate Vice-Presidents and Vice-Provosts with respect to their Units.

(k) "University" means The University of Manitoba.

(l) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, anyone holding an appointment with the University, students, volunteers, external parties, contractors and suppliers.

(m) "University Matter" has the same meaning as defined in section 2.3 of this Procedure.

(n) "Violence" means:

- (i) The attempted or actual exercise of physical force against a person; or
- (ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

#### Scope

2.2 This Procedure applies to members of the University Community in relation to any University Matter.

2.3 "University Matter" means any activity, event, or undertaking in which a member of the University Community participates, which has a substantial connection to the University, such as:

- (a) University-related activities or events, including but not limited to:

(i) Any activity or event on property owned or controlled by the University;

(ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;

(iii) The offering of any service by the University, including educational services;

(iv) Student placements, practica, or clinical training;

(v) University research activities, whether on or off campus;

(vi) Student and/or employee exchanges arranged in connection with the University;

(vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;

(viii) University field trips, travel-study tours, service-learning activities, and similar activities;

(b) Activities or events involving members of the University Community, where the actions of those members of the University Community may reasonably reflect upon or affect the University, including but not limited to:

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

(e) Location of the incident(s).

2.5 Where a report of Violence is received by UMSS, UMSS shall respond as soon as reasonably possible and the Director of UMSS (or designate) shall be notified.

2.6 Without limiting the scope of their jurisdiction and/or mandate, UMSS may take any one or more of the following actions in response to a report of Violence, as reasonably determined by UMSS:

(a) Restore order in violent situations;

(b) Arrest individual(s) in accordance with section 494(1) of the Criminal Code;

(c) Contact Winnipeg Police Service;

(d) Arrange medical assistance;

(e) Take statement(s) of witness(es);

(f) Make appropriate referrals; and

(g) Take immediate action to facilitate the removal or banning of individuals from University property.

2.7 Any decision under section 2.6(g) above to remove an individual from University property shall be effective immediately, subject to review by the Vice President (Administration). The Chief Risk Officer, the appropriate Unit Head, and STATIS shall be advised of the action as soon as possible.

2.8 The Director of Security Services shall in all cases file a written report with the Vice-President (Administration) on the next business day describing any action taken under section 2.6(g) above.

2.9 Members of the University Community, including students and employees, who have been harmed as a result of an incident of Violence, are encouraged to consult with a health care provider for treatment or referral for post-incident counselling, if appropriate.

2.10 For students affected by Violence, the University will:

(a) Provide reasonable academic accommodations (such as extensions on assignments, deferrals of exams, leaves of absences, authorized withdrawals, etc.).

(b) Create a safety plan in consultation with the University's Student Support Case Manager, UMSS, and other offices as appropriate.

2.11 For employees affected by Violence, the University will:

(a) Provide reasonable work accommodations, in consultation with Human Resources; and

(b) Create a safety plan, in consultation with the Unit Head, UMSS and other offices as appropriate.

### **Immediate Response Protocol**

2.4 In the event of imminent bodily harm, individuals should call 911 and UMSS. When reporting an incident, individuals should attempt to provide the following information:

(a) A complete description of the incident(s) involving Violence;

(b) Name(s) of individuals involved in the incident(s);

(c) Description of individual(s), if name(s) not known;

(d) Name(s) of witness(es) or description, if name(s) not known; and

### **Report to STATIS**

2.12 Where a report of Violence is received by STATIS under section 2.7 of this Procedure, the role of STATIS will be to:

(a) Develop an action plan to assist and support the members of the University Community affected by the Violence;

(b) Ensure that members of the University Community affected by the Violence are consulted where appropriate and kept informed of the developments within the parameters of confidentiality;

(c) Make recommendations to the appropriate Unit Head and/or Disciplinary Authority; and

(d) Take all necessary action relative to the above.

2.13 A coordinator for STATIS shall be appointed for each incident as follows:

(a) If the conduct of a Student is the source of concern, the coordinator will be the Vice-Provost (Students) (or a designate);

(b) If the conduct of an employee is the source of concern, the coordinator will be the Associate Vice-President (Human Resources) (or a designate); and

(c) If the conduct of any other member of the University Community is the source of concern, the coordinator will be the Director of Security Services (or a designate).

2.14 The coordinator of STATIS will have the following responsibilities:

(a) Bring together STATIS and, where necessary, experts and other University personnel;

(b) Coordinate internal and external communication;

(c) Maintain confidential records and ensure the Vice-President (Administration) is informed of developments as appropriate;

(d) Convene debriefing sessions; and

(e) Prepare a final report and recommendation in relation to any decision taken by UMSS under section 2.6(g) above, to be delivered to the Vice-President (Administration) for final determination, with a copy to the Chief Risk Officer and the Unit Head of any Unit affected by the Violence.

### Investigation

2.15 As soon as reasonably practicable after an incident of Violence, the University shall investigate the incident as follows:

(a) Where the individual is an employee, the Unit Head for the employee's Unit will investigate the allegation in consultation with STATIS and Human Resources, and in accordance with applicable legislation, common law, collective agreements, and University policies, procedures and bylaws;

(b) Where the individual is a student, the Disciplinary Authority under the Bylaw and related procedures will investigate the allegation in consultation with STATIS and in accordance with the Student Non-Academic Misconduct and Concerning Behaviour Procedure; and

(c) Where the individual is neither an employee nor a student, the Director of UMSS will investigate the allegation in accordance with applicable legislation, common law, and University policies, procedures and bylaws.

2.16 The Unit Head of any affected Unit, in consultation with the Office of Risk Management, will implement any control measures that are identified as a result of the investigation that will eliminate or control the risk of Violence to individuals in their Unit.

### Discipline

2.17 Individuals who are found to have engaged in Violence under this Policy will be subject to disciplinary action as follows:

(a) Where the individual is an employee, the discipline will be implemented pursuant to and in accordance with applicable legislation, common law, collective agreements, and University policies, procedures and bylaws.

(b) Where the individual is a student, the discipline will be implemented in accordance with the Student Discipline Bylaw and the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(c) Where the individual is neither an employee nor a student, the Vice-President (Administration) or designate may make any determination regarding the individual's continued access to the University in accordance with the Procedure and the Vice-President (Administration) Bylaw.

2.18 The Office of Risk Management must be advised of any decision taken under section 2.17 above.

2.19 The University may take disciplinary/legal action against any individual who submits a frivolous or vexatious complaint under this Policy, or who interferes with an investigation of a complaint under this Policy.

### Violence Prevention Plan

2.20 Subject to section 2.26 of this Procedure and in consultation with the Office of Risk Management, the Unit Head shall advise all employees for which they are responsible of the risk of Violence in the Unit, including the nature and extent of the risk and the risk of Violence from persons whom the employees are likely to encounter in the course of their work.

2.21 In accordance with The Workplace Safety and Health Regulation, each Unit Head shall, no less than annually:

(a) Consult with the employees in their Unit, the applicable LASH committee, and the Office of Risk Management to review and develop the violence prevention plan that will be implemented by their Unit;

(b) Ensure that all employees in their Unit have received appropriate training in the Policy, this Procedure, and the violence prevention plan for their Unit; and

(c) Review the mechanisms in place to ensure that employees in their Unit comply with the Policy, this Procedure, and the violence prevention plan for their Unit.

2.22 The violence prevention plan referred to in section 2.21 above shall provide information on the following matters:

(a) A description of:

(i) Any particular worksite in their Unit of which the University is aware that an incident of Violence has occurred or may reasonably be expected to occur; and

(ii) Any particular job functions at the workplace where an employee performing their job function has been, or may reasonably be expected to be, exposed to the incident of Violence;

(b) The measures the University will implement to eliminate the risk of Violence in the Unit, or the measures that the University will implement to control that risk if it is not reasonably practicable to eliminate it;

(c) The measures and procedures that the University has in place for summoning immediate assistance when an incident of Violence occurs or is likely to occur in the Unit;

(d) A statement directing the employee to review the Policy and this Procedure, as well as any other documents that will outline the measures and procedures that the University has in place for summoning immediate assistance when an incident of Violence occurs or is likely to occur; and

2.23 The violence prevention plan shall be communicated to all employees in the Unit immediately at the time of hire and shall be posted online or in the Unit for quick reference by employees.

### Annual Report

2.24 Annually, the Office of Risk Management will prepare a report that compiles:

(a) A record of the incidents of Violence in each Unit of the University, if any;

(b) The results of any investigation into an incident of Violence, including a copy of:

(i) Any recommendations for control measures or changes to the violence prevention policy for the affected Unit; and

(ii) Any report prepared under in respect of such an incident;

(c) The control measures, if any, implemented as a result of an investigation into an incident.

2.25 The annual report will be provided to the Vice-President (Administration) and to OSHA.

### Obligations of Confidentiality by the University

2.26 In respect of an incidence of Violence, the University will not disclose the name of the complainant, the name of the respondent, or the circumstances related to the complaint to any person, other than where the disclosure is:

(a) Necessary in order to investigate the complaint;

(b) Required in order to take corrective action in response to the complaint; or

(c) Required by law, including but not limited to the University's legal obligations under the Workplace Safety and Health Regulation (Manitoba).

2.27 Personal information that is disclosed under section 2.26 above in respect of an incidence of Violence must be the minimum amount necessary for the purpose.

### Obligations of Confidentiality by Others

2.28 All persons involved in an investigation of an incident of Violence, whether as a witness or retrieving relevant information or documents, must keep confidential:

(a) The existence and nature of the investigation; and

(b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office or from STATIS.

2.29 Notwithstanding section 2.28 above, any person involved in an investigation may:

(a) Obtain confidential advice (including advice from a student advocate, union representative, lawyer, or support person(s), as may be appropriate);

(b) Disclose information to others only to the extent reasonably necessary to gather evidence and to make full answer to any allegations; and

(c) Use information obtained independent of the investigation in any other forum.

### Legislated Review of the Procedure

2.30 In accordance with The Workplace Safety and Health Act (Manitoba), the OSHA shall review these Procedures every three (3) years and make any recommendations it feels are necessary and advisable.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Vice-President (Administration) that a formal review of this Procedure is required.

3.2 The Chief Risk Officer or designate is responsible for the implementation, administration and review of this Procedure.

3.3 Board of Governors members, Senate members, faculty/college/school councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers are responsible for complying with this Procedure.

## Part IV: Review

4.1 Governing Document reviews shall be conducted every three (3) year. The next scheduled review date for this Procedure is June 22, 2019.

4.2 In the interim, this Procedure may be revised or repealed if:

(a) the Vice-President (Administration) deems it necessary or desirable to do so;

(b) the Procedure is no longer legislatively or statutorily compliant;

(c) the Procedure is now in conflict with another Governing Document; and/or

(d) the Parent Policy is revised or repealed.

## Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

(a) Violent or Threatening Behaviour Procedure, effective March 17, 2009;

(b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and

(c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VI: Cross References

6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Violent or Threatening Behaviour Policy;
- (b) The Workplace Safety and Health Act, C.C.S.M. c. W210;
- (c) The Workplace Safety and Health Regulation W210 – R.M. 217/2006;
- (d) Health and Safety Policy;
- (e) Safety Committees Procedure;
- (f) Respectful Work and Learning Environment Policy;
- (g) Sexual Assault Policy;
- (h) RWLE and Sexual Assault Procedure;
- (i) Student Non-Academic Misconduct and Concerning Behaviour Procedure;
- (j) Student Discipline Bylaw; and
- (k) Use of Computer Facilities Policy and Procedure.

(f) "Grade Point Average" or "GPA" refers to the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted.

(g) "Leave of Absence" is a period of leave established, administered, and approved by the Faculty/College/School that enables Students to temporarily withdraw from the University.

(h) "Level" refers to the level of the degree in which the Student is enrolled, such as undergraduate level, graduate level or non-degree level.

(i) "Official Record" is a Student's complete academic history at the University of Manitoba that is maintained by the Registrar's Office. Official Records are available in the form of an Official Transcript or a Student History.

(j) "Official Transcript" is an official document printed on secure paper and signed by the Registrar that reflects a student's permanent record at the University of Manitoba.

(k) "Policy" means this Voluntary Withdrawal Policy.

(l) "Quality Points" is the grade point value of the assigned Letter Grade multiplied by the credit hours of the course.

(m) "Registration Period" is the period prior to the beginning of classes in which new and returning Students may register.

(n) "Registration Revision Period" is the period after the beginning of classes within which students may withdraw from a course or courses without academic or financial penalty.

(o) "School" means a "School of the University" or a "School of a Faculty", as those terms are defined under the Definitions of Academic Units Policy.

(p) "Student" refers to any person enrolled at the University.

(q) "Student History" is the complete record of a Student's activity at the University, including a record of Authorized Withdrawals, produced for internal administrative use.

(r) "Term" is a period of time defined in the Calendar within which a course for credit may be offered, including Fall, Winter and Summer Terms.

(s) "University" means The University of Manitoba.

(t) "Voluntary Withdrawal" or "VW" is a registration option that enables Students to withdraw from a course or courses after the Registration Revision Period without academic penalty.

(u) "Voluntary Withdrawal Period" is the period after the Registration Revision Period in which Students may voluntarily withdraw from a course or courses, as outlined in section 2.6 of this Policy.

## Voluntary Withdrawal Policy

The Policy and Procedure are available online at [http://umanitoba.ca/admin/governance/governing\\_documents#academic](http://umanitoba.ca/admin/governance/governing_documents#academic). ([http://umanitoba.ca/admin/governance/governing\\_documents/#academic](http://umanitoba.ca/admin/governance/governing_documents/#academic))

## Part I: Reason for Policy

1.1 The University of Manitoba provides Students with sufficient time to plan their schedules through the registration cycle with both academic and personal circumstances in mind. The registration cycle is characterized by the Registration Period, the Registration Revision Period, and the Voluntary Withdrawal Period. The purpose of this Policy is to define and establish the requirements and limitations for Voluntary Withdrawal during the Voluntary Withdrawal Period at the University.

## Part II: Policy Content

### Definitions

2.1 The following terms have the following defined meanings for the purpose of this Policy:

- (a) "Authorized Withdrawal" or "AW" is an approved withdrawal from all courses in a given period for medical or compassionate reasons, granted in accordance with the Authorized Withdrawal Policy and Procedure.
- (b) "Calendar" means the University's official academic calendar for the Term and Level in which a course is taught.
- (c) "College" means a Professional College as defined under the Definitions of Academic Units Policy.
- (d) "Faculty" means a Faculty as defined under the Definitions of Academic Units Policy.
- (e) "Grade Point" refers to a numerical value assigned to a letter grade received in a course.

### General

2.2 A Voluntary Withdrawal is to be distinguished from other University withdrawal options, such as Authorized Withdrawal, Leaves of Absence, withdrawal during the Registration Revision Period, or withdrawal pursuant to other University-approved policies or regulations.



2.3 Students at the undergraduate Level are generally permitted to VW from a course or courses without receiving prior approval from their Faculty/College/School.

2.4 In the event that a Student chooses to VW from a course with a co-requisite, the Student must also VW from the co-requisite course. To determine if a course has a co-requisite, Students should consult the Calendar and the course descriptions in the chapter of the Faculty/College/School offering the course.

2.5 Students at the graduate Level are not permitted to VW from a course or courses without receiving the approval of the advisor/advisory committee, the head or graduate chair in the department in which the Student is registered, and the Faculty of Graduate Studies.

2.6 Students may withdraw from a course(s) without academic penalty during the Voluntary Withdrawal Period, which begins at the end of the Registration Revision Period and ends on the VW deadline, as follows:

- (a) The 48th teaching day for courses taught over a single Term;
- (b) The end of the Registration Revision Period of the second Term for courses taught over two or more Terms;
- (c) A date calculated using a pro-rated number of teaching days for Summer Term or other Irregularly Scheduled Courses, as published yearly in the Calendar.

2.7 Ceasing to attend a class or classes will not constitute an official withdrawal from that course. Students who do not VW from a course will remain enrolled in and will receive a final grade for that course.

2.8 Students who have elected to VW from a course cannot subsequently re-enroll in that course, except in accordance with the Repeated Course Policy.

## Scope

2.9 This Policy applies only to Voluntary Withdrawal during the current Term. Students wishing to withdraw for medical or compassionate reasons should consult the Authorized Withdrawal Policy and Procedure, and provisions regarding Leaves of Absence as outlined in the Calendar.

## Responsibilities of the Student

2.10 Students are responsible for considering all implications prior to VW. Withdrawal from a course or courses may affect academic progression, financial aid eligibility, CIS athletic eligibility, entrance into professional and graduate programs, and/or student visa requirements.

## Responsibilities of the Faculties/Colleges/Schools

2.11 Voluntary Withdrawal may be considered, together with course failures or repeats, when the Faculty of Graduate Studies or another Faculty/College/School with limited enrolment is reviewing applications for admission into its programs.

2.12 Faculties/Colleges/Schools may, subject to the approval of Senate, deny access to VW for all Students enrolled in an identified academic program. Faculties/Colleges/Schools are required to notify all applicants to that program of this proscription.

## Official Records

2.13 A Voluntary Withdrawal shall be recorded on the Student History and Official Transcript issued by the University.

2.14 Final grades for courses in which Students ceased attending, without an official VW, will be included on the Student History and Official Transcript issued by the University, and will be factored into the Student's Grade Point Average.

## Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Provost and Vice-President (Academic) that a formal review of this Policy is required.

3.2 The Provost and Vice-President (Academic) or his/her delegate is responsible for the implementation, administration and review of this Policy.

3.3 All Faculty/College/School Councils and Students are responsible for complying with this Policy.

## Part IV: Authority to Approve Procedures

4.1 The Provost and Vice-President (Academic) may approve Procedures, if applicable, which are secondary to and comply with this Policy.

## Part V: Review

5.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Policy is September 1, 2026.

5.2 In the interim, this Policy may be revised or repealed if:

- (a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;
- (b) the Policy is no longer legislatively or statutorily compliant; and/or
- (c) the Policy is now in conflict with another Governing Document.

5.3 If this Policy is revised or repealed all Secondary Documents, if applicable, shall be reviewed as soon as possible in order that they:

- (a) comply with the revised Policy; or
- (b) are in turn repealed.

## Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

- (a) Voluntary Withdrawal Policy, effective February 1, 1977, revised May 13, 1993, and December 7, 2005;
- (b) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
- (c) all previous Administration Governing Documents on the subject matter contained herein.

## Part VII: Cross References

7.1 This Policy should be cross referenced to the following relevant Governing Documents, legislation and/or forms:

- (a) Authorized Withdrawal Policy;
- (b) Definitions of Academic Units Policy;
- (c) Grade Point Averages Policy; and
- (d) Repeated Course Policy.

# General Academic Regulations

## Introduction

This chapter contains the regulations and requirements that apply to all students, regardless of faculty or school.

Each faculty and school has its own supplementary regulations and requirements. These are published in the faculty or school chapters of the Academic Calendar. Some faculties and schools also have additional regulations and requirements governing their programs; these are available from the faculty or school.

It is the responsibility of each student to be familiar with the academic regulations and requirements of the University of Manitoba in general and of the specific academic regulations and requirements of their faculty or school of registration. Accordingly, students are asked to seek the advice of advisors in faculty and school general offices whenever there is any question concerning how specific regulations apply to their situations.

## Residence and Written English and Mathematics Requirements

### Residence Requirements For Graduation

Each faculty and school recommends to the Senate the number of credit hours each student must complete in order to graduate from its programs. Senate also requires each student to complete a minimum number of credit hours at the University of Manitoba – this is called the “residence requirement.”

Unless otherwise stated in faculty and school chapters, the minimum residence requirement of the University of Manitoba is the work normally associated with one year in the case of programs of three years’ duration, and two years for programs of four years’ duration. Some faculties and schools may have additional residence requirements specified in their program regulations. However, in all cases, the residence requirement is assessed following an appraisal of the educational record of the student applying to transfer credits from another institution or applying to earn credits elsewhere on a letter of permission. The residence requirement is not reduced for students whose “challenge for credit” results in a passing grade.

### University English and Mathematics Requirements for Undergraduate Students

All students are required to complete, within the first 60 credit hours of their programs, a minimum of one three credit hour course with significant content in written English, and a minimum of one three credit hour course with significant content in mathematics.

Some degree programs have designated specific written English and mathematics courses to fulfil this requirement.

Price Faculty of Engineering have their own written English requirements (p. 461).

Some degree programs require that the written English and/or mathematics requirements be completed prior to admission.

See the program descriptions in the faculty and school chapters of the Academic Calendar for details.

### Exemptions to the Written English and Mathematics Requirement

- All students with completed baccalaureate degrees and who transfer into any program to which these requirements apply.
- Registered Nurses entering the Bachelor of Nursing Program for Registered Nurses.
- Students admitted before the 1997-98 Regular Session.
- Written English exemption only: Students transferring from Université de Saint-Boniface who have completed a written French requirement (at the university) before transferring to the University of Manitoba will be deemed to have met the written English requirement.

### Approved English and Mathematics Courses

A complete list of all courses which satisfy the university written English and mathematics requirement is provided below. (When searching for courses in Aurora, students may search Course Attributes for courses that satisfy the written English and Mathematics requirements).

**Note that some programs may restrict the choice of English or Mathematics courses. See the program descriptions in the faculty and school chapters of the Academic Calendar for details.**

#### Written English Courses

Course	Title	Hours
AGRI 2030	Technical Communications	3
ANTH 1520	Critical Cultural Anthropology	3
ANTH 2020	Relatedness in a Globalizing World	3
ANTH 2230	Anthropology of Travel and Tourism	3
ANTH 3330	Sex and Sexualities	3
ARTS 1110	Introduction to University	3
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
CATH 1190	Introduction to Catholic Studies	3
CATH 2010	Literature and Catholic Culture 1	3
CATH 2020	Literature and Catholic Culture 2	3
CLAS 2612	Greek Literature in Translation	3
CLAS 2622	Latin Literature in Translation	3
ENGL 0930	English Composition	3
ENGL 0940	Writing About Literature	3
ENGL 1XXX	All English courses at the 1000 level	
ENGL 2XXX	All English courses at the 2000 level	
ENGL 3XXX	All English courses at the 3000 level	
ENGL 4XXX	All English courses at the 4000 level	
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
FAAH 2930	Writing about Art	3
FILM 2280	Film and Literature	6
FORS 2000	Introductory Forensic Science	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
GEOL 3130	Communication Methods in the Geological Sciences	3
GMGT 1010	Business and Society	3
GMGT 2010	Business Communications	3
GPE 2700	Perspectives on Global Political Economy	3

GRMN 1300	Masterpieces of German Literature in English Translation (C)	3	PSYC 4520	Honours Research Seminar	6
GRMN 1310	Love in German Culture in English Translation (C)	3	RLGN 1322	Introduction to Eastern Religions	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3	RLGN 1324	Introduction to Western Religions	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3	RLGN 1420	Ethics in World Religions	3
GRMN 2500	Special Topics in German in English Translation (C)	3	RLGN 1424	Religion and Sexuality	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3	RLGN 1440	Evil in World Religions	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3	RLGN 2032	Introduction to the Study of Religion	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3	RLGN 2036	Introduction to Christianity	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3	RLGN 2052	Conservative Christianity in the United States	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3	RLGN 2112	Medicine, Magic, and Miracle in the Ancient World	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3	RLGN 2116	Cognitive Science and Religion	3
GRMN 3390	German Representations of War (C)	3	RLGN 2140	Introduction to Judaism	3
GRMN 3510	Special Topics in German in English Translation (C)	3	RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3	RLGN 2162	Great Jewish Books	3
HIST 1XXX	All History courses at 1000 level		RLGN 2170	Introduction to the New Testament	3
HIST 2XXX	All History courses at 2000 level		RLGN 2222	The Supernatural in Popular Culture	3
HNSC 2000	Research Methods and Presentation	3	RLGN 2590	Religion and Social Issues	3
HYGN 1340	Communications	2	RLGN 3102	Myth and Mythmaking: Narrative, Ideology, Scholarship	3
INDG 2020	The Métis in Canada	3	RLGN 3280	Hasidism	3
INDG 2110	Introduction to Indigenous Community Development	3	RUSN 1400	Masterpieces of Russian Literature in Translation	3
INDG 2530	Introduction to Indigenous Theory	3	RUSN 1410	Love in Russian Culture in English Translation	3
KPER 2120	Academic Skills in Kinesiology and Recreation Management	3	RUSN 2280	Russian Culture until 1900	3
LABR 1260	Working for a Living	3	RUSN 2290	Russian Culture from 1900 to the Present	3
LABR 1290	Introduction to the Canadian Labour Movement	3	RUSN 2310	Exploring Russia through Film	3
LABR 2200	Labour History: Canada and Beyond (C)	3	RUSN 2410	Russian Literature after Stalin	3
LABR 2300	Workers, Employers and the State	3	RUSN 2600	Special Topics in Russian Culture in English Translation	3
LABR 4510	Labour Studies Field Placement Seminar	3	RUSN 2740	Literature and Revolution	3
LAW 1540	Legal Methods	5	SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
LAW 2650	Introduction to Advocacy	3	SOC 3100	Practicum in Criminological/Sociological Research	6
LING 2740	Interpretation Theory	3	SOC 3350	Feminism and Sociological Theory	3
PHIL 2612	A Philosophical History of Science	3	UKRN 2200	Ukrainian Myth, Rites and Rituals	3
PHIL 2614	Philosophy of Science	3	UKRN 2410	Ukrainian Canadian Cultural Experience	3
PHIL 2790	Moral Philosophy	6	UKRN 2590	Ukrainian Literature and Film	3
PHIL 3220	Feminist Philosophy	3	UKRN 2600	Special Topics in Ukrainian Studies	3
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3	UKRN 2770	Ukrainian Culture until 1900	3
POL 2600	Polish Culture until 1918	3	UKRN 2780	Ukrainian Culture from 1900 to the Present	3
POL 2610	Polish Culture 1918 to the Present	3	UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
POL 2660	Special Topics in Polish Literature and Culture	3	UKRN 3970	Women and Ukrainian Literature	3
POLS 1502	Introduction to Political Studies	3	WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3
PSYC 2500	Elements of Ethology	3	WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
PSYC 3200	Thinking Critically About Psychological Research	3	WOMN 2560	Women, Science and Technology	3
PSYC 3380	Nature, Nurture and Behaviour	3	WOMN 3520	Transnational Feminisms	3
<b>Mathematics Courses</b>					
<b>Course</b>	<b>Title</b>	<b>Hours</b>			
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3			
ECON 2040	Quantitative Methods in Economics	3			

FA 1020	Mathematics in Art	3
GEOG 3810	Quantitative Research Methods in Geography (TS)	3
MATH 1XXX	All Mathematics courses at 1000 level	
MATH 2XXX	All Mathematics at 2000 level	
MATH 3XXX	All Mathematics at 3000 level	
MATH 4XXX	All Mathematics at 4000 level	
MUSC 3230	Acoustics of Music	3
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PSYC 2260	Introduction to Research Methods in Psychology	3
SOC 2294	Understanding Social Statistics	3
STAT 1XXX	All Statistics courses at 1000 level	
STAT 2XXX	All Statistics courses at 2000 level	
STAT 3XXX	All Statistics courses at 3000 level	
STAT 4XXX	All Statistics courses at 4000 level	

## Course Identification

### Credit Hours (Cr.Hrs.)

Each faculty and school develops courses for its degree credit programs, subject to Senate approval, and assigns a credit hour value to each course.

The credit hours for a course are expressed as a number associated with the course which indicates its relative weight. There is a correlation between class hours and credit hours (i.e. 6 credit hours = 3 hours a week, two terms; and 3 credit hours = 3 hours a week, one term).

For the purposes of registration, courses taught over both the Fall and Winter Terms have been divided into two parts. The credit hour value of the course are divided equally and applied to each part of the course. For example: for a six credit hour spanned course each of the Fall and Winter Term parts of the course will be assigned the value of three credit hours. Students registering for term spanning courses will receive one grade for the course and only when the second part is completed. The course grade will be applied to both the Fall and Winter parts of the course.

### Prerequisite and Co-requisite Courses

**Prerequisite:** If a course is prerequisite for a second course, the prerequisite must be met in order to begin the second course. To determine whether or not a course has a prerequisite, see the course descriptions in the chapter of the faculty or school offering the course. Normally, a minimum grade of "C" is required in all courses listed as prerequisites, except as otherwise noted in the course descriptions.

For some courses, the prerequisite may be completed before registering for the second course or may be taken concurrently with the second course. To determine if a course may be taken concurrently, see the course descriptions in the chapter of the faculty or school offering the course.

**Co-requisite:** If a first course is a co-requisite for a second course, the first course **must** be completed in the same term as the second course. To determine if a course has a co-requisite, see the course descriptions in the chapter of the faculty or school offering the course.

## Course Numbers

### First Two to Four Characters

The two, three or four characters in every course number are a shortened version of the subject of the course.

### Last Four Digits

At the University of Manitoba the last four digits of the course number reflect the level of contact with the subject.

#### For example:

ECON 1210

ECON is the code for Economics.

1210 indicates that it is an introductory or entry level course.

If the course requires a laboratory, this will be shown following the credit hours immediately following the title.

#### For example:

BIOL 3242 (lab required)

The 2000, 3000, 4000 course numbers indicate the second, third, and fourth levels of university contact with a subject.

Numbers in the 5000 range are normally associated with pre-Master's work or courses in the Post Baccalaureate Diploma and the Post-Graduate Medical Education programs.

Courses numbered 6000-8000 are graduate courses of the Faculty of Graduate Studies.

Course numbers in the 9000 series are used to identify courses taken at the University of Winnipeg by students in the University of Manitoba/University of Winnipeg Joint Master's Programs. The 9000 numbers do not indicate the level of the course taken (see *Graduate Calendar* or *University of Winnipeg Calendar*).

In most cases, some correlation exists between the course number and a student's year of study; that is, students in the third year of a program will generally carry course loads comprised primarily of 3000-level courses.

### Other course numbering information

Courses with numbers that end in 0 or an even number are taught in English, most of which are offered on the Fort Garry or Bannatyne campuses or through Distance and Online Education.

Courses with numbers that end in odd numbers are taught in French at Université de Saint-Boniface. (<http://www.cusb.ca/>)

## Grades and Grade Point Average Calculation

### Introduction

Final grades in most courses are expressed as letters, ranging from F, to A+ the highest. A grade of D is the lowest passing grade, however the minimum grade required to use a course as credit toward a degree or diploma program may be set higher by a faculty or school. Refer to faculty and school regulations. Each letter grade has an assigned numerical value which is used to calculate grade point averages. Grading scales used to determine the final letter grade may vary between courses and programs.

Some courses are graded on a pass/fail basis and because no numerical value is assigned to these courses, they do not affect grade point

averages. Courses graded in this way are clearly identified in course descriptions and program outlines.

## The Letter Grade System

Letter Grade	Grade Point Value	Description
A+	4.5	Exceptional
A	4.0	Excellent
B+	3.5	Very Good
B	3.0	Good
C+	2.5	Satisfactory
C	2.0	Adequate
D	1.0	Marginal
F	0	Failure
P		Pass
S		Standing

The grade of "D" is regarded as marginal in most courses by all faculties and schools. It contributes to decreasing a term, degree or cumulative Grade Point Average to less than 2.0. Courses graded "D" may be repeated for the purpose of improving a GPA. Note that some faculties and schools consider a grade of "D" as unacceptable and will not apply the course toward the program as credit. In most cases the course will need to be repeated to attain the acceptable grade. Refer to faculty and school regulations.

## Calculation of Grade Point Average

The University of Manitoba will report cumulative and term grade point averages for all students through Aurora Student.

Please also refer to the Grade Point Averages Policy (p. 53) found in the University Policies and Procedures..

### Quality Points

The quality points for a course are the product of the credit hours for the course and the grade point obtained by the student; e.g., 3 credit hours with a grade of "B" (3.0 points) = 3 credit hours x 3.0 = 9.0 quality points.

### Quality Point Total

The quality point total is the sum of quality points accumulated as students proceed through their program of studies.

### Grade Point Average (GPA)

The grade point average (GPA) is the quality point total divided by the total number of credit hours.

Example:

Course	Credit Hours	Grade	Grade Points	Quality Points
Course 1	3	B	3	9
Course 2	3	B+	3.5	10.5
Course 3	3	C+	2.5	7.5
Course 4	3	B	3	9
Course 5	3	A	4	12
Totals	15			48

Grade point average: 240 Quality Points / 15 Credit Hours = 3.20

## Poor Grades and Program Progression

A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Students in doubt as to the status of their record should consult an advisor in their faculty or school.

For minimum grade levels, especially as they affect progression requirements, see the faculty or school regulations in the *Academic Calendar* or consult an advisor.

## Academic Honours

Students qualify for the Honour List (Dean's, Director's, University 1) when they achieve qualifying grade point averages, as specified by the faculty/school or program regulations.

In addition, outstanding academic achievement will qualify students for other honours and awards. These include:

- the University Gold Medal, which is awarded at graduation in each faculty or school to the student with the most outstanding academic record;
- program medals, which are awarded by faculties and schools to the best student graduating from a specific program;
- graduation "with distinction", which is recorded on the transcripts of all students who attain a qualifying grade point average;
- and other medals and prizes that are specific to programs or disciplines.

## Academic Evaluation

### Methods of Evaluation

Students shall be informed of the method of evaluation to be used in each course, as specified in the *Responsibilities of Academic Staff with Regard to Students Policy* (p. 75), found in the University Policies and Procedures.

In departments where a course is offered in more than one section, the department offering the course endeavours to provide instruction so that all sections cover similar topics and that all students achieve a similar level of competency in the topic. However, there will be differences in evaluation as well as in teaching style, readings and assignments from one section to another. Students may contact the department for additional information before registration.

### Credit for Term Work

In subjects involving written examinations, laboratories, and term assignments, a student may be required to pass each component separately. If no final examination is scheduled in a course, the student's final grade will be determined on the basis of the method of evaluation as announced in the first week of lectures.

If credit is not given for term work, the student's final grade will be determined entirely by the results of the final written examination. Where the final grade is determined from the results of both term work and final examinations, the method of computing the final grade will be as announced within the first week of classes. Should a student write a deferred examination, term grades earned will normally be taken into account as set out in the immediately preceding paragraph.

### Repeating a Course

A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Elective courses graded "F" may either be repeated or another elective substituted. All electives in a program must be approved by the faculty or school.

### Probation and Academic Suspension

Failure to meet minimum levels of performance as specified in the regulations of the faculty or school will result in a student being placed either on probation or academic suspension in accordance with the faculty or school regulations.

A student's status is determined, following final examinations, at the end of each term (Fall, Winter or Summer terms) or at the end of an academic session as specified in faculty regulations. A student placed on probation is advised to discuss his/her program prior to the next registration with a representative of the dean or director to determine which courses, if any, should be repeated.

A student placed on academic suspension will normally be permitted to apply for re-entry to the faculty or school after one year has elapsed, but reinstatement is not automatic and individual faculty or school regulations must always be consulted.

While on suspension, students are not normally admissible to another faculty or school.

### Other Forms of Earning Degree Credit

#### Letter of Permission for Transfer of Credit

Students in degree programs at this university may take courses at other recognized colleges or universities for transfer of credit provided such courses are approved at least one month prior to the commencement of classes at the other institution by the faculty or school in which they are currently registered. The approval is subject to individual faculty/school regulations and is granted in the form of a Letter of Permission. The student must obtain a Letter of Permission whether or not the course/s being taken are for transfer of credit to the University of Manitoba. Failure to obtain a Letter of Permission may have serious academic implications.

To obtain a Letter of Permission (<https://umanitoba.ca/registrar/letter-permission/>), application must be made to the Registrar's Office as early as possible and at least one month prior to when required at the other institution.

Each application must be accompanied by the appropriate fee. The fees are for each application and a separate application is required for each session and institution regardless of the number of courses being considered. Students planning to seek permission to take courses elsewhere for transfer of credit to the University of Manitoba are cautioned to check the current Academic Calendar for the residence and degree requirements of the degree programs in which they are enrolled.

Transferred courses will be given assigned credit hour values and grades. The transferred grade will be included in the student's degree and cumulative GPA.

#### Challenge for Credit

The purpose of Challenge for Credit is to provide students of the university with some means of obtaining academic credit in University of Manitoba courses (not otherwise obtainable as a transfer of credit from other institutions) for practical training and experience, or reading and

study previously completed. Students who have registered to challenge would normally not attend classes or laboratories. Courses which have previously been taken at the University of Manitoba may not be challenged for credit.

To be eligible to challenge for credit a student must first be admitted to a faculty or school of the University of Manitoba. Eligible students will be required to demonstrate their competence in the courses which they are challenging for credit. Where formal, written examinations are required, these will be generally scheduled during the regular examination sessions in April/May, June, August, or December.

For information regarding requirements, procedures, applications and fees a student should contact the office of the faculty or school in which the student is enrolled, or in the case of new students, the faculty or school to which the new student has been admitted.

### Application of Course Credit when transferring between Programs within the University of Manitoba

When students transfer into program from another faculty or school within the University of Manitoba, some course credits previously earned may be applied to the new program. The credit hour value assigned by the faculty or school that offers the course is used. That is, there can only be one credit weight designated for a course with a particular course number.

### Academic Appeals

With the exception of decisions on admissions or disciplinary matters, all academic appeals from decisions of faculty or school appeals committees at the University of Manitoba or by the Comité d'appels at Université de Saint-Boniface shall be heard by the Senate Appeals Committee regardless of the institute of registration of the student concerned.

The complete terms of reference for the Senate Committee on Appeals as well as an Appeal Form may be obtained from the Office of the University Secretary, 312 Administration Building or Student Advocacy/Student Resource Services, 519 University Centre.

### Academic Integrity

The University of Manitoba takes academic integrity seriously. As a member of the International Centre for Academic Integrity, the University defines academic integrity as a commitment to six fundamental values: honesty, trust, fairness, respect, responsibility and courage. (International Centre for Academic Integrity, 2014)

To help students understand the expectations of the University of Manitoba, definitions for the types of prohibited behaviours are in the Student Academic Misconduct Procedure (p. 84) and provided below.

"Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the academic integrity of the University, including but not limited to:

(a) Plagiarism – the presentation or use of information, ideas, images, sentences, findings, etc. as one's own without appropriate attribution in a written assignment, test or final examination.

(b) Cheating on Quizzes, Tests, or Final Examinations – the circumventing of fair testing procedures or contravention of exam regulations. Such acts may be premeditated/planned or may be unintentional or opportunistic.

(c) Inappropriate Collaboration – when a student and any other person work together on assignments, projects, tests, labs or other work unless authorized by the course instructor.

(d) Duplicate Submission – cheating where a student submits a paper/ assignment/test in full or in part, for more than one course without the permission of the course instructor.

(e) Personation – writing an assignment, lab, test, or examination for another student, or the unauthorized use of another person’s signature or identification in order to impersonate someone else. Personation includes both the personator and the person initiating the personation.

(f) Academic Fraud – falsification of data or official documents as well as the falsification of medical or compassionate circumstances/ documentation to gain accommodations to complete assignments, tests or examinations.

Note that the above applies to written, visual, and spatial assignments as well as oral presentations.

Over the course of your university studies, you may find yourself in situations that can make the application of these definitions unclear. The University of Manitoba wants to help you be successful, and this includes providing you with the knowledge and tools to support your decisions to act with integrity. There are a number of people and places on campus that will help you understand the rules and how they apply to your academic work. If you have questions or are uncertain about what is expected of you in your courses, you have several options:

- Ask your professor, instructor, or teaching assistant for assistance or clarification.
- Get support from the Academic Learning Centre (p. 1769) or Libraries (p. 1772):
- Visit the Academic Integrity site (p. 1769) for information and tools to help you understand academic integrity.
- Make an appointment with the Student Advocacy (p. 1773) office. This office assists students to understand their rights and responsibilities and provides support to students who have received an allegation of academic misconduct.

## Appeals of Grades

### Appeal of Term Work

Students may formally appeal a grade received for term work provided that the matter has been discussed with the instructor in the first instance in an attempt to resolve the issue without the need of formal appeal. Term work grades normally may be appealed up to ten (10) working days after the grades for the term work have been made available to the student.

The fee which is charged for each appealed term work grade will be refunded for any grade which is changed as a result of the appeal.

### Appeal of Final Grades

Final grades are not released to students who are on “Hold Status”; the deadline for appeal of assigned grades will not be extended for students who were unable to access their final grades due to a hold.

*These regulations expand on the Final Grades Procedures (p. 48) found in the University Policies and Procedures.*

## Attendance and Withdrawal

### Attendance at Class and Debarment

Regular attendance is expected of all students in all courses.

An instructor may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by the faculty or school regulations.

A student may be debarred from class, laboratories, and examinations by action of the dean/director for persistent non-attendance, failure to produce assignments to the satisfaction of the instructor, and/or unsafe clinical practice or practicum. Students so debarred will have failed that course.

### Withdrawal from Courses and Programs

#### Voluntary Withdrawal

The registration revision period extends two weeks from the first day of classes in both Fall and Winter terms. Courses dropped during this period shall not be regarded as withdrawals and shall not be recorded on official transcripts or student histories. The revision period is prorated for Summer terms and for parts of term.

After the registration revision period ends, voluntary withdrawals (VWs) will be recorded on official transcripts and student histories.

The following dates are deadlines for voluntary withdrawals:

- The Voluntary Withdrawal deadline shall be the 48th teaching day in both Fall and Winter term for those half-courses taught over the whole of each term;
- The Voluntary Withdrawal deadline for full-courses taught over both Fall and Winter term shall be the 48th teaching day of the Winter term; and
- The Voluntary Withdrawal deadline for full-and-half courses taught during Summer terms or during some other special schedule shall be calculated in a similar manner using a pro-rated number of teaching days.

The exact Voluntary Withdrawal dates that apply to courses offered in the current academic session are published in the Academic Schedule (p. 28).

#### Authorized Withdrawal

Subject to the provision of satisfactory documentation to the faculty of registration, Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds.

#### Required Withdrawal from Professional Programs

Senate, at the request of some faculties and schools, has approved bylaws granting them the authority to require a student to withdraw on the basis of unsuitability for the practice of the profession to which the program of study leads.

This right may be exercised at any time throughout the academic year or following the results of examinations at the end of every year.

This right to require a student to withdraw prevails notwithstanding any other provisions in the academic regulations of the particular faculty or school regarding eligibility to proceed or repeat.

Where Senate has approved such a bylaw, that fact is indicated in the *Academic Calendar* chapter for that faculty or school. A copy of the

professional unsuitability bylaw may be obtained from the general office of the faculty or school.

## Deferred and Supplemental Examinations

*These regulations expand on the Deferred and Supplemental Examinations Procedures ([https://umanitoba.ca/admin/governance/governing\\_documents/academic/1299.html](https://umanitoba.ca/admin/governance/governing_documents/academic/1299.html)) found in the University Policies and Procedures.*

### Accepting Standing in Course without Examination

In the event that a student is unable to write a deferred examination as it has been scheduled, a grade may be assigned without examination (please refer to the Deferred and Supplemental Examinations Procedures) (p. 48). A student who accepts standing in a course without examination may not, at a later date, request permission to write a deferred examination in the course.

### Supplemental Examinations

Supplemental Examinations are offered by some faculties to students who have not achieved the minimum result in required courses.

Students who are granted supplemental privileges are normally required to sit the examination within thirty (30) working days from the end of the examination series in which the supplemental grade was received, unless the progression rules of a faculty or school require the successful completion of an entire academic year before a student is eligible to proceed into the next. In this case, students are obliged to sit the examination at the next ensuing examination period.

## Final Examinations

*These regulations expand on the Final Examinations and Final Grades Policy and Procedures found in the University Policies and Procedures.*

### General Examination Regulations

Students (with the exception of students auditing courses) are required to write all final examinations. Those who absent themselves without an acceptable reason will receive a grade classification of "NP" (No Paper) accompanied by a letter grade based on term work completed, using a zero value for incomplete term work and for the final examination. If no credit for term work is involved, a grade of "F" will be assigned. Under certain conditions a student may apply for a deferred examination; see Deferred and Supplemental Examinations.

### Examination Schedules

For most faculties, schools and colleges, final examinations are normally conducted in December for Fall Term courses; in April/May for Winter Term and Fall/Winter Term spanned courses; and in August for Distance and Online Education Summer Term courses. Exact dates for the exam period can be found in the Academic Schedule (p. 28).

The Schedule of Final Exams for Fall and Winter is made available by the Registrar's Office approximately one month after the beginning of the term. This schedule is made available on the Registrar's Office Website (<https://umanitoba.ca/registrar/final-exams/>) and includes finalized dates and times for each exam. Exam locations are added to the schedule at a later date. Summer Term courses, final exam details will be made available at the time of registration.

**Students must remain available until all examination and test obligations have been fulfilled. Travel plans are not an acceptable reason for missing an exam.**

### Examination Personations

A student who arranges for another individual to undertake or write any nature of examination for and on his/her behalf, as well as the individual who undertakes or writes the examination, will be subject to discipline under the university's Student Discipline Bylaw, which could lead to suspension or expulsion from the university. In addition, the Canadian Criminal Code treats the personation of a candidate at a competitive or qualifying examination held at a university as an offence punishable by summary conviction.

## Hold Status

*More details about being on Hold can be found online on the Registrar's Office website (<https://umanitoba.ca/registrar/hold-status/>).*

Students will be placed on "Hold Status" if they incur any type of outstanding obligation (either financial or otherwise) to the university or its associated faculties, schools, colleges or administrative units.

Some typical reasons for holds are:

- Program/course selection must be approved
- U1 student must transit into the Faculty of Arts or Science
- Required Major, Minor and/or Concentration declaration
- Transcripts or documents required from other institutions
- Unpaid tuition and/or other university fees
- Outstanding library books and/or fines
- Parking fines
- Pending disciplinary action

Depending on the reason for the hold, limited or no administrative or academic services will be provided to students on Hold Status until the specific obligations have been met.

Students must clear their holds prior to registration by contacting the appropriate office. Students with outstanding financial obligations to the university will not be permitted to register again until the hold has been cleared or permission to register has been obtained from the Office of the Vice-President (Administration).

### Advisor and Program Holds

Students enrolled in some programs are required to discuss their course selections and program status with an advisor prior to registration. Advisor and Program Holds normally only restrict registration activity; other administrative services remain available.

Students can verify whether their program requires consultation with an advisor by checking their faculty/school section of the Academic Calendar, or by viewing their Registration Time and Status in Aurora.

## Graduation and Convocation

### Graduation

Students may graduate from the University of Manitoba in May/June, October, and February of each year. (Convocation ceremonies are held in May/June and October only).

Students are eligible to graduate when they have completed all of the requirements for their degree program in accordance with the regulations



described in the chapter General Academic Regulations (p. 118) and the regulations available from the general offices of their faculties and schools.

It is the responsibility of each student to be familiar with the graduation requirements of the program in which they are enrolled. Consultation with academic advisors is advised to ensure that graduation requirements are met.

Please refer to the Registrar's Office website (<https://umanitoba.ca/registrar/graduation-convocation/FAQ/>) for Frequently asked Questions about Graduation and Convocation.

## Application for Graduation

Every candidate for a degree, diploma or certificate must make formal application at the beginning of the session in which he/she expects to complete graduation requirements.

Application is to be made through Aurora Student. (Log into Aurora Student; click Enrolment and Academic Records, then Declarations, then Declare Graduation Date.)

## Changing a Graduation Date

If you need to change your graduation date after you have made your declaration, you must contact the general office of your faculty, college, or school as soon as possible.

## Receipt of Information about Graduation

After you have declared your graduation, you will be sent a series of e-mails to your University e-mail account, requesting you to verify your full legal name, asking you about your attendance at convocation, providing convocation information, and so on. **It is imperative that you activate your University of Manitoba email account and check it regularly.**

## Convocation

Convocation ceremonies are held in May/June and October of each year.

February graduates are invited to attend the May/June ceremonies.

Graduating students are encouraged to attend with their families and friends because it is the one ceremonial occasion that marks the successful conclusion of their program of studies.

Graduates who wish to attend Convocation, verify their attendance at the Convocation ceremony by reserving their academic attire through the University approved supplier.

Students who, for any reason, do not attend Convocation will receive their degrees in absentia.

The Registrar's Office will hold unclaimed parchments for a maximum of twelve months after graduation when any unclaimed parchments will be destroyed. These will include those not given at Convocation, those that were to be picked up in person but not claimed, those that were mailed but returned to the Registrar's Office by the postal outlet or courier depot, those that were not issued due to a financial hold on a student's records, and those that were reprinted immediately after convocation due to corrections.

It is critical that you update your address, phone number and email through Aurora whenever changes occur. Note that any changes made with the Alumni Association are not reflected in your University of Manitoba student records.

If you do not receive your parchment, it is your responsibility to follow up with the Registrar's Office within a twelve-month period. Any requests for parchments after this time will be processed as replacements; there is a fee charged for replacement parchments.

## Academic Dress

Students are responsible for making arrangements to reserve their academic attire through the University approved supplier. Rental fees apply. Details will be provided via e-mail once Convocation planning begins.

## Convocation Information

Information on Convocation may be found on the Graduation/Convocation website (<http://umanitoba.ca/convocation/>).

## Personal Information

### Mailing Address

In order to receive University mail, it is essential that you to provide the Registrar's Office with your current address. All mail will be directed to the address you provide. You may change your mailing address and phone number by accessing Aurora Student and then selecting Personal Information.

### Change of Name

If you have changed your name since you were first admitted or if the name on your record is incomplete or inaccurate, official evidence of the name change or correction must be submitted to the Registrar's Office along with a completed Request for Change of Name form (<https://umanitoba.ca/registrar/change-your-personal-information/>). The University of Manitoba uses your **full legal name** on its records, transcripts, and graduation documents (a full legal name, for example, includes all names on your birth certificate - first, middle, and last - or on your study permit). Abbreviated names, Anglicized names, or initials should not be used unless they have been proven with appropriate documentation.

## Admissions

**Dean:** Dr. Kelley Main (Acting)

**Associate Dean(s):** Dr. Michael Czubryt, Dr. Stephen Kirkland, Dr. Randall Jamieson

**Campus Address/General Office:** 500 University Centre

**Telephone:** (204) 474 9377

**Fax:** (204) 474 7553

**Email Address:** Graduate\_Studies@umanitoba.ca

**Website:** [http://umanitoba.ca/graduate-studies/](http://umanitoba.ca/graduate-studies)

## Preface (Grad Admissions)

At the University of Manitoba, graduate study and research were conducted on a modest scale from the foundation of the university and during its early years. In 1949, a Faculty of Graduate Studies and Research was established to systematize efforts in these fields. A substantial number of graduate students received fellowships, scholarships, or assistantships made available under such arrangements as the Natural Sciences and Engineering Research Council, and the university itself. Providing additional opportunity for graduate students, research work funded through grants from business corporations and government bodies is now conducted at the university.

Agriculture and Agrifood Canada and the Department of Fisheries and Oceans maintain research initiatives on the Fort Garry campus. Additional and extensive research facilities are available in the faculties of Dentistry and Medicine located in central Winnipeg and the university's Bannatyne Campus. The Faculty of Medicine operates in close conjunction with the major teaching hospitals.

Graduate work at the doctoral level is offered in the faculties of Agricultural and Food Sciences, Arts, Clayton H. Ridell Faculty of Environment, Earth and Resources, Dentistry, Education, Engineering, Medicine, Science, Social Work, and the Asper School of Business/ Faculty of Management.

The Faculty of Graduate Studies is governed by the Faculty Council of Graduate Studies. The Faculty Council delegates powers to the Executive Committee of Graduate Studies which in turn delegates responsibilities to standing committees of the faculty, such as the Guidelines and Policy Committee and the Awards Committee.

## Admission to Graduate Studies

### Degrees and Diplomas Offered

The Faculty of Graduate Studies offers advanced courses of instruction and facilities for research leading to the following:

- Master of Architecture (M.Arch.)
- Master of Arts (M.A.)
- Maîtrise ès Arts (Université de Saint-Boniface)
- Master of Business Administration (M.B.A.)
- Master of City Planning (M.C.P.)
- Master of Dentistry (M.Dent.)
- Master of Education (M.Ed.)
- Maîtrise en Éducation (Université de Saint-Boniface)
- Master of Engineering (M.Eng.)
- Master of Environment (M.Env.)
- Master of Finance (M.Fin.)

- Master of Fine Art (M.F.A.)
- Master of Human Rights (M.H.R.)
- Master of Interior Design (M.I.D.)
- Master of Landscape Architecture (M.L.Arch.)
- Master of Laws (LL.M.)
- Master of Music (M.Mus)
- Master of Natural Resources Management (M.N.R.M.)
- Master of Nursing (M.N.)
- Master of Occupational Therapy (M.O.T.)
- Master of Physical Therapy (M.P.T.)
- Master of Physician Assistant Studies (M.P.A.S.)
- Master of Public Administration (M.P.A.)
- Master of Public Health (M.P.H.)
- Master of Science (M.Sc.)
- Master of Social Work (M.S.W.)
- Master of Supply Chain Management and Logistics (M.S.C.M.)
- Doctor of Philosophy (Ph.D.)
- Diploma in Population Health (Dip.P.H.)\*

\*Currently on hold.

See the Graduate Studies Program index in this Calendar for listings of graduate programs by unit.

## Admission

### General Policy on Admission

The general policy on admission to the Faculty of Graduate Studies is found in the Academic Guide section of this Calendar. Note that admission standards as well as criteria and procedures for admission may vary from program to program. Consult the specific departmental listing in this Calendar for details.

Admission to the Faculty of Graduate Studies is competitive and a combination of factors is considered in the admission decision, including:

- The past academic performance of the applicant and assessments of referees. These are used as indicators of the likelihood that the applicant can successfully complete the course of studies and research for the degree.
- The capacity of the department (unit, faculty, institute, etc.) to provide the program of study and research requested by the applicant, including adequate study and research facilities.

The availability and willingness of a faculty member competent to supervise the program of study and research of the applicant.

## Application

### APPLICATION FORMS

See the Graduate Studies website (<https://umanitoba.ca/graduate-studies/graduate-student-admissions/>) for application information. For application deadline dates and program-specific requirements, refer to the specific graduate program of study page (<https://umanitoba.ca/explore/programs-of-study/graduate/>). Application to live in residence is made separately (Please refer to Homestay (<https://umanitoba.ca/english-language-centre/homestay-accommodations/>) or Student Residences (<https://umanitoba.ca/housing/>))

### Application Fee

This fee must accompany all **online** admission applications:

- Canadian/permanent residents - \$100. (CAD)
- International applicants - \$100. (CAD)

### **Application Declaration**

All persons seeking admission to the University of Manitoba must sign the following declaration on the Application for Admission: "I hereby certify that I have read and understood the instructions and information sheet attached to this application form and that all statements made in conjunction with this application are true and complete. I understand that my application will be rejected if I have not disclosed my complete academic record or have submitted false information in support of my application to the Faculty of Graduate studies. In such an event I understand that future applications from me will not be considered."

### **Application Fraud or Misconduct**

It should be noted that the commission of application fraud or misconduct may result in acceptance and registration being withdrawn and the applicant disqualified from consideration, not only in the year of application, but, in all subsequent sessions. If discovered in a subsequent session it may result in dismissal from the university. Application fraud or misconduct includes the following:

- Failure to declare attendance at another post-secondary institution;
- Presenting falsified academic documentation or causing or encouraging another person to falsify records through translation or data changes;
- Presenting falsified personal documentation, e.g. using a false name, date of birth, country of origin, etc.;
- Presenting falsified or fictitious reference documentation;
- Cheating on or having another person write a standardized entry exam such as TOEFL, MCAT, LSAT, DAT or GMAT;
- Presenting another person's standardized test score as one's own to falsify a test result; and
- Failure to report suspensions from another post-secondary institution.

### **Classification of Students**

The classification of a student at the University of Manitoba is determined on admission to a program of study.

Please refer to Student Status/Classification of Students. (p. 1343)

## Academic Guide

The Faculty of Graduate Studies Academic Guide contains all the rules and policies pertaining to the Faculty of Graduate Studies. Adherence to these rules is of utmost importance for the effective functioning/operation of programs and for guiding and monitoring the progress of students. The integrity of the process is at stake. The major goal of this guide is to prevent potential problems that may affect the completion of a student's program. It is the responsibility of students and the department/unit offering a graduate program to read and follow the policies contained herein.

All regulations as laid out in the Faculty of Graduate Studies Academic Guide are subject to revision by the appropriate bodies of the Faculty of Graduate Studies. This compendium is presented as the most recent set of regulations as a guideline for students and staff. Individual departments may have additional regulations that supplement these general regulations. All such supplementary procedures and regulations must be approved as specified by the By-Laws of the Faculty of Graduate Studies, be published and available to students, and kept on file in the Faculty of Graduate Studies Office.

### Preface

The Faculty of Graduate Studies is a pan-University faculty responsible for overseeing the administration of all graduate programs at The University of Manitoba. The Faculty of Graduate Studies Academic Guide contains all the rules and policies pertaining to the Faculty of Graduate Studies. These regulations apply to all graduate students in all programs in all academic units. Adherence to these rules is of utmost importance for the effective functioning/operation of programs and for guiding and monitoring the progress of students. It is the responsibility of students and the department/unit offering a graduate program to read and follow the policies contained herein.

All regulations as laid out in the Faculty of Graduate Studies Academic Guide are subject to revision by the appropriate bodies of the Faculty of Graduate Studies. This compendium is presented as the most recent set of regulations as a guideline for students and staff. Individual departments/units may have additional regulations that supplement these general regulations. Supplementary procedures and regulations must be approved as specified by the By-Laws of the Faculty of Graduate Studies, be published and available to students, and be kept on record by the Faculty of Graduate Studies Office. For those programs that are administered through a Faculty (as opposed to a Department) the term "Department" should be substituted by "Unit" within this document (i.e., Department Head becomes Unit Head.)

### Definitions

The "Dean, Faculty of Graduate Studies" shall be taken to mean the Dean, Faculty of Graduate Studies or designate.

"Unit" shall be taken to mean the academic unit where the graduate student is pursuing their studies. Generally, this is the department. For Faculty-based programs, the Dean or Director is the de facto Head of the unit. The term "unit" shall also include School(s) or College(s) of Faculties within the University. The Dean of the Faculty of Graduate Studies is the de facto Head of interdisciplinary programs administered by the Faculty of Graduate Studies. The Head of any unit may designate any of their responsibilities in this policy to another member of the unit (e.g., Graduate Chair).

## Application, Admission, and Registration Policies

### Application and Admission Procedures

The application (and all required documentation) is to be submitted directly to the Faculty of Graduate Studies via the online application system. **Applicants should contact the department/unit to which they are applying for the procedures and requirements which are specific to the program of application.** Contact information for each department/unit can be found on the Graduate programs of study website (<https://umanitoba.ca/explore/programs-of-study/graduate/>).

### Process

1. A completed official application for admission form must be submitted, together with the application fee and supporting documentation, to the Faculty of Graduate Studies, via the online application system. Applicants are **required** to submit the application and documentation to the Faculty of Graduate Studies in time to meet the application deadline in place for a particular department/unit. Deadlines vary depending on the program to which the applicant is applying and whether the applicant is domestic or international. Deadlines can be found by clicking the appropriate application program page on the Graduate programs of study website (<https://umanitoba.ca/explore/programs-of-study/graduate/>). **Note:** International students must pay special attention to transcript requirements (see application form for details).
2. Applications are subsequently reviewed by the unit offering the program which will decide whether the applicant meets the unit's criteria including, but not limited to, availability of advisors, space, and facilities.
3. Notification of recommended/rejected applications is sent by the Head of the unit to the Faculty of Graduate Studies. Applications recommended for admission are checked to determine if they meet the Faculty of Graduate Studies' eligibility requirements. The Faculty of Graduate Studies then notifies applicants of their acceptance or rejection.

### Deadlines for Recommended Applications (from Departments/Units to the Faculty of Graduate Studies)

The following are the deadlines for receipt by the Faculty of Graduate Studies of recommendations from departments/units.

Term	Start Date	Canadian/US	International
Fall	September	July 1	April 1
Winter	January	November 1	August 1
Summer	May	March 1	December 1

**IMPORTANT:** These are not unit-specific application deadlines. Prospective applicants must consult the appropriate application program page on the Graduate programs of study website (<https://umanitoba.ca/explore/programs-of-study/graduate/>).

### Application Fee

A \$100.00 (CDN) non-refundable fee must accompany an application for admission. The Physician Assistant Studies and Orthodontics programs charge an additional fee of \$25 and \$50, respectively.

## Transcripts

Unofficial copies of transcripts and final degree certificates are acceptable for initial assessment and provisional admission purposes. Upon admission to the Faculty of Graduate Studies, applicants must arrange for official transcripts from all post-secondary institutions attended to be sent to the Faculty of Graduate Studies, within one (1) month of the date on the admission letter. Applicants will be placed on hold, which prevents registration until all admission requirements have been submitted. **All transcripts must arrive in sealed, university-stamped envelopes sent directly from the issuing institution(s) and be accompanied by official and literal English translations** (Please refer to Transcripts: International below). For international degrees or where the transcripts do or will not clearly state that a degree has been conferred, a copy of the official degree certificate is also required.

### Transcripts: International

Where academic records from a country other than Canada are produced in a language other than English, the applicant must arrange for the submission of official literal English translations of all records. To be official, original language documents and English translations must arrive together in envelopes which have been sealed and endorsed by the issuing institution. For international degrees, a copy of the official degree certificate is also required.

### Transcripts: University of Manitoba

University of Manitoba students are not required to submit University of Manitoba transcripts.

### Proficiency in English

The Faculty of Graduate Studies requires a passing, acceptable English Language Test score in order to offer admission. A successfully completed English Language Proficiency Test from the approved list is required of all applicants unless they have received a secondary school diploma and/or university degree from Canada or one of the countries listed on the English Language Proficiency Test Exemption List (<https://umanitoba.ca/graduate-studies/graduate-student-admissions/requirements/#countries-exempt-from-english-language-requirements>). In all cases, test scores older than two (2) years (from the time of completing the test) are invalid.

Thresholds required for successful completion are indicated in parentheses.

- Test of English as a Foreign Language (TOEFL) Internet based - iBT® (86; minimum score of 20 in each of reading, writing, listening and speaking categories). The “best score” will not be considered for admission. Only individual test scores will be used to meet the minimum requirements.
- International English Language Testing System (IELTS™) (6.5 in the Academic Module)
- Academic English Program for University and College Entrance (AEPUCE) (65%)
- PTE Academic (61% overall)

#### Note:

Some units may require a specific test or test scores greater than those indicated above. Students should check department/unit supplementary regulations for details.

## English Language Proficiency Test Exemption List

Applicants holding secondary school diplomas and/or recognized university degrees from countries on the Faculty of Graduate Studies English Language exemption list are not required to submit an English Language Proficiency score. For more information please see our website (<https://umanitoba.ca/graduate-studies/graduate-student-admissions/requirements/#countries-exempt-from-english-language-requirements>).

## Letters of Recommendation

Letters of Recommendation are to be completed via the online application. Recommendation letters submitted via post or email are not accepted. Applicants are required to add their ‘Recommendation Provider(s)’ contact information so that each recommender is sent an automated email notification.

Generally, two (2) Letters of Recommendation must be submitted to the Faculty of Graduate Studies. The number of required recommendation letters for an application for admission is stated on the program’s webpage which is available at this link (<https://umanitoba.ca/explore/programs-of-study/graduate/>).

## Admission Tests

Some departments/units require admissions tests, such as the Graduate Record Examination (GRE®) or the Graduate Management Aptitude Test (GMAT™). These requirements are listed in the department/unit’s supplementary regulations. If required, the scores must be submitted at the time of application.

## Entrance Requirements

The minimum standard for acceptance into any category in the Faculty of Graduate Studies is a 3.0 Grade Point Average (GPA) (or equivalent) in the last two (2) years of full-time university study (60 credit hours).

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

## Eligibility of University of Manitoba Staff Members

A staff member at The University of Manitoba at the rank of Assistant Professor and above or Instructor 1 and above, is not eligible to apply for admission to a graduate program in the department/unit in which the appointment is held.

## Registration Procedures

### Undergraduate Student Registration in Graduate Level Courses

Undergraduate students may be permitted to register in 7000-level courses or above on recommendation of the department/unit offering the graduate course, subject to the conditions listed below.

- Undergraduate students must obtain permission from the Department/Unit Head and course instructor before registering for a graduate course.
- Only undergraduate students completing an undergraduate degree at the University of Manitoba are eligible to enroll in a graduate course (i.e., undergraduate students from other institutions and those completing courses without registration in a degree program are ineligible for registration in graduate courses).
- Undergraduate students are not eligible for enrollment in any graduate course that is cross-listed with an undergraduate course,

or that is scheduled to be taught at the same time and location as an undergraduate class.

- Undergraduate students will only be eligible to receive graduate-level credit for a course designated as 7000-level or above if at least 75% of the students registered in the course are graduate students.
- Undergraduate students who complete a graduate course are not guaranteed admission to a graduate program.

## Initial Program Registration

On admission to a graduate program at the University of Manitoba, students may submit a formal request to the Faculty of Graduate Studies to apply any previously completed graduate courses toward their graduate program requirements, subject to the restrictions listed below.

- No more than 50% of the coursework required in a graduate program may be imported from credit hours completed during an undergraduate program.
- Only courses in which a C+ grade or higher, or the minimum grade required by the program to which the course would be applied, are eligible to be considered towards meeting the requirements of any graduate program.
- Any graduate course completed by an undergraduate student may subsequently be applied to a graduate program only if it has not been used toward completion of any other degree program.
- Any graduate course completed by an undergraduate student for which a passing grade has been obtained (i.e., C+ or higher) may not be repeated should the student later gain admission to a graduate program.
- Courses completed more than seven (7) years prior to the date of awarding a degree may not normally be used for credit towards the degree (please refer to Lapse or Expiration of Credit of Courses (p. 1353)).

**All graduate students must initially register in the term indicated in their letter of acceptance as specified in the Academic Schedule of the Graduate Calendar.** Any student not registering by the registration deadline for the term specified in their letter of offer will be required to re-apply for admission; admission is not guaranteed if a student re-applies to the Faculty of Graduate Studies. In exceptional circumstances and with prior approval from the department/unit, students may defer registration for up to one (1) year following acceptance into the Faculty of Graduate Studies.

**All programs must be approved by the Head of the major department/unit or designate.** Approval to take courses from departments/units outside the major department/unit must be obtained from the outside department/unit.

The approval or denial of admission and registration to two (2) concurrent programs rests with the Dean of the Faculty of Graduate Studies in consultation with the department/unit concerned. The request for approval or denial must be submitted to the Faculty of Graduate Studies prior to the student's admission/registration on the "Concurrent Curriculum Permission (<https://umanitoba.ca/graduate-studies/forms/>)" form.

Where a student does register in two (2) programs, it is important to note that dual registration may affect funding, and that completing a graduate program as a part-time student will affect eligibility for The University of Manitoba Graduate Fellowship (UMGF) and may limit other funding possibilities.

## Re-Registration

All students must re-register in all Fall, Winter and Summer terms of their program until a degree is obtained. Failure to re-register will result in the student being discontinued from their graduate program. A student who has been discontinued and would like to be considered for continuation in a program must apply for re-admission via the standard online admission process. Re-admission is not guaranteed.

The notation 'Discontinued Graduate Program' will be placed on the academic record of any graduate student who has failed to maintain continuous registration. Should a student be discontinued, but is in poor academic standing, the notation 'Required to Withdraw' will replace 'Discontinued Graduate Program'.

The re-registration requirement does not apply to occasional students, visiting students, Pre-Master's students or students on an Exceptional or Parental Leave of Absence (please refer to "Leave of Absence (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/leaves-absence/>)").

## Registration Revisions

Revisions to registration must be approved by the Department/Unit Head or designate and may be made during the designated periods as published in the Academic Schedule (<https://catalog.umanitoba.ca/graduate-studies/academic-schedule/>) of the Graduate Academic Calendar.

**Note:** Graduate students are not permitted to withdraw from courses without written permission from their Department/Unit Head on recommendation from their advisor/co-advisor (and/or advisory committee). The notation "Required to Withdraw" may be placed on the academic record of any graduate student who has withdrawn from courses without such approval.

## Advisor Student Guidelines (ASG)

All students in thesis/practicum programs, together with their advisor/co-advisor, are required to discuss and complete the ASG as soon as possible after initial registration, prior to the commencement of any research, and no later than at the time of submission of the first Progress Report. The advisor/co-advisor and the student are required to approve the agreement. If the parties cannot agree on one or more component(s) of the Advisor Student Guidelines, the matter should be referred to the Department/Unit Head, Graduate Chair, or the Dean of the Faculty of Graduate Studies. If a student does not have an advisor/co-advisor at this time, the interim advisor\* will be required to complete the ASG. A new ASG is to be completed if there is a change in advisor/co-advisor, a co-advisor is added mid-way through the student's program, or if a student transfers programs.

\* In department/units where the choice of thesis/practicum topic and thesis/practicum advisor are postponed after a student's entry into the program, the Department/Unit Head, within one (1) term, shall appoint a faculty member to advise the student in the interim period before the regular advisor is assigned or chosen. Students must have an advisor through to the end of their program in programs requiring an advisor.

## Western Deans' Agreement

This agreement was established in 1974 as an expression of co-operation and mutual support among universities offering graduate programs in western Canada. Its primary purpose is the reciprocal enrichment of graduate programs throughout western Canada. This agreement is not intended to preclude other agreements between participating

institutions. A list of the participating Universities can be found on the Western Canadian Deans of Graduate Studies website (<http://wcdgs.ca/>). University of Manitoba graduate students interested in participating can learn more about how to apply on the Registrar's Office (<https://umanitoba.ca/registrar/letter-permission/>) website.

The Western Deans' Agreement normally provides an automatic tuition fee waiver for visiting students. Graduate students paying normal required tuition fees to their home institution will not pay tuition fees to the host institution.

Only degree level courses from recognized post-secondary institutions will be considered; courses that are part of certificate or diploma programs will not be approved.

Program fees are always to be paid to the home institution, regardless of coursework taken at another institution. Students may be required to pay student, activity, application, or other ancillary fees to the host institution, according to general policies in effect at the host institution. Wherever possible, these fees will also be waived.

Students will qualify for the fee waiver if they:

1. Present the "Authorization Form: Western Deans' Agreement (<http://wcdgs.ca/content/dam/ex/wcdgs/Western-Deans-Agreement.pdf>)" signed by the University of Manitoba graduate student's Department/Unit Head or advisor/co-advisor to the Faculty of Graduate Studies at least eight (8) weeks prior to the start of the term of the course(s) at the host institution. The Dean of the Faculty of Graduate Studies (or designate) will review and sign the form and submit it to the participating Western Deans' institution at least six (6) weeks prior to the start of the term, specifying the course(s) to be taken for credit toward a graduate degree program at the student's home institution;
2. Are in good standing in a graduate program at the home institution;
3. Do not owe tuition and/or fees at the home institution.

Students must meet all requirements as prescribed by the host university's regulations, deadlines, class capacities, and course prerequisites.

Registration is possible in courses at both the graduate and undergraduate levels, and in credit courses offered through distance education or other means. To be eligible, courses must be an integral part of the applicant's graduate degree program. Fee waiver is not permitted for audit or non-credit courses.

Students must have the Authorization Form approved by the relevant Department/Unit Head and the Faculty of Graduate Studies at the host institution at least one (1) month prior to the commencement of the course(s) requested. The fee waiver is not available retroactively.

Students are subject to regulations of the home institution governing credit for the courses to be undertaken. As a condition of registration at the host institution, students will arrange for official transcripts from the host institution to be sent to the home institution confirming successful completion of courses selected.

Students must send confirmation of registration and notice of any change to the Registrar's Office of the home institution at the time of registration or course change is completed.

Students may not claim fee waivers under the terms of this Agreement for a period of more than three (3) terms in total.

Each institution has its own regulations regarding the maximum number of transfer credits permitted in a given degree program. A list of the participating Universities can be found on the Western Canadian Deans of Graduate Studies website (<http://wcdgs.ca/>).

## Canadian University Graduate Transfer Agreement (CUGTA)

The CUGTA (<https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#canadian-university-graduate-transfer-agreement>) is to provide students in good standing enrolled in a graduate degree or diploma program at a CAGS member university the opportunity to avail themselves of courses offered at another member institution (host) for transfer credit to the program at their institution (home).

The CUGTA provides an application fee waiver for visiting students when applying through this agreement. Tuition fees are not automatically waived, it is up to the host institution whether tuition fees will be charged.

Program fees are always paid to the home institution, regardless of coursework taken at another institution. Students may be required to pay tuition, student, activity, application, or other ancillary fees to the host institution, according to general policies in effect at the host institution.

Only degree-level courses from recognized post-secondary institutions will be considered; courses that are part of certificate or diploma programs will not be approved.

Students must meet all requirements as prescribed by the host university's regulations, deadlines, class capacities, and course prerequisites.

Registration is possible in courses at both the graduate and undergraduate levels, and in credit courses offered through distance education or other means. To be eligible, courses must be an integral part of the applicant's graduate degree program.

Students must submit the CUGTA form to their home University at least eight (8) weeks prior to the start of classes.

Students must have the Authorization Form approved by the relevant Department/Unit Head and the Faculty of Graduate Studies at the host institution at least one (1) month prior to the commencement of the requested course(s).

Students are subject to the home institution's regulations concerning credit for the courses to be taken. As a condition of registration at the host institution, students will arrange for official transcripts from the host institution to be sent to the home institution confirming successful completion of course(s) selected.

Students must send confirmation of registration and notice of any changes to the home institution at the time of registration/registration revision is completed.

Each institution has its own regulations regarding the maximum number of transfer credits that are permitted in a given degree program.

Most but not all Canadian Universities that are a member of the Canadian Association for Graduate Studies (<https://cags.ca/institutional-members/>) participate in the CUGTA. Student must contact the host institution for information on whether they accept the CUGTA.

## Course Classifications

### General Classifications

Students who register themselves through Aurora Student Information System (Aurora Student) must have prior approval of the Department/Unit Head or designate. Students registering through Aurora Student should add only those courses that are a Major (Standard "S") course in their program. Courses with Auxiliary "X", Audit "A", or Occasional "O" status (see below) must be added by the department/unit.

**"X" Auxiliary course:** Course is not a major requirement of the program but is required/recommended by the student's advisor/co-advisor. The student's advisor/co-advisor and Department/Unit Head must determine if there is a valid need for the registration in courses under the X classification. Extra courses that are not part of the Master's or Ph.D. program but which are specified and required/recommended by the student's advisor/co-advisor, may be classified as "X" and the grade will not be included in the degree GPA which appears on the transcript. However, "X" course grades may be used in the calculation of the GPA for continuation in the program and a minimum grade requirement may be required for "X" coursework by the department/unit. (Please consult the individual department/unit's supplementary regulations.) Additionally, "X" courses are used in the calculation of the GPA for the purposes of Admission and Awards (e.g., the University of Manitoba Graduate Fellowship (UMGF) and International Graduate Student Scholarship (IGSS)). A maximum of twelve (12) credit hours under the "X" course classification is permitted while registered in a given program.

**"A" Audit course:** Course is not taken for credit. No grade is recorded. Additional fees will be assessed.

**"O" Occasional course:** Course is not a requirement of the program. Additional fees will be assessed.

#### Note:

- Students are not permitted to audit a course and take the same course for credit at a later date.
- Changes in course classifications are regarded as course/program changes and may not be made without approval (refer to Registration Revision (p. 1341)) or after the deadline dates for course changes as indicated in the Academic Schedule of the *Calendar*.

### Incomplete Courses

Students who are unable to complete the term work prescribed in a course may apply to the instructor prior to the end of lectures for an incomplete grade and time extension for work completion. Even if the student is granted an incomplete grade ("I") and an extension for work, the student will still need to write the final examination if one is scheduled for the course.

Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the instructor will calculate the temporary grade using a zero value for incomplete work. In no case will the satisfaction of the incomplete requirements cause a grade to be lowered.

The following maximum extensions are allowed:

- August 1st for courses terminated in April
- December 1st for courses terminated between May and August
- April 1st for courses terminated in December

If a final grade is not reported within one (1) month of the extension deadline, the letter "I" will be dropped, and the grade will remain as awarded. The student's opportunity to improve the grade will have lapsed. Please visit the Registrar's Office (<https://umanitoba.ca/registrar/grades/#time-extensions-for-incomplete-grades>) website for further information.

### Continuing Courses (CO)

For those graduate level courses (6000, 7000, and 8000) which are being taken by students enrolled in the Faculty of Graduate Studies and which continue beyond the normal academic term, the instructor shall recommend that a grade classification of CO be used until such time as a final grade can be established. If the course is not completed by August 31, the student must re-register for the course(s).

In the absence of an assigned mark of CO, the student may receive a mark of F in the course.

#### Note:

With the exception of "GRAD" courses, a CO will normally not be permitted longer than twelve (12) months. In exceptional circumstances, where a CO grade is requested for a second twelve (12) months, at the time the CO grade is submitted, the instructor and Department/Unit Head must also submit the "Recommendation for Continuing Status of a Course" form stating the reason for the CO and the deadline by which the course must be completed.

### Cross-Listed Courses

Cross-listed courses are defined as courses taught at the same time and in the same location.

The regulations below place limits on the extent to which cross-listed courses may be used to meet graduate program requirements.

1. In order to receive credit for any 7000-level course that is cross-listed with a 3000-, 4000-, or 5000-level undergraduate course, the 7000-level course must have a distinct syllabus, and the course content and evaluation methods must be at the graduate-level.
2. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a 1000- or 2000-level undergraduate course unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate.
3. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a previously completed course.

## Student Status/Categories of Students

### Full-Time and Part-Time Students

Graduate students are admitted as full-time students. Graduate student status is not determined by the number of credit hours taken per term, unless the student is admitted as Pre-Master's. Therefore, students who spend much of the time in a laboratory or library engaged in research or writing a thesis/practicum, or who spend part of the academic year engaged in research elsewhere, are regarded as full-time students.

Student status should be determined by the student and advisor/co-advisor, and changes must be requested on the "Part-Time Status" form. The form must be approved by the Department/Unit Head and submitted to the Faculty of Graduate Studies. A change to part-time status cannot be granted solely for financial circumstances. Students are not permitted to change to part-time status more than once within their program. Once a student declares as part-time, they may return to full-time status once,



but cannot subsequently revert to part-time. Declaration of full/part time status must be made prior to the end of the registration revision period in the Fall and/or Winter terms and within one (1) month of the start of the Summer term.

For every full year (12 months) that a Master's student is declared as part time, they will receive an additional four (4) months in time to complete their program. For every two (2) full years (24 months) a Master's student is declared as part time, they will receive an additional year (12 months) in time to complete their program. Master's students who declare part time status for less than one year (12 months) are not permitted any additional time to complete their program. Retroactive status changes will not be made.

For every two (2) full years (24 months) that a Ph.D. student is declared as part time, they will receive an additional four (4) months in time to complete their program. Ph.D. students who declare part time status for less than two (2) full years (24 months) are not permitted any additional time to complete their program. Retroactive status changes will not be made.

### Pre-Master's Students

In specific cases where the academic background of the student is judged to be insufficient for the given program in a department/unit, the department/unit may recommend that the student be admitted to a Pre-Master's program of study. The Pre-Master's program is intended to bring the student's standing to approximately the level of an Honours graduate in the major department/unit, and to satisfy prerequisites for courses.

See General Regulations: Pre-Master's (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-pre-masters/>).

### Occasional Students

A student wishing to take graduate courses with no intention of applying them toward an advanced degree at The University of Manitoba is classified as an occasional student. Occasional students must apply via the regular FGS admission process (to the department/unit offering the course or majority of courses) and meet the same degree and grade point average entrance requirements as regular graduate students and must write final examinations in the courses taken (unless audited), but will not receive credit toward a degree. In special circumstances, an occasional student may apply for permission to proceed to a degree program and also apply for transfer, for credit, of courses previously taken in the "occasional" category.

Occasional student status is not advised for international students due to study permit limitations. International students interested in becoming an occasional student should contact the Graduate Studies admissions office and University of Manitoba International Centre.

#### Note:

1. Transfer of courses from the "occasional" category to a degree program is not automatic: request for advance credit must be made within the first year of a degree program on the "Advance Credit – Transfer of Credit (<https://umanitoba.ca/graduate-studies/forms/t>)" form.
2. Fees paid by a student while registered as an occasional student are not transferable to a degree program at a later date.
3. Registration in the occasional student category can be for no more than one (1) academic year (September 1 - August 31) without reapplication.

4. The majority of coursework per academic year must be taken at the graduate level while registered as an occasional student.
5. Students admitted as Occasional are required to upload proof of instructor permission (in the application for admission) to take the courses as Occasional.

### Joint Master's (With the University of Winnipeg)

The University of Manitoba and the University of Winnipeg offer four (4) joint Master's programs: History, Religion, Public Administration, and Peace and Conflict Studies. The University of Manitoba, Faculty of Graduate Studies is responsible for the administration of the joint programs, and students must complete the regular University of Manitoba application and registration forms. Students taking Pre-Master's qualifying work for these programs register at the university where the courses are being taken.

### Visiting Students

Visiting students are students who are registered at another institution who are taking one (1) or more courses at The University of Manitoba on a Letter of Permission from their home university. Visiting students must submit an online application, along with a \$100.00 (CDN) non-refundable application fee, in addition to copies of transcripts from all institutions attended and a successfully completed English Language Proficiency Test from the approved list, if applicable. Applications must be submitted to the Faculty of Graduate Studies a minimum of one (1) month prior to the start of the intended term of study.

#### Note:

1. Fees paid by a student while registered as a visiting student are not transferable to a degree program at a later date.
2. Registration in the visiting student category can be for no more than one (1) academic year (September 1 - August 31) without reapplication.
3. The majority of coursework per academic year must be taken at the graduate level while registered as a visiting student.
4. Registration at two different universities on a Letter of Permission (<https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#letter-of-permission>) (Including Western Dean's and CUGTA) must have permission from the Dean of Graduate Studies. Students must provide a letter from their home department stating that they are in good academic standing and that they are permitted to take courses at multiple institutions.

## Academic Performance – General

### General Note

**Students are responsible for ensuring that they meet all degree and program requirements.** The advisor (and co-advisor, if applicable), advisory committee, and department/unit must also ensure that each student follows Faculty of Graduate Studies regulations, department/unit supplementary regulations and meets all program requirements. The Faculty of Graduate Studies performs a final check of Faculty of Graduate Studies minimum requirements for each student just prior to graduation. Students are cautioned, therefore, to periodically check all regulations with respect to their degree requirements. Failure to meet all the requirements will render a student ineligible to graduate.

Departments/Units may make recommendations with respect to the regulations concerning minimum academic performance; however, enforcement of academic regulations rests with the Faculty of Graduate Studies. The following procedures apply to recommendations made by departments/units:

The department/unit is responsible for informing the Faculty of Graduate Studies when a student's performance is unsatisfactory in research or coursework and the department/unit must outline any recommended remedial action(s).

The department/unit must notify the student of the deficiency and of its recommendation.

If the department/unit does not recommend remediation, or if the student fails to satisfy any required remedial action, the student may be Required to Withdraw from the Faculty of Graduate Studies.

**Note:**

When a graduate student is Required to Withdraw from a program of study, the notation on the academic record will be: "Required to Withdraw".

A student who has been Required to Withdraw from a graduate program may be permitted to apply for admission to another graduate program only if the application for admission is approved by the Dean of the Faculty of Graduate Studies.

Voluntary withdrawal from a program is only permitted if the student is in good academic standing. Good academic standing includes, but is not limited to, the regulations contained in sections Academic Performance and Performance Related to Coursework without exceeding the maximum time permitted to complete a program.

Recommendations of departments/units may supersede student requests for voluntary withdrawal.

## Bona Fide Academic Requirements (BFAR)

The following Bona Fide Academic Requirements (BFAR) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills. Students must also meet additional requirements that may be specified for their program.

Students must meet requirements as outlined in both BFARs and Supplementary Regulation documents as approved by Senate.

Unless otherwise indicated, students may elect to complete any/all of the following requirements with or without appropriate and authorized assistive technology/aids. Students must consult Student Accessibility Services (SAS) regarding authorization for these procedures. Students may also refer to the University's Accessibility Policy and Procedures (<https://catalog.umanitoba.ca/graduate-studies/university-policies-procedures/accessibility-policy/>).

BFAR Statement	Taught	Assessed
Student must successfully complete a co-operative experience or practicum, if required by their program.	Master's GRAD 7030	GRAD 7030
Student must successfully complete a comprehensive exam, project, studio exhibition, or equivalent, as required by their program and determined by the assigned examining committee.	GRAD 7010 GRAD 7050 GRAD 7090 GRAD 7200	GRAD 7010 GRAD 7050 GRAD 7090 GRAD 7200 Examining/ Adjudication Committee
Student must produce a recorded/published thesis commensurate with degree being sought.	Master's GRAD 7000 Doctoral GRAD 8000	GRAD 7000 GRAD 8000
Student must successfully defend their thesis (where required), as determined by the assigned examining committee, in real-time.	Master's GRAD 7000 Doctoral GRAD 8000	GRAD 7000 GRAD 8000
Student in doctoral program must complete a candidacy exam (or equivalent) as required by their program and determined by the assigned examining committee.	GRAD 8010	GRAD 8010
Student must demonstrate knowledge of the University of Manitoba's policy on academic integrity, plagiarism, and cheating.	GRAD 7500	GRAD 7500

<p>Student must conduct research in a safe and ethical manner, referring to their respective ethics board and supervisor(s) to ensure respect is maintained for: human dignity and/or animal welfare; vulnerable persons; informed consent; justice and diversity; confidentiality and privacy; beneficence and non-maleficence in the work that they conduct.</p> <p>Student must complete coursework as required by their program.</p>	GRAD 7300	GRAD 7300
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Individual unit BFARs available on the Graduate Studies website. (<https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#all-bona-fide-academic-requirements>)

## Academic Performance

Student progress shall be reported **at least** annually, (but not to exceed once every four (4) months), to the Faculty of Graduate Studies on the “Progress Report” form (<https://umanitoba.ca/graduate-studies/forms/>). Performance that remains “Satisfactory” throughout the year does not need to be reported to the Faculty of Graduate Studies more than annually, but should remain on file in the department/unit.

Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Graduate Chair and/or Department/Unit Head to the Dean of the Faculty of Graduate Studies on the “Progress Report” form. Students who receive two (2) consecutive “in need of improvement” or one (1) “unsatisfactory” rating will normally be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be “Required to Withdraw”.

## Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit recommends remedial action (subject to approval by the Dean of the Faculty of Graduate Studies).

A student may be permitted to remove deficiencies in grades by repeating the course or replacing it with an equivalent substitute course as determined by the student’s department/unit. In the event that a substitute course is used for remediation, the substituted course must be at the same or higher level as the failed course (e.g., at the graduate level for a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of six (6) credit hours of remediated coursework. If a course is repeated or replaced, the higher grade obtained will be used in the determination of the degree grade point

average. Students receiving a grade of “C” or less in more than six (6) credit hours of coursework are normally Required to Withdraw, unless otherwise stated in the department/unit’s supplementary regulations. A student may also be permitted the opportunity to improve a low DGPA as determined by the Graduate Chair of the student’s department/unit through the registration and completion of additional course(s).

Students are normally expected to complete remedial action by the end of the subsequent term.

Graduate students are not permitted to repeat a previously passed course, unless the department/unit recommends that course(s) be re-taken if they have lapsed or expired (refer to Master’s Degree General Regulations (p. 1353) and Doctor of Philosophy General Regulations (p. 1359)).

### Note:

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Supplemental exams are not permitted to students in the Master’s or Ph.D. program, unless otherwise stated in the department/unit’s supplementary regulations.

A summary of all actions taken administratively are to be reported to the Faculty of Graduate Studies Executive Committee.

## Mandatory Academic Integrity Course (GRAD 7500 or GRAD 7501)

All students, including those in a Pre-Master’s program, are required to register for and complete GRAD 7500 Academic Integrity Tutorial (0 credit hours) within their first term of initial registration. Université de Saint-Boniface graduate students may choose to complete GRAD 7500 or the French-language equivalent, GRAD 7501.

Failure to complete this course will result in a registration hold and a grade of “F/NP” being assigned to the course which may lead to being “Required to Withdraw” from the graduate program.

### Notes:

Students who have successfully completed GRAD 7500 in a previous program are not normally required to repeat the course upon entry to their new program so long as no more than one (1) term separates one program from another.

Students who have not completed GRAD 7500 or GRAD 7501 prior to embarking on a leave of absence must register in the course upon their return to their program.

Visiting and Occasional students are not expected to complete GRAD 7500. For further information see GRAD 7500 FAQ (<https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#grad-7500-academic-integrity>).

## Mandatory Research Integrity Online Course (GRAD 7300)

All students, including those in a Pre-Master’s program, are required to register for and complete GRAD 7300 prior to applying to any ethics

boards which are appropriate to the student's research, or within the student's first year, whichever comes first.

Failure to complete this course will result in a registration hold and a grade of "F/NP" being assigned to the course which may lead to being "Required to Withdraw" from the graduate program.

#### Notes:

Students who have successfully completed GRAD 7300 in a previous program are not normally required to repeat the course upon entry to their new program so long as no more than one (1) term separates one program from another.

Students who have not completed GRAD 7300 prior to embarking on a leave of absence must register in the course upon their return to their program.

Visiting and Occasional students are not expected to complete GRAD 7300. For further information see GRAD 7300 FAQ (<https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#grad-7300-research-integrity>).

## Graduate Focus on Aging Concentration

The Graduate Focus on Aging Concentration is available to any interested student who is enrolled in the Faculty of Graduate Studies and whose graduate work is concentrated in aging. To be eligible, a "Student intention to receive the Graduate Focus on Aging Concentration (<https://umanitoba.ca/graduate-studies/forms/>)" form must be submitted to the Faculty of Graduate Studies. Masters or Doctoral students must complete the requirements of the program to which they have been admitted and the requirements of the Graduate Focus on Aging Concentration.

The Graduate Focus on Aging Concentration requirements include:

1. Six (6) credit hours of graduate (7000-level or higher) courses that focus on aging and are approved by the student's Advisory Committee;
2. A thesis/practicum on an aging-related topic;
3. Having at least one advisory committee member who is officially affiliated with the Centre on Aging as a Research Affiliate (<https://umanitoba.ca/centre-on-aging/research/affiliates/>); and
4. Participating in the annual Spring Research Symposium of the Centre on Aging at least once as a poster presenter.

Graduate students may be able to attain their 6 credit hours of courses within the existing course requirements of their graduate program. Students must attain a minimum grade of C+ (or higher, if stipulated in the department/unit supplementary regulations), for the required 6 credit hours of aging courses.

Graduate students who are not in a thesis/practicum-based program will be considered on a case-by-case basis and will require approval in advance by the Dean of the Faculty of Graduate Studies.

Student progress in the Graduate Focus on Aging Concentration would normally be discussed with the student's Advisory committee, and progress documented on the "Student Intention to receive the Graduate Focus on Aging Concentration (<https://umanitoba.ca/graduate-studies/forms/>)" form which must accompany the Progress Report form submitted to the Faculty of Graduate Studies. The final Graduate Focus on Aging Concentration Completion ([studies/forms/\) form must be submitted no later than at least one week prior to the FGS deadline for graduands to submit theses/practica and other reports.](https://umanitoba.ca/graduate-</a></p>
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## General Regulations – Pre-Master's Admission and Program Requirements

Graduates of bachelor degree programs with a minimum Grade Point Average (GPA) of 3.0 (or equivalent) in the last two (2) previous years of full-time university study (60 credit hours) may be considered for admission to a Pre-Master's program. Departments/Units may specify higher or additional criteria. Admission to a Pre-Master's program does not guarantee future admission to a Master's program.

The purpose of the Pre-Master's program of study is to bring a student's background up to the equivalent of a required four (4)-year undergraduate degree and/or fulfill deficiencies in knowledge of a particular discipline. Departments/Units should assign to students, as part of their Pre-Master's program of study, an appropriate number of applicable upper level (3000 or 4000) undergraduate courses. These courses may not be transferred into a Master's program. Pre-Master's students are not normally allowed to register in 7000-level courses or above, with the exception of GRAD 7300 and GRAD 7500 (or GRAD 7501), unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate. If permission is granted, students may take a maximum of three (3) credit hours at the 7000 level or above and these credit hours must be taken as Occasional ("O"). A Pre-Master's student may only transfer a maximum of three (3) credit hours at the 7000 level into a prospective Master's program of study.

## Academic Performance

The Department/Unit Head is responsible for assigning the courses and monitoring the progress of each student.

A minimum degree grade point average of 3.0 with no grade below C+ must be maintained to continue in a Pre-Master's program. Students who fail to maintain this standing will be Required to Withdraw unless remedial action recommended by the department/unit (as described below) is approved by the Dean of the Faculty of Graduate Studies.

Students deficient in six (6) hours of credit or less may be permitted to write a supplemental examination (when offered in the department/unit's supplementary regulations) in courses in which a grade of C or less was obtained.

Students deficient in six (6) hours of credit or less with a grade of C, D, or F in a course or courses may be permitted, if the overall average is C or better, to write one (1) supplemental examination in each course (when permitted by the department/unit's supplementary regulations), to repeat the courses, or to take equivalent substitute courses.

A student may be permitted to remove deficiencies in grades by writing a supplemental examination or repeating courses only one (1) time for each course to a maximum of nine (9) credit hours of remedial coursework.

If a course is repeated or a supplemental examination is written, the highest grade obtained in that course will be used in the determination of the degree GPA.

The degree GPA is cumulative in a Pre-Master's program if more than one (1) year is required to complete the course requirements.

A summary of all action taken administratively is to be reported to the Faculty of Graduate Studies Executive Committee.

## General Regulations – Micro-Diploma Program Requirements

A Graduate Micro-Diploma is a short, flexible program of study focused on core knowledge in a field or interdisciplinary field of study at the graduate level. A Graduate Micro-Diploma consists of a minimum of six (6) credit hours to a maximum of nine (9) credit hours of coursework at the 7000-level or above. It may be stand alone and/or embedded in a graduate degree. A minimum of six (6) credit hours must be delivered by The University of Manitoba.

All students should consult department/unit supplementary regulations for specific details regarding a particular Graduate Micro-Diploma.

### Admission

Students who are eligible to be considered for direct admission to a program of study leading to the Graduate Micro-Diploma include:

- Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.
- Graduates from first-cycle Bologna compliant degrees.
- Students who have completed a Pre-Master's program from:
  - The University of Manitoba (see General Regulations - Pre-Master's (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-pre-masters/>)); or
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.

All students applying for a Graduate Micro-Diploma program must have attained a minimum GPA of 3.0 in the last two (2) previous years of full-time university study (60 credit hours). This includes those applying for direct admission and those entering from a Pre-Master's program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

### Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

A student may be permitted to remediate deficiencies in grades by repeating the course or replacing it with an equivalent substitute course as determined by the department/unit. In the event that a substitute course is used for remediation, the substituted course must be at the same or higher level as the failed course (e.g., at the graduate level for

a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of three (3) credit hours of coursework. If a course is repeated or replaced, the highest grade obtained will be used in the determination of the degree grade point average. Students receiving a grade of "C" or less in more than three (3) credit hours of coursework are normally Required to Withdraw from the Micro-Diploma, unless otherwise stated in the department/unit's supplementary regulations. A student may also be permitted the opportunity to improve a low DGPA as determined by the Graduate Chair of the student's department/unit through the registration and completion of additional course(s).

Students are normally expected to complete remedial action by the end of the subsequent term.

Graduate students are not permitted to repeat a previously passed course, unless the department/unit recommends that course(s) be re-taken if they have lapsed or expired (refer to Master's Degree General Regulations (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/masters-degrees-general-regulations/#Lapse-Credit-Courses>) and Doctor of Philosophy General Regulations (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/doctor-philosophy-general-regulations/#Lapse-Credit-Courses>)).

#### Note:

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Supplemental exams are not permitted to students in the Graduate Micro-Diploma program, unless otherwise stated in the department/unit's supplementary regulations.

### Time in Program

The expected time-to-completion for students in the Micro-Diploma program is one (1) academic year (i.e., three (3) consecutive terms). Micro-Diploma students are subject to the same re-registration requirements as all other graduate students.

### Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot normally be used for credit towards another degree;
- may not exceed three (3) credit hours of coursework required of the student's Graduate Micro-Diploma program at The University of Manitoba, so long as six (6) credit hours of the Graduate Micro-Diploma program is taken at the University of Manitoba.

Permission is granted in the form of a Letter of Permission (<https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#letter-of-permission>) which may be obtained by making an application to the Faculty of Graduate Studies; an original transcript and course equivalency must be provided.

## Recognition for Credit

Graduate-level courses completed as part of a Graduate Micro-Diploma may be recognized toward a Graduate Diploma or graduate degree program (where appropriate) and subject to the Senate approved program regulations. Graduate Micro-Diplomas may be stackable or laddered (refer to definitions per the Certificate and Diploma Framework ([https://umanitoba.ca/admin/governance/media/Certificate\\_and\\_Diploma\\_Framework\\_2021\\_02\\_03.pdf](https://umanitoba.ca/admin/governance/media/Certificate_and_Diploma_Framework_2021_02_03.pdf))) into Graduate Diplomas or graduate degree programs in same or related fields of study.

## General Regulations – Diploma Program Requirements

A graduate diploma is a structured program of study focused on developing graduate-level knowledge in a field or interdisciplinary field of study. A graduate diploma consists of a minimum of twelve (12) credit hours to a maximum of eighteen (18) credit hours of coursework primarily at the 7000-level or above. It is a stand-alone program. A minimum of 50% of the credit hours must be delivered by The University of Manitoba.

All students should consult department/unit supplementary regulations for specific details regarding a particular Graduate Diploma.

## Admission

Students who are eligible to be considered for direct admission to a program of study leading to the diploma include:

- Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.
- Graduates from first-cycle Bologna compliant degrees.
- Students who have completed a Pre-Master's program from:
  - The University of Manitoba (see General Regulations - Pre-Master's (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-pre-masters/>)); or
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.

All students applying for a diploma program must have attained a minimum GPA of 3.0 (or equivalent) in the last two (2) previous years of full-time university study (60 credit hours). This includes those applying for direct admission and those entering from a Pre-Master's program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

## Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit

recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

A student may be permitted to remove deficiencies in grades by repeating the course or replacing it with an equivalent substitute course. In the event that a substitute course is used for remediation, the substituted course must be at the same or higher level as the failed course (e.g., at the graduate level for a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of three (3) credit hours of remediated coursework. If a course is repeated or replaced, the highest grade obtained will be used in the determination of the degree grade point average. Students receiving a grade of "C" or less in more than three (3) credit hours of coursework are normally Required to Withdraw, unless otherwise stated in the department/unit's supplementary regulations. A student may also be permitted the opportunity to improve a low DGPA as determined by the Graduate Chair of the student's department/unit through the registration and completion of additional course(s).

Students are normally expected to complete remedial action by the end of the subsequent term.

Graduate students are not permitted to repeat a previously passed course, unless the department/unit recommends that course(s) be re-taken if they have lapsed or expired (refer to Master's Degree General Regulations (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/masters-degrees-general-regulations/#Lapse-Credit-Courses>) and Doctor of Philosophy General Regulations (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/doctor-philosophy-general-regulations/#Lapse-Credit-Courses>)).

### Note:

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Supplemental exams are not permitted to students in the Graduate Diploma program, unless otherwise stated in the department/unit's supplementary regulations.

## Time in Program

The expected time-to-completion for students in the Diploma program is the same as the Master's. The minimum time is equivalent to two (2) terms (8 months) and the maximum time allowed for the completion of the Diploma is four (4) years for students declared as full-time and six (6) years for students declared as part-time (see Student Status/ Categories of Students (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/application-admission-registration-policies/#Student-Status>) for information on calculating maximum time for students). Diploma students are subject to the same re-registration requirements as all other graduate students.

## Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot be used for credit towards another degree;

- may not exceed 50% of the credit hours of coursework required of the student's Graduate Diploma program at The University of Manitoba.

Permission is granted in the form of a Letter of Permission (<https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#letter-of-permission>) which may be obtained by making an application to the Faculty of Graduate Studies; an original transcript and course equivalency must be provided.

## Recognition for Credit

Graduate-level courses completed as part of a Graduate Diploma may be recognized toward a graduate degree program (where appropriate) and subject to the Senate approved program regulations. Graduate Diplomas may be stackable or laddered (refer to definitions per the Certificate and Diploma Framework ([https://umanitoba.ca/admin/governance/media/Certificate\\_and\\_Diploma\\_Framework\\_2021\\_02\\_03.pdf](https://umanitoba.ca/admin/governance/media/Certificate_and_Diploma_Framework_2021_02_03.pdf))) into graduate degree programs in same or related fields of study.

# Master's Degrees General Regulations

## General

Although general regulations apply to all students, individual departments/units may have additional regulations that supplement these general regulations. All such supplementary regulations must be approved (as specified by the By-Laws of the Faculty of Graduate Studies), be published and available to students (please refer to the following link ([https://umanitoba.ca/faculties/graduate\\_studies/admin/supplemental\\_regulations.html](https://umanitoba.ca/faculties/graduate_studies/admin/supplemental_regulations.html))), and be kept on record in the Faculty of Graduate Studies. All students should consult department/unit supplementary regulations for specific details regarding admission, program requirements, progression, and completion. Individual departments/units may offer Master's programs by one or more of the following:

- Thesis/practicum-based;
- Course-based;
- Comprehensive Exam;
- Project;
- Major research paper.

## Admission

Students who are eligible to be considered for direct admission to a program of study leading to the Master's degree include:

- Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.
- Graduates from first-cycle Bologna compliant degrees.
- Students who have completed a Pre-Master's program from:
  - The University of Manitoba (see General Regulations - Pre-Master's (p. 1347)); or
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.

All students applying for a Master's degree program must have attained a minimum GPA of 3.0 (or equivalent) in the last two (2) years of full-time university study (60 credit hours). This includes those applying for direct admission and those entering from a Pre-Master's program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

## Program Requirements

In general, students must complete one of the programs of study described below for the Master's degree. However, the program of study is determined by the department/unit and may follow the department/unit's supplementary regulations. Some programs are subject to an external accrediting body. In such programs, the credit hours and course requirements shall reflect the requirements of the department/unit's external accrediting body. Students should refer to department/unit supplementary regulations.

Any single course cannot be used for credit toward more than one degree.

### Thesis/Practicum Route

A minimum of twelve (12) credit hours of coursework, unless otherwise stated in the department/unit's supplementary regulations, plus a thesis or practicum is required. The minimum must include at least six (6) credit hours at the 7000-level or above, with the balance of the coursework at the 3000-level or above. A maximum of twenty-four (24) credit hours of coursework is allowed unless the department/unit's supplementary regulations indicate otherwise. The student must complete the thesis/practicum at The University of Manitoba.

### Course-based, Major Research Paper, Project or Comprehensive Examination Route

A minimum of twenty-four (24) credit hours of coursework is required. If the student is in the comprehensive examination route, a comprehensive examination(s) is required. The minimum must include at least eighteen (18) credit hours at the 7000-level or above with the balance of the coursework at the 3000-level or above. A maximum of forty-eight (48) credit hours of coursework is allowed unless a department/unit's supplementary regulations indicate otherwise. Refer to unit supplementary regulations concerning specific regulations on coursework, major research paper, project and/or comprehensive examination requirements.

### Language Requirements

Some department/units specify an additional language requirement for the Master's degree. Students should check department/unit supplementary regulations regarding this requirement.

### Advance Credit

Advance credit for courses completed prior to admission to a Master's program will be considered on a case-by-case basis. The student's department/unit must make a request to the Faculty of Graduate Studies by completing the "Recommendation for Advance Credit-Transfer of Courses (<https://umanitoba.ca/graduate-studies/forms/>)" form.

- Application for advance credit must be made within the first year of the program (see Lapse or Expiration of Credit of Courses (p. 1353)).

- No more than 50% of the required coursework for the program can be achieved using advance credit.
- A course may not be used for credit toward more than one (1) degree.
- The student must register at The University of Manitoba for at least two (2) terms within a single academic year and must also complete all other program requirements at The University of Manitoba (or in the case of a Joint Master's Program student, at The University of Winnipeg).
- A Pre-Master's student may only transfer a maximum of 3 credit hours at the 7000 level taken as occasional into a prospective Master's program of study.

Regardless of the number of courses approved for which advance credit is granted, all students are required to pay all applicable program fees (i.e., program fees will not be pro-rated according to advance credit granted).

## Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot be used for credit towards another degree;
- may not exceed 50% of the minimum credit hours of coursework required of the student's graduate program at The University of Manitoba.

Permission is granted in the form of a Letter of Permission (<https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#letter-of-permission>) which may be obtained by making an application to the Faculty of Graduate Studies; an official transcript and course equivalency must be provided.

## Time in Program

The minimum time for students in the Master's program is equivalent to two (2) terms (8 months). Completion of most programs requires more than this and students should check department/unit supplementary regulations regarding specific requirements.

The maximum time allowed for the completion of the Master's degree is four (4) years for students declared as full-time and six (6) years for students declared as part-time (see Student Status/Categories of Students for information on calculating maximum time for students). Individual departments/units and/or programs may have specified minimum and maximum time limits.

Requests for extensions of time to complete the degree will be considered on an individual basis and must be submitted to the Dean of the Faculty of Graduate Studies using the "Time Extension Request" (<https://umanitoba.ca/graduate-studies/forms/>) form **at least three (3), but no more than four (4), months** prior to expiration of the respective maximum time limit.

A student who has not completed the degree requirements within the time limit or within the time limit of the extension will be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

# Student's Advisor and Co-Advisor

## Student's Advisor

Each student should have an advisor upon entry into the program, and must have one assigned no later than one (1) term following initial registration. Advisors are required for thesis/practicum routes, but not usually course-based routes or some comprehensive exam routes. In department/units where the choice of thesis/practicum topic and thesis/practicum advisor are postponed after a student's entry into the program, the Department/Unit Head, within one (1) term, shall appoint a faculty member to advise the student in the interim period before the regular advisor is assigned or chosen. Students must have an advisor through to the end of their program in programs requiring an advisor.

The advisor is responsible for supervising the student's graduate program. The advisor is the student's first point of contact at the University of Manitoba and must be familiar with the general policies and regulations of the Faculty of Graduate Studies as well as the specific supplementary regulations of their academic department/unit. In this capacity, the advisor assists the student in planning the graduate program and ensures that the student is aware of all graduate program requirements, degree regulations, and general regulations of the academic department/unit, the Faculty of Graduate Studies, the university, and external funding agencies. The advisor provides counsel for all aspects of the graduate program, and stays informed of the student's scholarly activities and progress. The student's advisor also acts as a channel of communication to the student's advisory committee, the department/unit and the Faculty of Graduate Studies.

The advisor must:

- hold an appointment in the student's department/unit;
- be a member of the Faculty of Graduate Studies<sup>1</sup>;
- hold at least a Master's degree or equivalent<sup>2</sup>;
- be active in their field;
- have expertise in a discipline related to the student's program.

<sup>1</sup> See <https://umanitoba.ca/graduate-studies/graduate-studies-administration> (<https://umanitoba.ca/graduate-studies/graduate-studies-administration/>) for details.

<sup>2</sup> Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis. The potential advisor's demonstrated research record and current research activities will be considered as part of the equivalency assessment. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Master's or Ph.D.

It is the responsibility of the Department/Unit Head to determine whether faculty members meet these criteria, and also to report to the Dean of the Faculty of Graduate Studies on equivalency as necessary. Any exceptions or special circumstances must be recommended by the Department/Unit Head and approved by the Dean of the Faculty of Graduate Studies who considers each case on an individual basis.

## Student's Co-advisor

Upon approval of the Department/Unit Head, an advisor and a maximum of one (1) co-advisor may advise a student. The co-advisor must:

- be a member of the Faculty of Graduate Studies<sup>1</sup>;
- hold a Master's or equivalent<sup>2</sup>;



- be active in research;
- have expertise in a discipline related to the student's program;

<sup>1</sup> See <https://umanitoba.ca/graduate-studies/graduate-studies-administration/> for (<https://umanitoba.ca/graduate-studies/graduate-studies-administration/>) details.

<sup>2</sup> Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential co-advisor's demonstrated research record and current research activities. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Master's or Ph.D.

The co-advisor may be identified either at the beginning of, or mid-way through, a student's program. In all instances, the Faculty of Graduate Studies must be informed of, and approve, the co-advisor arrangement. If a co-advisor is added midway through the student's program, a new Advisor Student Guidelines must be completed.

When an advisor and co-advisor are assigned, together they shall fulfill the role of the advisor (that is, neither shall fulfill any other advisory or examining committee membership requirements for that student). One (1) advisor must be identified as the primary advisor; the advisor/co-advisor share a single vote. Both the advisor and co-advisor's signatures are required on all documents where the advisor's signature is required.

## Student's Advisor/Co-advisor

A student who also holds an appointment at The University of Manitoba at the rank of Assistant Professor and above or Instructor 1 and above cannot have an advisor or co-advisor with an appointment in the same department/unit.

The advisor, co-advisor (if applicable) and student must discuss and complete the Faculty of Graduate Studies Advisor-Student Guidelines prior to the commencement of any research and no later than the submission of the first Progress Report for the student. If a student does not have an advisor/co-advisor, then the interim advisor will be required to complete the Advisor-Student Guidelines. The advisor/co-advisor and the student are required to approve the agreement. If the parties cannot agree on one or more component(s) of the Advisor Student Guidelines, the matter should be referred to the Department/Unit Head, Graduate Chair, or the Dean of the Faculty of Graduate Studies. A new Advisor-Student Guidelines is to be completed if there is a change in advisor/co-advisor or when a co-advisor is added mid-way through the student's program.

Should, during the student's program, the relationship between the student and advisor/co-advisor significantly deteriorate, the matter should be referred sequentially to the Department/Unit Graduate Chair, the Head of the department/unit, then to the Dean of the Faculty of Graduate Studies (or designate). It is the responsibility of the department/unit offering the program in which the student is studying to arrange an alternate advisor if this is appropriate and necessary. All students should consult department/unit supplementary regulations for specific details regarding advisor/co-advisor requirements.

## Advisory Committee

### Conflict of Interest

There are several circumstances that might lead to a real, perceived or potential Conflict of Interest (COI) in advisory and examining committees. A real COI could be present due to the existence of a (past or present) personal relationship that is romantic, sexual, marital, personal or familial. There is a potential for a perceived COI

in cases of recent (within the last 5 years) collaboration among committee members, which may result in the perception of a lack of fairness or impartiality. These examples are not intended to be comprehensive, and are provided solely for illustration. The University of Manitoba Conflict of Interest Policy ([https://umanitoba.ca/admin/governance/governing\\_documents/community/248.html](https://umanitoba.ca/admin/governance/governing_documents/community/248.html)) and Conflict of Interest Procedures ([https://umanitoba.ca/admin/governance/governing\\_documents/community/962.html](https://umanitoba.ca/admin/governance/governing_documents/community/962.html)) as well as the Conflict of Interest Between Evaluators and Students due to Close Personal Relationships ([https://umanitoba.ca/admin/governance/governing\\_documents/students/277.html](https://umanitoba.ca/admin/governance/governing_documents/students/277.html)) should also be consulted.

In addition to following the processes outlined in the above policies, COIs that exist within advisory and examining committees and proposed mitigation should be declared in writing to the Faculty of Graduate Studies to provide transparency to all relevant parties (including the student, committee members, unit leadership, and the Faculty of Graduate Studies). All reported conflicts will be reviewed by the Dean of the Faculty of Graduate Studies (or designate). If the conflict is deemed sufficiently significant and cannot be mitigated, a new committee may need to be struck.

## Thesis/Practicum Route

Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during their research program. The advisor/co-advisor is the Chair of the advisory committee.

The advisory committee must consist of a minimum of three (3) voting members (the advisor/co-advisor have a single vote), at least two (2) of whom must be members of the Faculty of Graduate Studies (<https://umanitoba.ca/graduate-studies/graduate-studies-administration/>).

All examiners must be deemed qualified by the Department/Unit Head and be willing to serve. It is expected that advisory committee members will have a Master's degree or equivalent. **Equivalency will be determined by the Dean of the Faculty of Graduate Studies or designate.**

Individuals who are not a member of the Faculty of Graduate Studies, and who do not hold a Master's degree or equivalent, but who possess specific and extensive expertise and experience, such as professionals, artists, Knowledge Keepers or Elders, may serve on the advisory committee as a full voting member. No more than one such knowledge expert may serve on any individual advisory committee and must be nominated by the Department/Unit Head or Graduate Chair with a justification of their role and be approved by the Dean of the Faculty of Graduate Studies or designate.

Advisory committees may alternatively include one (1) non-voting invited member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies. Committees may include a Knowledge Expert or invited member, not both.

Under no circumstances are graduate students, Post-Doctoral fellows, and Research Assistants or Associates to serve on graduate student advisory committees, regardless if they hold a rank of Adjunct Professor.

The composition of, and any changes to, the advisory committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies.

Additional specifications, if any, regarding the advisory committee are found in the department/unit supplementary regulations and students should consult these regulations for specific requirements.

## Course-based, Major Research Paper, or Comprehensive Examination Route

Normally, advisory committees are not required in these routes; however, however, the department/unit may specify advisory committee requirements in their supplementary regulations.

## Courses and Performance

### Course or Program Changes

Students are not permitted to change their program of study, including withdrawal from individual courses, without the approval of their advisor/co-advisor (and/or advisory committee) and Department/Unit Head. Withdrawal from courses or changes of course category without such approval may result in the student being Required to Withdraw from the Faculty of Graduate Studies.

### Lapse or Expiration of Credit of Courses

Courses completed more than seven (7) years prior to the date of awarding of a degree may not normally be used for credit toward that degree. A department/unit may request an exception to this limit on behalf of the student. Such requests, which will be evaluated on a case-by-case basis, must be submitted via the Course Currency form (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>) and accompanied by supporting information including a detailed summary of the content of the course as taken initially and as offered most recently, and a detailed rationale explaining how the student has maintained knowledge of the course content. If FGS approves the course's currency, the approval will be valid for one (1) year. After one (1) year, an updated Course Currency form may be required.

Courses completed more than ten (10) years prior to the date of awarding of a degree are deemed **expired and cannot** be used for credit toward that degree.

In the event that coursework is no longer considered current or has expired, students must take additional coursework (as recommended by the Department/Unit Head, or designate, and as approved by the Dean of the Faculty of Graduate Studies) to meet the minimum credit hour requirements for their program. The department/unit may recommend that students re-take previously passed course(s) which have lapsed or expired.

## Academic Performance

Student progress shall be reported *at least* annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the "Progress Report" form (<https://umanitoba.ca/graduate-studies/forms/>). Performance that remains "Satisfactory" throughout the year does not need to be reported to the Faculty of Graduate Studies more than annually, but should remain on file in the department/unit.

Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the "Progress Report" form. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will normally be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

## Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless the department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

Students are normally expected to complete remedial action by the end of the subsequent term.

## Performance not Related to Coursework

In some departments/units, students are required to demonstrate satisfactory academic performance in areas not related to performance in courses, such as attendance at or participation in course lectures, seminars and in laboratories and progress in research, thesis or practicum. The specific nature of satisfactory academic performance is outlined in individual department/unit supplementary regulations and students should consult these supplementary regulations for specific requirements. Unsatisfactory performance must be reported to the Faculty of Graduate Studies on the "Progress Report" (<https://umanitoba.ca/graduate-studies/forms/>) form. Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Department/Unit Head to the Dean of the Faculty of Graduate Studies.

## Academic Requirements for Graduation

All students must:

- maintain a minimum degree grade point average (DGPA) of 3.0 with no grade below C+;
- complete GRAD 7500
- complete GRAD 7300
- meet the minimum and not exceed the maximum course requirements; and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Individual department/units may have additional specific requirements for graduation and students should consult department/unit supplementary regulations for these specific requirements.

## Thesis/Practicum Route

### Thesis vs. Practicum

Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum. The thesis/practicum will normally be written in English but may be written in French. Departmental/unit supplementary regulations may allow the thesis/practicum to be written in a language other than English or French.

The thesis must be written according to a standard style acknowledged within the student's particular field of study and recommended by the department/unit, be lucid and well-written, and be reasonably free from errors of style and grammar (including typographical errors). Additional recommendations for a thesis are outlined in Appendix 1: Thesis/Practicum Types.

The thesis is developed under the mentorship of the advisor/co-advisor. Individual departments/units may have specific guidelines regarding the thesis proposal and its acceptance by the student's advisory committee and Department/Unit Head; students should consult department/unit supplementary regulations for specific requirements. Research must be approved by the appropriate Human Research Ethics Board or Animal Care Committee, if applicable, before the work has begun on the thesis research.

A practicum differs from the thesis in its emphasis on the application of theory, it is however similar in scope, span, and rigour. The practicum takes the form of an exercise in the practical application of knowledge and skill. It usually involves the careful definition of a problem, the application of appropriate knowledge and skills to the problem, and a report of the results in a manner suitable for evaluation by an examining committee. Individual departments/units have specific requirements for graduation and students should consult department/unit supplementary regulations for specific requirements. Research must be approved by the appropriate Human Research Ethics Board or Animal Care Committee, if applicable, before the work has begun on the practicum.

### Examining Committee

The advisor/co-advisor will recommend an examining committee to the Department/Unit Head for approval, which shall then be reported to the Faculty of Graduate Studies on the "Master's Thesis/Practicum Title and Appointment of Examiners" (<https://umanitoba.ca/graduate-studies/forms/>) form. This form must be approved by the Dean of the Faculty of Graduate Studies at least two (2) weeks prior to the distribution of the thesis.

Under normal circumstances, the examining committee will be the same as the advisory committee unless otherwise stipulated in the department/unit's supplementary regulations. The examining committee must consist of a minimum of three (3) members (including the advisor/co-advisor), at least two (2) of whom must be members of the Faculty of Graduate Studies. All examiners must be deemed qualified by the Department/Unit Head and be willing to serve. It is expected that, under normal circumstances, examination committee members will have a Master's degree or equivalent. Knowledge Experts and invited members are exempt from this requirement. The composition of, and any changes to, the examining committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies. Individual departments/units establish specific requirements for examination and students should consult department/unit supplementary regulations for specific requirements.

Under no circumstances are graduate students, Post-Doctoral fellows, and Research Assistants or Associates to serve on graduate student examining committees, regardless if they hold a rank of Adjunct Professor.

The Head of the department/unit arranges for the distribution of the thesis/practicum to the examiners. It is the duty of all examiners to read the thesis/practicum and report on its merits according to the following categories:

- Acceptable, without modification or with minor revision(s); or
- Acceptable, subject to modification and/or revision(s); or
- Not acceptable.

If two or more examiners do not approve the thesis, then the student is deemed to have failed the distribution.

Note that advisors and co-advisors share a single vote.

### Oral Examination

For departments/units requiring students to pass an oral examination on the subject of the thesis/practicum and matters relating thereto, the format of the oral examination is described in the supplementary regulations of the department/unit. Students should consult these supplementary regulations for specific requirements. A student has the right to an examination of the thesis/practicum if they believe it is ready for examination. It is the department/unit's responsibility to advise the student of any risk involved should they decide to proceed against the department/unit's recommendation.

The examination should be completed within one (1) month of distribution of the thesis/practicum to the examining committee.

Normally, all members of the examining committee should be present in real time at the examination. Under exceptional circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, one (1) member may be absent from the proceedings. No recordings will be permitted. Any in-person components of the oral examination must be held at either The University of Manitoba Fort Garry or Bannatyne campus, Université de Saint-Boniface, or the St. Boniface Hospital Albrechtsen Research Centre normally during regular business hours. The oral examination shall be open to all members of The University of Manitoba community except in exceptional cases. The oral examination may be closed, for example, when the results of the thesis/practicum research must be kept confidential for a period of time. In such cases, the examining committee and Department/Unit Head must request a closed examination to the Dean of the Faculty of Graduate Studies, who shall then decide that the final examination be closed to all but the examining committee. The Dean of the Faculty of Graduate Studies (or delegate) reserves the right to attend a closed examination.

The oral examination will normally be held in English, but may be held in French. Departmental/unit supplementary regulations may allow the oral examination to be held in a language other than English or French.

Following completion of the examination of the thesis/practicum, examiners will determine the results of the oral examination and the written thesis/practicum.

The examiners will also determine the nature of and procedures for approval of any revisions that will be required prior to submission of the thesis/practicum to the Faculty of Graduate Studies (via MSpace). The advisor/co-advisor is normally responsible for ensuring that revisions are completed according to the instructions from the examining committee.

The final assessment of the examiners shall be reported to the Faculty of Graduate Studies as either "approved" or "not approved" on the Master's Thesis/Practicum Final Report form (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>) submitted by the advisor. Each examiner must sign the form. If two (2) or more examiners do not approve the thesis/practicum, the student is deemed to have failed the examination.

### Failure

In the case of a failure of the thesis/practicum at the Master's level, the student may be allowed to defend the thesis a second time. In this case, a detailed written report will be prepared by the Chair of the examination committee and submitted to the Faculty of Graduate Studies, who will make the report available to the student, the student's advisor/co-advisor and the Department/Unit Head. Without this detailed report, the student may not defend the thesis the second time. The Department/Unit Head

shall convene a meeting of the members of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard and/or prepare for the second defence.

A student will be Required to Withdraw when the thesis/practicum has been rejected twice at the stage where:

- The examining committee reports on the merits of the written thesis/practicum;
- The oral examination; or
- A combination of both stages.

## Course-based, Major Research Paper, or Comprehensive Examination Route

Students must demonstrate their mastery of their field. The specific procedures for evaluation of this mastery are stated in individual department/unit supplementary regulations.

In those departments/units where comprehensive examinations are required, students should consult the department/unit's supplementary regulations for specific requirements.

The results of the comprehensive examinations shall be submitted to the Faculty of Graduate Studies on the "Report on Comprehensive Examination (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)" form as either "pass" or "fail." No student may sit comprehensive examinations more than twice. Any student who receives a "fail" on the comprehensive examination twice will be Required to Withdraw from the Faculty of Graduate Studies.

## Style and Format

The thesis/practicum must be written according to a standard style acknowledged by a particular field of study (please refer to Appendix 1: Thesis/Practicum Types (p. 1369)).

## Details for Submission of the Final Copy

Following the approval of the thesis/practicum by the examining committee via the "Master's Thesis/Practicum Final Report (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)" form and the completion of any revisions required by that committee, the thesis/practicum must be submitted to the Faculty of Graduate Studies as follows:

- One digital version submitted as an e-thesis/practicum at the MSpace website (<https://mspace.lib.umanitoba.ca/xmlui/login/>);
- "Copyright Licence Declaration/Infringement" form (completed on MSpace).

## Publication and Circulation of Thesis/Practicum

Every graduate student registering in a thesis/practicum Master's program at The University of Manitoba shall be advised that, as a condition of being awarded the degree, they will be required to grant a licence of partial copyright to the University and to the Library and Archives Canada for any thesis or practicum submitted as part of their degree program.

**Note:** This licence makes the thesis/practicum available for further research only. Publication for commercial purposes remains the sole right of the author.

The "Copyright Licence Declaration/Infringement" form must be completed in MSpace. This and other related regulations may give rise to important questions of law, and students may need additional legal advice on the copyright laws of Canada and/or other countries. Students who wish to obtain legal advice concerning their subsequent rights are advised to do so prior to signing the agreements. Signing of the licence agreements is normally done after the contents of the thesis/practicum have been delineated and the importance of copyright and/or patents fully understood and appreciated.

Publication in the above manner does not preclude further publication of the thesis or practicum report or any part of it in a journal or in a book. In such cases, an acknowledgement that the work was originally part of a thesis/practicum at The University of Manitoba should be included.

### Notes:

**Patents** – Refer to "Policy of Withholding Theses Pending Patent Applications (p. 1364)" in this Guide.

**Restriction of Thesis/Practicum for Publication** – In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to one (1) year after submission of the digital version of a thesis or practicum to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted.

**Library and Archives Canada** – Library and Archives Canada obtains a copy of the thesis via the University's MSpace repository.

## Final Requirements and Deadlines for Graduation

The student will be recommended for the Master's degree providing that all degree requirements have been satisfied. In addition, the Faculty of Graduate Studies must receive:

For the Thesis/Practicum:

- the final report on the thesis/practicum; and
- the final (corrected and advisor-/advisory committee-approved) version of the thesis/practicum uploaded to MSpace; and
- the Copyright Licence Declaration agreed to in MSpace

For the Comprehensive Examination/M.Eng project/Design Thesis:

- the final report form

The final requirements of the degree must be submitted to the Faculty of Graduate Studies by the appropriate deadline. For those programs that do not have a GRAD course associated with their culminating exercise, the department/unit must forward a list of names of their potential graduates to the Faculty of Graduate Studies by the deadline published on the Faculty of Graduate Studies (<https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/#submitting-your-thesis-to-committee-members>) website.

## Doctor of Philosophy General Regulations

The degree of Doctor of Philosophy (Ph.D.) is granted only upon evidence of general proficiency and of distinctive achievement in a special field.

In particular, the candidate must demonstrate an ability for independent investigation, original research or creative scholarship. This is expected to be presented in a thesis with a degree of literary skill and by an oral examination wherein the candidate exhibits mastery of their field. The Ph.D. is a research degree and is not conferred by The University of Manitoba solely as a result of coursework study.

Although general regulations apply to all students, individual department/units may have additional regulations that supplement these general regulations. All such supplementary regulations must be approved (as specified by the By-Laws of the Faculty of Graduate Studies), be published and available to students (please refer to the website ([https://umanitoba.ca/faculties/graduate\\_studies/admin/supplemental\\_regulations.html](https://umanitoba.ca/faculties/graduate_studies/admin/supplemental_regulations.html))), and be kept on record in the Faculty of Graduate Studies. All students should consult department/unit supplementary regulations for specific details regarding admission, program requirements, progression, and completion.

## Admission

### General Criteria

Normally, the completion of a Master's degree or equivalent from a recognized university and a cumulative GPA of 3.0 or equivalent in the last two (2) years of full-time university study (60 credit hours) is the minimum requirement for admission to the Ph.D. program.

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission. Some departments/units require completion of a thesis-based Master's program prior to admission to a Ph.D. program.

### Direct Admission from the Bachelor's Honours or Equivalent

With special recommendation of the department/unit, applicants without a Master's degree who have an honours Bachelor's degree or equivalent may be considered for entry to the Ph.D. program. These students must be outstanding in their academic background (GPA well above 3.0 in the last two (2) full years (60 credit hours) of undergraduate study).

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria. Once admitted, these students must complete at least 24 credit hours of coursework, unless the individual department/unit's approved supplementary regulations specify otherwise, and will be assessed Ph.D. fees for three (3) years. A minimum of 18 credit hours at the 7000-level or higher is required. Any further coursework beyond the minimum 18 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.

### Transfer from the Master's to the Ph.D. Program

Students who have not completed a Master's program may transfer to the Ph.D. program within the same department/unit upon the recommendation by the Department/Unit Head to the Faculty of Graduate Studies. The recommendation should be made within four (4) terms from the start of the Master's program. Fees paid, coursework completed, and time spent in the Master's program will normally be credited towards the Ph.D. program. Students must complete at least 24 credit hours of coursework unless the individual department/unit's approved supplementary regulations specify otherwise. A minimum of 18 credit hours at the 7000-level or higher is required. Any further coursework

beyond the minimum 18 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.

The request to transfer from a Master's to the Ph.D. program must be submitted to the Faculty of Graduate Studies via the Faculty's admission application at least one (1) month prior to the term for which the student intends to start the Ph.D. program. The applicant must indicate a request for transfer in their application.

The student will be admitted to a 3-year Ph.D. program and will pay a total of three years of program fees, including program fees paid in the Master's at the time of transfer. Students are cautioned that such transfers may impact on the duration of The University of Manitoba Graduate Fellowship.

Students who have previously completed a recognized Master's degree and are initially admitted and registered in a Master's program may transfer to the Ph.D. program within the same department/unit on the recommendation of the student's advisor/co-advisor and Department/Unit Head. Where a student holds a Master's degree that would be sufficient for admission to the Ph.D. program, students must complete at least 12 credit hours of coursework, unless the individual department/unit's approved supplementary regulations specify otherwise. The student will be admitted to a 2-year Ph.D. program and will pay a total of two years of program fees, including program fees paid in the Master's at the time of transfer.

### Provisional Admission to the Ph.D.

Students nearing the completion of the Master's degree may be accepted provisionally to the Ph.D. program for a 12-month period commencing with the first registration in the Ph.D. program. Further registration in the Ph.D. program is contingent upon completion of all requirements of the Master's degree within the 12 months. Students must maintain continuous registration in their Master's program until its completion. Students will require assistance from the department/unit and the Faculty of Graduate Studies to complete dual registration on the "Concurrent Curriculum Permission (<https://umanitoba.ca/graduate-studies/forms/>)" form in the Master's and Ph.D. program simultaneously.

## Student's Advisor, Co-advisor and Advisory Committee

### Student's Advisor

Every Ph.D. student must have an advisor throughout their program, who is recommended to the Faculty of Graduate Studies by the Department/Unit Head. The advisor is responsible for supervising the student's graduate program. The advisor is the student's first point of contact at the University of Manitoba and must be familiar with the general policies and regulations of the Faculty of Graduate Studies as well as the specific supplementary regulations of their academic department/unit. In this capacity, the advisor assists the student in planning the graduate program and ensures that the student is aware of all graduate program requirements, degree regulations, and general regulations of the academic department/unit, the Faculty of Graduate Studies, the university, and external funding agencies. The advisor provides counsel for all aspects of the graduate program, and stays informed of the student's scholarly activities and progress. The student's advisor also acts as a channel of communication to the student's advisory committee, the department/unit and the Faculty of Graduate Studies.

The advisor must:

- hold an appointment in the student's department/unit.
- be a member of the Faculty of Graduate Studies<sup>1</sup>;
- hold a Ph.D. or equivalent<sup>2</sup>;
- be active in research; and
- have expertise in a discipline related to the student's program.

<sup>1</sup> See <https://umanitoba.ca/graduate-studies/graduate-studies-administration> (<https://umanitoba.ca/graduate-studies/graduate-studies-administration/>) for details.

<sup>2</sup> Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential advisor's demonstrated research record and current research activities. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Ph.D.

Usually, the student and the advisor choose to work together by mutual agreement. In departments/units where the choice of thesis topic advisor is postponed for some time after entry into the program, the Head of the department/unit or the selection committee shall appoint a faculty member to advise the student as to the rules and regulations and on program and course requirements. This interim period must not exceed eighteen (18) months after entry into the program before a permanent advisor is chosen.

### Student's Co-advisor

In special circumstances, upon approval of the Head of the department/unit, an advisor and a maximum of one (1) co-advisor may advise a student. The co-advisor must:

- be a member of the Faculty of Graduate Studies<sup>1</sup>;
- hold a Ph.D. or equivalent<sup>2</sup>;
- be active in research; and
- have expertise in a discipline related to the student's program.

<sup>1</sup> See <https://umanitoba.ca/graduate-studies/graduate-studies-administration> (<https://umanitoba.ca/graduate-studies/graduate-studies-administration/>) for details.

<sup>2</sup> Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential co-advisor's demonstrated research record and current research activities. Note that M.D., D.M.D. and J.D. are undergraduate degrees and are not equivalent to a Ph.D.

The co-advisor may be identified either at the beginning of, or midway through, a student's program. In all instances, the Faculty of Graduate Studies must be informed of, and approve, the co-advisor arrangement. If a co-advisor is added midway through the student's program, a new Advisor-Student Guidelines must be completed. When an advisor and co-advisor are assigned, together they fulfill the role of the advisor (that is, neither fulfills any other advisory or examining committee membership requirements for that student). One (1) advisor must be identified as the primary advisor. The advisor and co-advisor share a single vote. Both the advisor and co-advisor's signatures are required on all documents where the advisor's signature is required.

### Student's Advisor/Co-advisor

A student who also holds an appointment at the University of Manitoba at the rank of Assistant Professor and above or Instructor 1 and above cannot have an advisor or co-advisor with an appointment in the same department/unit.

The advisor, co-advisor (if applicable) and student must discuss and complete the Faculty of Graduate Studies Advisor-Student Guidelines prior to the commencement of any research and no later than the submission of the first Progress Report for the student. If a student does not have an advisor/co-advisor, the interim advisor will be required to complete the Advisor Student Guidelines. If the parties cannot agree on any component(s) of the Advisor Student Guidelines, the matter should be referred to the Department/Unit Graduate Chair, the Department/Unit Head, or the Dean of the Faculty of Graduate Studies. A new Advisor-Student Guidelines is to be completed if there is a change in advisor/co-advisor or when a co-advisor is added midway through the student's program.

Should, during the student's program, the relationship between the student and advisor/co-advisor significantly deteriorate, the matter should be referred sequentially to the Department/Unit Graduate Chair, the Department/Unit Head, then to the Dean of the Faculty of Graduate Studies. It is the responsibility of the department/unit offering the program in which the student is studying to arrange an alternate advisor/co-advisor if this is appropriate and necessary.

All students should consult department/unit supplementary regulations for specific details regarding advisor/co-advisor requirements.

### Advisory Committee

The Department/Unit Head is responsible for recommending the advisory committee for each Ph.D. student. Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during their program. The advisor/co-advisor is the Chair of the advisory committee

The advisory committee must consist of a minimum of three (3) voting members (including the advisor/co-advisor as a single member sharing a single vote), all of whom must be members of the Faculty of Graduate Studies (<https://umanitoba.ca/graduate-studies/graduate-studies-administration/>). It is expected that advisory committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies or designate.

In addition, individuals who are not a member of the Faculty of Graduate Studies, and who do not hold a Ph.D. degree or equivalent, but who possess specific and extensive expertise and experience, such as professionals, artists, Knowledge Keepers or Elders, may serve on the advisory committee as a full voting member. No more than one such knowledge expert may serve on any individual advisory committee and must be nominated by the Department/Unit Head or Graduate Chair with a justification of their role and be approved by the Dean of the Faculty of Graduate Studies or designate. Advisory committees may alternatively include one (1) non-voting invited member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies. Committees may include a Knowledge Expert or invited member, not both.

Under no circumstances should graduate students, Post-Doctoral Fellows, and Research Assistants or Associates serve on graduate student advisory committees, regardless if they hold a rank of Adjunct Professor.

The composition of, and any changes to, the advisory committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies on the "Program of Study and Appointment of Advisory

Committee (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)” form.

Advisory committee meetings must be held at least annually and are not intended to take the place of meetings between the student and advisor/co-advisor which should occur with much greater frequency than the advisory committee meetings.

### Conflict of Interest

There are several circumstances that might lead to a real, perceived or potential Conflict of Interest (COI) in advisory and examining committees. A real COI could be present due to the existence of a (past or present) personal relationship that is romantic, sexual, marital, personal or familial. There is a potential for a perceived COI in cases of recent (within the last 5 years) collaboration among committee members, which may result in the perception of a lack of fairness or impartiality. These examples are not intended to be comprehensive, and are provided solely for illustration. The University of Manitoba Conflict of Interest Policy ([https://umanitoba.ca/admin/governance/governing\\_documents/community/248.html](https://umanitoba.ca/admin/governance/governing_documents/community/248.html)) and Conflict of Interest Procedures ([https://umanitoba.ca/admin/governance/governing\\_documents/community/962.html](https://umanitoba.ca/admin/governance/governing_documents/community/962.html)) as well as the Conflict of Interest Between Evaluators and Students due to Close Personal Relationships ([https://umanitoba.ca/admin/governance/governing\\_documents/students/277.html](https://umanitoba.ca/admin/governance/governing_documents/students/277.html)) should also be consulted.

In addition to following the processes outlined in the above policies, COIs that exist within advisory and examining committees and proposed mitigation should be declared in writing to the Faculty of Graduate Studies to provide transparency to all relevant parties (including the student, committee members, unit leadership, and the Faculty of Graduate Studies). All reported conflicts will be reviewed by the Dean of the Faculty of Graduate Studies (or designate). If the conflict is deemed sufficiently significant and cannot be mitigated, a new committee may need to be struck.

## Program of Study

As soon as possible, but no later than 24 months after a student has commenced their program, the student’s program of study should be registered with the Faculty of Graduate Studies on the “Program of Study and Appointment of Advisory Committee (<https://umanitoba.ca/graduate-studies/forms/>)” form and should include:

- information about the minimum or expected time for completion of the degree;
- coursework to be taken along with course classification (“S”, “X”, “A” or “O”);
- any additional language requirement;
- the research area in which the thesis will be written.

The approval of the student’s advisor/co-advisor and the Head of the department/unit are sufficient for registration. The program of study, including withdrawal from individual courses and any subsequent changes, must be approved by the student’s advisor/co-advisor, the advisory committee, and the Head of the department/unit. Withdrawal from courses or changes of course category without such approval may result in the student being required to withdraw from the Faculty of Graduate Studies.

## Program Requirements

All students must complete one of the following programs of study for the Ph.D. degree, unless otherwise specified in the approved department/unit supplementary regulations:

- Where admission to the Ph.D. is directly from a Master’s degree, a minimum of 12 credit hours at the 7000- level or higher plus a thesis is required. Any further coursework beyond the minimum 12 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 24 credit hours of coursework is allowed toward the Ph.D. program.<sup>1</sup>
- Where admission to the Ph.D. is directly from an Honours Bachelor degree or equivalent, a minimum of 24 credit hours plus a thesis is required. The coursework must include a minimum of 18 credit hours at the 7000-level or higher with the balance of the coursework at the 3000-level or higher. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program unless department/unit’s supplementary regulations indicate otherwise.

### Language Requirements

Some departments/units specify a language requirement for the Ph.D. degree. Students are advised to consult department/unit supplementary regulations regarding this requirement.

### Advance Credit

Advance credit for courses completed prior to admission to a Ph.D. program will be considered on a case-by-case basis. The student’s department/unit makes the request to the Faculty of Graduate Studies by completing the “Advance Credit-Transfer of Courses (<https://umanitoba.ca/graduate-studies/forms/>)” form.

- Application for advance credit must be made within the first year of the program (please refer to Lapse or Expiration of Credit of Courses (p. 1359))
- No more than 50% of the required coursework for the program can be achieved using advance credit.
- A course may not be used for credit toward more than one degree, diploma, micro-diploma or certificate.
- The student must register at the University of Manitoba for at least two consecutive terms and must also complete the thesis and candidacy examination at The University of Manitoba. Regardless of the extent of advance credit received, all students are required to pay applicable program fees.

### Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at the University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot be used for credit towards another degree, diploma, micro-diploma or certificate;
- may not exceed 50% of the minimum credit hours of coursework required of the student’s graduate program at The University of Manitoba.

Permission is granted in the form of a Letter of Permission (<https://umanitoba.ca/registrar/letter-permission/>) which may be obtained by

making an application to the Registrar's Office; an official transcript, and course equivalency must be provided.

## Lapse or Expiration of Credit of Courses

Courses completed more than seven (7) years prior to the date of awarding of a degree may not normally be used for credit toward that degree. A department/unit may request an exception to this limit on behalf of the student. Such requests, which will be evaluated on a case-by-case basis, must be submitted via the "Course Currency (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)" form and accompanied by supporting information including a detailed summary of the content of the course as taken initially and as offered most recently, and a detailed rationale explaining how the student has maintained knowledge of the course content. If the Faculty of Graduate Studies approves the course's currency, the approval will be valid for one (1) year. After one (1) year, an updated "Course Currency" form may be required.

Courses completed more than ten (10) years prior to the date of awarding of a degree are deemed expired and cannot be used for credit toward that degree.

In the event that coursework is no longer considered current or has expired, students must take additional course-work (as recommended by the Department/Unit Head, or designate, and as approved by the Dean of the Faculty of Graduate Studies) to meet the minimum credit hour requirements for their program. The department/unit may recommend that students re-take previously passed course(s) which have lapsed or expired.

## Time in Program

The minimum time requirement for the program of study for a Ph.D. degree will normally be two (2) years of study beyond the level of the Master's degree, or three (3) years beyond the level of a Bachelor's degree.

The maximum time allowed for the completion of the Ph.D. degree is six (6) years following initial registration in the Ph.D. program. For those students who transfer from the Master's to the Ph.D., years spent in the Master's program are counted as years in the Ph.D. program.

Ph.D. students who are declared as part-time will receive an additional four (4) months in time to complete their program for every two (2) years (24 months) they are declared as part time (see Student Status/ Categories of Students (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/application-admission-registration-policies/#Student-Status>)) to a maximum of seven (7) years. Requests for extensions of time to complete the degree will be considered on an individual basis and must be submitted using the "Time Extension Request (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)" form to the Dean of the Faculty of Graduate Studies **at least three (3), but no more than four (4)**, months prior to expiration of the respective maximum time limit.

A student who has not completed the degree requirements within the time limit or within the time limit of any extension that has been granted (please refer to "Extension of Time to Complete Program of Study (p. 1364)" and "Leaves of Absence (p. 1364)") will be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

### Academic Performance

Student progress shall be reported **at least** annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the "Progress Report (<https://umanitoba.ca/graduate-studies/forms/>)" form. Performance that remains "Satisfactory" throughout the year does not need to be reported to the Faculty of Graduate Studies more than annually, but should remain on file in the department/unit.

Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Graduate Chair and/or Department/Unit Head to the Dean of the Faculty of Graduate Studies on the "Progress Report" form. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will normally be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

## Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

## Performance Not Related to Coursework

Students may be Required to Withdraw from their Ph.D. program for reasons of unsatisfactory performance other than those related to failing grades. These include, but are not restricted to, unsatisfactory attendance and lack of progress in research and/or thesis preparation. Unsatisfactory performance must be reported to the Faculty of Graduate Studies on the "Progress Report (<https://umanitoba.ca/graduate-studies/forms/>)" form. Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Department/Unit Head to the Dean of the Faculty of Graduate Studies.

Students are normally expected to complete remedial action by the end of the subsequent term.

## Academic Requirements for Graduation

All students must:

- maintain a minimum degree grade point average (DGPA) of 3.0 with no grade below C+;
- complete GRAD 7500
- complete GRAD 7300
- complete the Candidacy Examination (GRAD 8010);
- meet the minimum and not exceed the maximum course requirements; and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Individual departments/units may have additional specific requirements for graduation and students should consult department/unit supplementary regulations for these specific requirements. A degree grade point average of 3.0 or greater is required in those courses that constitute the program of study for graduation from the Faculty of Graduate Studies.



## Candidacy Examination

The candidacy examination is a requirement of the Faculty of Graduate Studies and, as such, cannot be waived under any circumstances. However, the format and content of the candidacy exam varies from department/unit to department/unit. The purpose of the candidacy exam in doctoral programs is to determine the student's competence in the discipline with respect to understanding and absorbing a broad spectrum of material, and then researching, identifying, analyzing, synthesizing, and communicating ideas about that material in depth.

At the time specified by the advisory committee, normally within the first year after the completion of the Ph.D. program coursework, but in no case later than one year prior to expected graduation, the student must successfully complete the formal candidacy examination.

The examination is conducted according to a procedure established by the department/unit which is approved and documented in departmental/unit supplementary regulations. The department/unit supplementary regulations state the format and composition of the examination committee for the candidacy examination. The candidacy examination may be held virtually. If it is held in-person, it must be held at either The University of Manitoba Fort Garry or Bannatyne campus, or the St. Boniface Hospital Albrechtsen Research Centre normally during regular business hours.

This examination, which must be independent from the thesis proposal, may be oral, written, or both and may cover subjects relevant to the general area of the student's research. The structure of the exam must be made known to the student well in advance of the exam. In the case where there is a required oral component, the student must participate in-person or virtually.

A "pass" decision of the examiners must be unanimous. Students must be provided with feedback on their performance and access to the reasons for the pass/fail.

The Dean of the Faculty of Graduate Studies must be informed of the results of the examination via the "Report on Ph.D. Candidacy Examination (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)" form.

Any student who fails the candidacy examination twice will be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

On successful completion of this examination, the student will be considered a candidate for the Ph.D. degree.

## Thesis Proposal

Some departments/units have specific procedures in place for approval of thesis proposals and students are advised to refer to the specific department/unit supplementary regulations. The thesis proposal must be independent from the candidacy examination.

The proposed thesis research must be approved by the advisory committee and, if necessary, by the Human Research Ethics Board or Animal Care Committee before the work has begun on the thesis research or project.

## Thesis

An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings.

The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication. The thesis will normally be written in English but may be written in French. Departmental/unit supplementary regulations may allow the thesis/practicum to be written in a language other than English or French..

The thesis must be written according to a standard style acknowledged within the candidate's particular field of study and recommended by the department/unit, be lucid and well-written, and be reasonably free from errors of style and grammar (including typographical errors). Additional recommendations for a thesis are outlined in Appendix 1: Thesis/Practicum Types.

The final version of the thesis must be submitted by the candidate to the Faculty of Graduate Studies following the guidelines found on the Faculty's website. (<https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/>)

## Thesis Examination Procedures

The final examination for the Ph.D. degree proceeds in two (2) stages:

1. Examination of the candidate's thesis by the examining committee;
2. Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

### Formation of the Examining Committee - University of Manitoba (Internal) Examiners

The candidate's advisor/co-advisor is considered to be a single voting member of the examining committee. All voting members of the advisory committee are expected to serve on the examining committee; any exceptions must be approved in advance by the Dean of the Faculty of Graduate Studies. All examiners must be members of the Faculty of Graduate Studies ([https://umanitoba.ca/faculties/graduate\\_studies/governance/academic\\_membership.html](https://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html)). It is expected that examining committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies.

### Formation of the Examining Committee - External Examiner

The candidate's advisor/co-advisor, in consultation with the advisory committee, will recommend the names of at least three (3) distinguished scholars from outside The University of Manitoba with particular experience in the field of the thesis research and significant Ph.D. student supervisory/examination experience to serve as the external examiner. The recommendations must be made to the Dean (or designate) of the Faculty of Graduate Studies for approval online and must include:

- A CV of each of the prospective external examiners;
- A short statement explaining:
  - The rationale behind the recommendations;
  - The prospective external examiners' qualifications (if not already explicit on the CV). This includes a current list of their scholarly publications and research activities and, importantly, their experience with Ph.D. student supervision/examination (e.g., Ph.D. students they have supervised to completion; Ph.D. students they are currently supervising; experience serving as external examiner for Ph.D. examining committees).

Advisors and/or departments/units must contact the prospective external examiners to obtain this information and determine if they are

available to review the thesis prior to submitting the recommendations to the Faculty of Graduate Studies.

If any of the recommended examiners do not meet the criteria specified below, a detailed explanation should be included with the rationale for the recommendation.

The external examiner must:

- hold a Ph.D. (or equivalent if outside of North America);
- hold the rank of Associate Professor, Full Professor, Senior Scholar or Emeritus Professor (or the equivalent if outside North America) at a university, or have comparable expertise and standing if not a faculty member at a university;
- have an established reputation in the area of the thesis research and be able to judge whether the thesis would be acceptable at an institution comparable to The University of Manitoba; and
- have a demonstrated record of supervising a significant number of Ph.D. students to completion, and significant recent experience with the supervision/examination of Ph.D. students.

The external examiner must not:

- have held any faculty appointment within the candidate's home department/unit at the University of Manitoba within the last 10 years;
- have acted as an external examiner for a student of the same Ph.D. advisor and/or co-advisor within the previous two (2) years;
- have been associated with the candidate at any time or in any significant way in the past five (5) years, present or reasonably foreseeable future (as advisor/co-advisor, colleague, teacher, co-author of published material, family member etc.); or
- be associated with the candidate's advisor/co-advisor in any of the following ways:
  - former student within the last ten (10) years;
  - research advisor/co-advisor within the last ten (10) years;
  - research collaborator within the last five (5) years;
  - co-author of published material within the last five (5) years.

The Dean of the Faculty of Graduate Studies or designate will choose the external examiner from the list provided by the candidate's advisor/co-advisor or department/unit and will make the formal invitation to the external examiner. The Dean (or designate) of the Faculty of Graduate Studies shall ensure the anonymity of the external examiner until their report has been submitted.

## Changes in the Examining Committee

The Dean of the Faculty of Graduate Studies must approve changes in the membership of the examining committee. No changes shall be made in the examining committee after the thesis is submitted to the Faculty of Graduate Studies.

## Distribution of the Thesis for Examination

Ph.D. candidates must submit their thesis for distribution electronically through the Faculty of Graduate Studies approved thesis distribution process. Please refer to the website (<https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/>) for pertinent instructions. It is the responsibility of the Faculty of Graduate Studies to distribute the electronic version of the thesis to all examiners once an external examiner has been secured. The Faculty of Graduate Studies shall ensure that the thesis is distributed to examiners as soon as possible after the submission

of all required documentation. The Faculty of Graduate Studies website (<https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/#submitting-your-thesis-to-committee-members>) should be consulted regarding recommended dates by which theses must be submitted.

Once the thesis has been submitted to the Faculty of Graduate Studies, neither the candidate nor the advisor/co-advisor shall have any communication with the examining committee regarding the thesis.

However, should the need arise, the examiners may contact the Dean of the Faculty of Graduate Studies to discuss any issues related to the thesis.

## Responsibilities of the Examiners

In general, the examiners are responsible for:

- ensuring that the thesis and the candidate meet recognized scholarly standards for a Ph.D.;
- appraising the underlying assumptions, methodology, findings, and scholarly significance of the findings of the thesis;
- ensuring that the thesis is organized, presents data and uses accepted conventions for addressing the scholarly literature in an acceptable manner;
- evaluating that the candidate has the ability to present their findings orally and demonstrate their scholarship by responding to questions and defending the thesis.

### Notes:

1. Any potential breach of academic integrity must be reported to the Dean of the Faculty of Graduate Studies.
2. Any potential breach of The University of Manitoba's Responsible Conduct of Research Policy ([https://umanitoba.ca/admin/governance/governing\\_documents/research/responsible\\_conduct\\_of\\_research.html](https://umanitoba.ca/admin/governance/governing_documents/research/responsible_conduct_of_research.html)) must be reported to the Office of the Vice President (Research and International).
3. Submission of previously published, peer-reviewed material in the thesis does not preclude its critical examination, either as a written document being reviewed by examiners or at the thesis defence.

## Process

### Examination of the Written Thesis

Support of the candidate's advisor/co-advisors, advisory committee, and department/unit is required before the thesis is eligible for examination. Such support must be provided to the Faculty of Graduate Studies through submission by the Department/Unit Head of a completed "Approval to Proceed to Examination (<https://umanitoba.ca/graduate-studies/forms/>)" form. By completing the "Approval to Proceed to Examination" form:

- each member of the advisory committee verifies that they have read the complete version of the thesis and have provided the candidate with a detailed review and comments including any necessary revisions in content and formatting (see Appendix 1);
- the student verifies that they have received feedback from all members of the advisory committee and have taken the feedback into account in preparing the thesis and are ready and willing to have their thesis examined; and
- the department/unit verifies that the student's thesis has been reviewed by all members of the advisory committee and that the department/unit fully supports the thesis proceeding for examination.

The thesis will be eligible for examination if no more than one (1) member of the advisory committee is not in support, the department/unit is in support, and an external examiner has been secured by the Faculty of Graduate Studies.

The Dean of the Faculty of Graduate Studies will request the examiners to give, within four (4) weeks of the distribution of the thesis, a detailed written report of the thesis.

The examiners will be asked to place the thesis into one of the following categories:

1. The thesis represents a distinct contribution to the candidate's field of research and is acceptable as it stands. Minor revisions to content, structure, or writing style may be required. The thesis may proceed to oral examination.
2. The thesis has merit and makes a contribution to the candidate's field; however, there are research-related concerns that have the potential to be addressed in the oral defence. The structure and writing style are acceptable or require only minor revisions. The thesis may proceed to oral examination.
3. The thesis has some merit, but is not acceptable in its current state and requires major revisions to one or more of its core components, such as research content, structure or writing style. The thesis should not proceed to oral examination.
4. The thesis is unacceptable with respect to its core components, such as research content, structure, and writing style. The thesis should not proceed to oral examination.

The candidate's advisor (and, if appropriate, co-advisor) may also submit a report.

If either the external examiner or two (2) or more internal examiners indicate a failure (i.e. places the thesis in categories 3 or 4), then the candidate fails the examination. Otherwise, the candidate may proceed to the oral examination. The awarding of a passing grade by an internal or external examiner does not preclude them from assigning a failing grade at a subsequent stage in the examination process.

In the event of a first failure, the candidate will be allowed to have the thesis evaluated a second time, by the same examining committee. In this case, the Department/Unit Head shall convene a meeting of the internal examiners of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard. In normal circumstances, this will involve additional scholarly work that the Department/Unit Head will describe in writing to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies. Without this written description, the thesis will not be distributed a second time.

Support of the candidate's advisor/co-advisors, examining committee, and department/unit is required before the thesis is eligible for re-examination. Such support must be provided to the Faculty of Graduate Studies through submission by the Department/Unit Head of a new completed "Approval to Proceed to Examination" form, accompanied by a detailed summary of the changes made to improve the thesis. The thesis will be eligible for second distribution only once this is received by Faculty of Graduate Studies.

Two failures at any combination of written review and/or oral examination stage will result in the candidate being withdrawn from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

## Reports

The Dean of the Faculty of Graduate Studies shall provide electronic copies of all reports to each of the advisor/co-advisor, internal examiners, and Department/Unit Head and/or Graduate Chair.

## Oral Examination

Please consult the Faculty of Graduate Studies website (<https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/phd-oral-examination/>) for up-to-date and detailed guidelines for the conduct of Ph.D. Oral Examinations.

## Scheduling

Departments/Units cannot proceed with scheduling the oral examination prior to receiving the approved internal and external examiners' reports from the Faculty of Graduate Studies. It is the responsibility of the Advisor and/or Department/Unit to contact the internal and external committee members to determine their availability and arrange a date for the examination. The oral examination may be held in-person, remotely, or using a hybrid model. Any in-person participants must be hosted at either The University of Manitoba Fort Garry or Bannatyne campus or the St. Boniface Hospital Albrechtsen Research Centre, normally during regular business hours. It is the responsibility of the department/unit to provide the appropriate space and technology for their chosen delivery method(s) (i.e., room booking, ensuring that the chosen facilities meet minimum standards expected for a Ph.D. defence, determining the meeting platform to be used). The Advisor or Department/Unit must inform the Faculty of Graduate Studies of the following information no later than two weeks (10 business days) prior to the date of the examination:

- The date and time of the examination;
- The method of delivery (i.e., in-person, remote, or hybrid);
- The location and/or platform to be used; and
- Whether the external examiner and invited member (if applicable) will attend.

In addition, the candidate must submit biographical information/CV and an abstract of the thesis to the Faculty of Graduate Studies at least two (2) weeks in advance of the date of the oral examination.

The department/unit or advisor(s) are strongly encouraged to contact prospective chairs to determine their availability to chair the examination. The method of delivery (i.e., in-person, virtual, or hybrid) must be disclosed to prospective chairs. Chairs should attend in the same manner as the candidate (e.g., for hybrid examinations, the chair should participate in-person only if the candidate also participates in-person). Prospective chairs must:

- Be members of the Faculty of Graduate Studies;
- Hold a rank of Assistant Professor or above; and
- Not hold an appointment, including nil-salaried appointments (e.g., Adjunct) in any unit represented by the advisor and co-advisor.

## Attendance

The Dean of the Faculty of Graduate Studies or designate shall act as Chair of the examination committee. The Faculty of Graduate Studies will provide the Chair with an electronic package of documents and forms one week before the examination is scheduled to take place.

The attendance of the external examiner at the candidate's oral examination is strongly encouraged. If the external examiner cannot

participate, they will be asked to provide questions in advance. These questions will be read to the candidate at the defence by the advisor.

It is expected that all internal members of the examining committee, including the Knowledge Expert (if applicable), be present in real time at the defence. Under exceptional circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, one (1) member may be absent from the proceedings.

The candidate and advisor/co-advisor must be present in real time for the examination.

Normally, the oral examination shall be open to all members of The University of Manitoba community and the general public. In exceptional cases the final oral examination may be closed; for example, when the results of the thesis research must be kept confidential for a period of time. In such cases, the examination committee and Department/Unit Head shall request prior approval in writing from the Dean of the Faculty of Graduate Studies. If approved, the final oral examination shall be closed to all but the examining committee and the Dean of the Faculty of Graduate Studies or designate.

Regardless of open or closed status, no recordings will be permitted.

## Format of the Examination

The first part of the oral examination shall consist of an oral presentation by the candidate. This is followed by examination of the candidate by the examination committee. If time permits, the Chair, at their discretion, may allow questions from the Knowledge Keeper or invited member (if applicable) of the examining committee and then members of the audience.

## Procedures for the Conduct of the Examination

The Chair should discuss the examination procedures with the examiners prior to the beginning of the formal examination.

The Chair will introduce the candidate and request them to give a concise (20 to 25 minute) oral presentation of the thesis to include a summary of the problem addressed, the results obtained, and the conclusions drawn from the study.

Following the presentation, the Chair will invite questions from each member of the examining committee, taking care to ensure that each examiner has approximately equal time for questions. The total time for questions by the examining committee must not exceed two (2) hours.

The Chair may exercise their discretion in allowing questions from the audience following completion of the formal examination. Once assuming the role of Chair, they forego the right to comment on the merits of the thesis regardless of whether they are an expert in the field.

## Decision of the Committee

Following completion of the formal examination, the candidate, invited member (if applicable) of the examining committee and audience must leave the examination room or virtual meeting. The decision of the examining committee will be based on the content of the thesis, the candidate's ability to defend their work, and the candidate's ability to accurately respond to questions posed by the examining committee. The performance of the candidate at the oral examination may reveal problems of comprehension or explanation, and the examining committee may require revisions be made to the written thesis to address these problems prior to granting final approval. Each examiner is expected to comment on the candidate's performance and vote in favour of assigning

either a pass or fail grade for the examination. Co-advisors share a single vote.

The judgement of the examiners shall be reported by the Chair to the Faculty of Graduate Studies in the qualitative terms "pass" or "fail" on the Final Examination of the Ph.D. Thesis Chair Report Form. Each examiner must also indicate their vote on the Final Examination of the Ph.D. Thesis Approval Form, which will be submitted to the Faculty by the Advisor once all required revisions have been made.

- **Pass:** the candidate has satisfactorily presented the thesis rationale, methodology, findings, and conclusions to the general satisfaction of the examining committee. Notwithstanding this, stylistic, grammatical, and content revisions to the thesis may be required. Normally, the advisor/co-advisor is charged with ensuring that any revisions are satisfactorily completed. Under some circumstances, the entire examining committee may wish to ensure any required revisions are completed satisfactorily. Regardless, those examiners in agreement must indicate, by their signatures, concurrence with the passing grade.
- **Fail:** the candidate has failed to adequately orally present the thesis rationale, methodology, findings, and/or conclusions, or to satisfactorily respond to questions posed related to the thesis. Failure may also arise because of defects in conception, methodology, or context. Those examiners in agreement must indicate, by their signature, concurrence with the failing grade.

If either the external examiner or two (2) or more internal examiners indicate a failure, then the candidate fails the examination.

In the case of a first failure of the oral defence, the candidate will be allowed to defend the thesis a second time. In this case, the Department/Unit Head shall convene a meeting of the internal members of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard and/or prepare for the second oral defence. In normal circumstances this may involve additional scholarly work which the Department/Unit Head will describe, in writing, to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies.

Approval from the candidate's advisor/co-advisor, advisory committee, and department/unit is required before the thesis is eligible for re-examination. Eligibility for re-examination must be provided to the Faculty of Graduate Studies through submission by the Department/Unit Head of a new completed "Approval to Proceed to Examination (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)" form, accompanied by a detailed summary of the changes made to improve the thesis, if any. The thesis will be eligible for second distribution to internal and external examiners only once this is received by Faculty of Graduate Studies. Only then will the candidate be eligible for a second oral defence.

**Note:** In some circumstances, the candidate may revise the written thesis. The revised thesis will be provided to the committee prior to the next oral defence. The revised written thesis shall not be re-examined; however, revisions can be recommended at the oral examination.

Candidates whose thesis is failed twice at either the written review or the oral examination stage will be withdrawn from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

## Graduation

The candidate will be recommended for the Ph.D. degree providing that all degree requirements have been satisfied, and upon receipt by the Faculty of Graduate Studies:

- the favourable reports by the thesis examining committee;
- the completed Final Examination of the Ph.D. Thesis Chair Report and Approval forms;
- the final (corrected) version of the thesis uploaded to MSpace; and
- the Copyright Licence Declaration agreed to in MSpace.

The final requirements of the degree must be submitted to the Faculty of Graduate Studies by the appropriate deadline. The deadline for each graduation period is published on the Faculty of Graduate Studies website (<https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/#submitting-your-thesis-to-committee-members>).

**Patents** – Refer to “Policy of Withholding Theses Pending Patent Applications (p. 1364)”.

**Restriction of Theses for Publication** – In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to one (1) year after the submission of the digital version of a thesis to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted.

**Library and Archives Canada** – Library and Archives Canada obtains a copy of the thesis via the University’s MSpace repository.

## Student Withdrawal

A student will be Required to Withdraw when the Ph.D. thesis has been rejected twice at the stage where:

1. The internal examining committee reports on the merits of the written thesis;
2. The external examiner reports on the merits of the written thesis;
3. The oral examination; or
4. A combination of any of these stages.

## Policy of Withholding Thesis Pending a Patent Application Content or Manuscript Submission

In 1970, The University of Manitoba Board of Governors and Senate approved a policy on accepting research grants from outside agencies. This policy defined the right of agencies to defer release of information and thus ensure freedom of publications for research findings of University personnel. Occasionally, the University may also wish to restrict the release of a thesis pending patent application. For additional details, see The University of Manitoba Governing website. (<https://umanitoba.ca/governance/governing-documents/#academic>)

This situation may arise in the two (2) circumstances defined below, both of which are governed by the same set of regulations:

1. Where a research project is known to contain patentable items as defined in the research contract, then it is the responsibility of the

advisor/co-advisor to give written information of the restrictions on publication to the student prior to the start of the thesis research. If the student agrees to carry out the research, then the regulation given below will apply.

2. Where a patentable item is found during the course of research, then the advisor/co-advisor and the student may make application for patent rights through the University Patent Committee, and the following regulation will apply concerning the release of the thesis.

## Regulations Concerning Release of a Thesis during Application and Negotiation for Patents

The Dean of the Faculty of Graduate Studies will receive the approved thesis. On written joint request of the advisor/co-advisor and the student, the Dean will retain the thesis for a period up to one (1) year.

## Regulations Concerning Release of Thesis Pending Manuscript Submission

The Dean of the Faculty of Graduate Studies will receive the approved thesis. On written joint request of the advisor and the student, the Dean will retain the thesis for a period up to one (1) year.

In exceptional cases, not covered by the regulation concerning patents, where adequate causes can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate studies restrict access for a period up to one (1) year after submission of the digital version of a thesis or practicum to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted.

## Extension of Time to Complete Program of Study

All requests for extensions will normally be dealt with administratively and reported, in summary form, to the Executive Committee of Graduate Studies for information. The student must complete the “Time Extension Request (<https://umanitoba.ca/graduate-studies/forms/>)” form and submit it to their major department/unit for recommendation to the Faculty of Graduate Studies **at least three (3), but no more than four (4), months** prior to expiration of the respective maximum time limit. Requests for an extension are reviewed by the Faculty of Graduate Studies on a case-by-case basis.

Requests for extension must be accompanied by a realistic detailed timeline that has been agreed to by the student and advisor/co-advisor and endorsed by the Department/Unit Head. The extension time requested must closely reflect the time required to complete the program.

The normal time granted for extensions is four (4) to eight (8) months. More than one (1) extension period may be granted, however the total for all approved extensions will not normally exceed one (1) year.

## Leaves of Absence

**For International Graduate Students:**

To determine how applying for a Leave of Absence may affect your immigration status with Immigration, Refugees and Citizenship Canada, please consult with an International Student Advisor at the International

Centre (<https://umanitoba.ca/international/>) prior to completing your "Leave of Absence (<https://umanitoba.ca/graduate-studies/forms/>)" application with your department/unit.

## Regular Leave

A regular leave is intended to allow students to meet responsibilities/plans related to family, travel or employment and circumstances not covered by the parental or exceptional leaves. At the student's request, the Department/Unit Head may recommend to the Dean of the Faculty of Graduate Studies that a student be granted a leave of absence for a period of time not to exceed one (1) year. While on a regular leave of absence, a student must not be actively engaged in their program of study or thesis/practicum research work. A student on a regular leave of absence is required to maintain continuous registration. A student on a regular leave of absence will not be assessed program fees, if any are owing, during the period of the leave; however, the appropriate continuing fee will be assessed.<sup>1</sup> Any program fees deferred as a result of a regular leave will be assessed when the student returns from leave. A regular leave of absence status does not extend time limits to complete program of study as outlined in Faculty of Graduate Studies regulations.

**Note:** At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.

<sup>1</sup> **Program Fees:** The continuing fee in effect at the time of the granting of the leave will be levied. However, if the student returns from leave in January, the normal tuition fee will be levied less the continuing fee already paid (as determined by the Registrar's Office).

All applications for Leaves of Absence must be submitted on the "Leave of Absence (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)" form.

## Exceptional Leave

In exceptional circumstances for medical or compassionate reasons (e.g. the need to care for an ailing family member), at the request of the student, the Head of the department/unit may recommend to the Dean of the Faculty of Graduate Studies that a student be granted an exceptional leave of absence for a period of time not to exceed one (1) year. Supplemental documentation must support the requested dates of the leave. Exceptional leaves must correspond with the start and end of (an) academic term(s). While on an exceptional leave of absence, a student is not permitted to be engaged in their program of study or thesis/practicum work, and would not be required to maintain continuous registration or pay tuition fees. In addition, the leave period would not be included in the time period allowed for the completion of the degree. This leave does not cover circumstances related to travel, employment or financial concerns.

**Note:** At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.

### Fees

**Program Fees:** Students are not expected to pay fees for the term in which they have been granted an exceptional leave. Upon return from the exceptional leave, students will be assessed fees as determined by the Registrar's Office.

All applications for Leaves of Absence must be submitted on the "Leave of Absence (<https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms>)" form.

## Parental Leave

A graduate student who is expecting a child or who has primary responsibility for the care of an infant or young child immediately following a birth or adoption of a child is eligible for parental leave. The request for a parental leave should be made through the department/unit, to the Faculty of Graduate Studies for a period of time normally not to exceed one (1) year. Supplemental documentation must be submitted to support the requested dates of the leave. Parental leaves must correspond with the start and end of (an) academic term(s). While on leave of absence for parental reasons, a student must not be actively engaged in their program of study or thesis/practicum work. The leave period is not included in the time period allowed for completion of the degree.

**Note:** At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.

### Fees

**Program Fees:** Students are not expected to pay fees for the term(s) in which they have been granted a parental leave. Upon return from the parental leave students will be assessed fees as determined by the Registrar's Office.

All applications for Leaves of Absence must be submitted on the "Leave of Absence (<https://umanitoba.ca/graduate-studies/forms/>)" form.

## Awards and Leave of Absence

Students granted an exceptional leave will retain the full value of a University of Manitoba Graduate Fellowship or other award whose terms and conditions are established by the Faculty of Graduate Studies. Such an award will be suspended at the onset of the leave and reinstated at the termination of the leave period (4 to 12 months) provided that the student returns to full time study at that time. Students granted an approved parental leave will have their UMFG extended for the time of the parental leave, not to exceed one year. The UMFG Award Holder's Guide is available on the Faculty of Graduate Studies website (<https://umanitoba.ca/graduate-studies/forms/#funding-awards-and-financial-aid>).

**Note:** Other awards will be paid according to the conditions established by the donor or granting agency.

## Graduate Student Vacation Entitlement

Students are entitled to 21 calendar days of vacation over a twelve (12) month period.

- For the purposes of calculating vacation entitlement, the academic year means the period from September 1 to August 31.
- Vacation entitlement will be prorated for the portion of the year in which a student is registered.
- Any vacation time taken during an official closure of the University is not included as part of the 21 calendar day vacation entitlement. In addition, attendance at academic conferences shall not be considered vacation time.
- Student vacation requests should have minimal impact on the student's research, coursework, and other obligations to the

University. Any requests provided ahead of time and within these guidelines will not be unreasonably denied.

- Should a conflict arise between a student's vacation request and a supervisor's expectations, the Department/Unit Head (or designate) shall make a final determination.

## Appeals – Procedures and Guidelines

### General

Students who disagree with a decision have access to appeal routes as laid out by various Faculty of Graduate Studies and University of Manitoba appeal procedures. Student appeals may be limited by the scope of the inquiry available at each level and category of appeal, as well as by the time restrictions for submission of appeals.

A further limitation is that the Faculty of Graduate Studies rules and regulations, established to uphold the academic rigour of the University of Manitoba, are generally not subject to appeal unless an appeal route is otherwise stipulated. In situations where no appeal route is available, a student may make a written request to the Dean of the Faculty of Graduate Studies.

Students are referred to the appeals section of the University of Manitoba Governing Documents (<https://umanitoba.ca/governance/governing-documents/>) for further details.

For students registered in Joint Master's Programs (University of Manitoba and University of Winnipeg), there is a different process for handling academic and disciplinary appeals cases than normally used for University of Manitoba students in regular programs (not Joint Programs). This process is outlined in the Joint Master's Program Governing Document.

### Definitions

- "Appellant" – the graduate student appealing a decision affecting the student's own admission to, academic standing in, awards from or disciplinary action by a department/unit or the Faculty of Graduate Studies;
- "Appeal Panel" – a panel convened from the members of the Faculty of Graduate Studies Appeals Committee by the Executive Committee of the Faculty of Graduate Studies empowered to deal with appeals stemming from decisions of departments/units or the Faculty of Graduate Studies, or individuals designated to make such decisions;
- "Unit" – the department/unit council, or appeal body, whose decision is being appealed. This is understood to include decisions taken by individuals or committees acting in the name of the department/unit and also to the supplementary regulations pertinent to a department/unit's operation which have been approved by the Faculty of Graduate Studies;
- "Respondent" – a representative of the Faculty of Graduate Studies designated by the Dean of the Faculty of Graduate Studies to represent the Faculty of Graduate Studies. In this document, "Respondent" may also refer to a "Co-respondent" invited by the Respondent to represent the department/unit unless otherwise noted.

### Types of Appeal

Several areas of appeal are available to appellants:

- admission;
- academic;
- discipline;
- administration (e.g. fee appeals).

In all cases, appeals should be addressed to the Dean of the Faculty of Graduate Studies. Appeals of decisions made by the Dean will be referred to an Appeal Panel of the FGS Appeals Committee. A decision of the Faculty of Graduate Studies Appeal Panel is appealable only to the Senate Committee on Appeals or the University Discipline Committee, as appropriate. In all cases, an appellant shall have the option of being registered in, and undertaking the responsibilities of, their program, until such time as they have exhausted the university appeal process or the appellant decides not to appeal further, whichever comes first.

A flow chart of the University of Manitoba Appeals Processes is available at this link (<https://umanitoba.ca/sites/default/files/2020-04/appeal-procedures-for-students.pdf>).

### Admission Appeals

Please refer to University of Manitoba Governing Documents: Students: Policy: Admission Appeals Procedures and Guidelines (<https://umanitoba.ca/governance/governing-documents-students/#senate-committee-on-admission-appeals>).

### Academic Appeals

Academic Appeals are appeals concerning academic decisions made by the department/unit and/or the Faculty of Graduate Studies.

### Appeal Considerations

The Faculty of Graduate Studies will consider appeals:

- stemming from a decision of a department/unit on academic matters (e.g. first failure of a candidacy examination) only after they have been dealt with by the appropriate department/unit-level appeal process (if any), as is outlined in the department/unit supplementary regulations;
- stemming from a decision of the Faculty of Graduate Studies (e.g. Required to Withdraw) which may follow the recommended action of a department/unit.
- stemming from a negative decision from the Registrar's Office on a final grade or term work grade appeal.

In all cases, appeals should be addressed to the Dean of the Faculty of Graduate Studies.

A decision of the Appeal Panel is appealable only to the Senate Committee on Appeals (<https://umanitoba.ca/governance/governing-documents-students/#senate-committee-on-appeals>).

### Composition of an Appeal Panel

Faculty members or students are disqualified from participating on an Appeal Panel if they:

- hold any academic appointment in the department/unit in which the appellant is registered;
- are/were a student in the department/unit in which the appellant is registered;
- were, as an individual, or as a member of a committee or board, responsible for making the decision being appealed.

**Note:** All members of an Appeal Panel shall participate in all of the deliberations essential for the determination of the matter in dispute. If, in the course of hearing an appeal, a member is not present at the commencement of the hearing or a member cannot continue, the Panel may elect to proceed in the absence of that member. If more than one (1) member is not present at the commencement or cannot continue, the Appeal Panel must adjourn the proceedings.

## Grounds for an Academic Appeal

It shall be the responsibility of the appellant to indicate clearly and specifically the grounds warranting consideration of the appeal.

The Appeal Panel shall only consider an appeal if there is evidence that:

- the department/unit or the Faculty of Graduate Studies failed to follow the rules of natural justice;
- the department/unit or the Faculty of Graduate Studies failed to follow procedures;
- a department/unit or Faculty of Graduate Studies regulation has been unfairly or improperly applied, or has become inapplicable through lapse of time;
- there are documented mitigating circumstances (e.g. medical, compassionate);
- there is apparent conflict between a Senate Regulation, a Faculty of Graduate Studies policy and/or a department/unit regulation.

## Appeal of a Faculty of Graduate Studies Decision

An appeal of action taken by any department/unit, committee, administrator or faculty member within the Faculty of Graduate Studies must be submitted in writing by the appellant to the Dean of the Faculty of Graduate Studies within fifteen (15) working days of the date that the appellant was informed in writing of the action to be appealed. This is considered a first-level appeal.

## Faculty of Graduate Studies Academic Appeals Process

### Submission of Appeal Package

The Appellant must submit an appeal package consisting of an appeal form, a letter clearly explaining their grounds for appeal, a copy of the letter of decision from the last action/appeal level, a copy of all the documentation submitted to the last appeal level, if not a first-level appeal, and any relevant supporting documentation to the Faculty of Graduate Studies within the above timeframe. Incomplete appeals may not be considered.

Upon receipt of a formal appeal, the Dean of the Faculty of Graduate Studies may, at their discretion, consider the appeal or forward it to an Appeal Panel. If the Dean considers the appeal, the student shall be informed of the outcome in writing.

### Faculty of Graduate Studies Appeals Committee

The appellant may appeal the Dean's decision to the Faculty of Graduate Studies Appeals Committee within fifteen (15) working days of the date of the letter of decision. This is considered a second-level appeal.

An Appeal Panel will be struck, and a videoconference meeting set by the Faculty of Graduate Studies to determine whether the appellant has grounds to proceed to a Hearing. If the Appeal Panel determines that the appellant has not substantiated their grounds for appeal, the matter will not proceed to a hearing. The Panel will notify the appellant and the Dean of Graduate Studies of their decision in writing. If the Appeal Panel determines that the appellant has substantiated their grounds for appeal,

the appellant and the Dean of Graduate Studies will be notified and a hearing will be scheduled.

If it is determined that the appeal will proceed to a hearing, the Appeal Panel may request additional information, or of its own volition, call additional witnesses.

### Hearing Procedures

The Faculty of Graduate Studies shall inform the appropriate Department/Unit Head (or designate) of the nature of the appeal and request that they accompany the Faculty of Graduate Studies respondent as a co-respondent at the hearing. The co-respondent will be requested to provide a letter responding to the appeal no later than fifteen (15) business days before the date of the hearing. The respondent will be requested to provide a letter addressed to the Chair of the Appeal Panel no later than ten (10) working days prior to the hearing.

The appellant shall be advised by the Dean of the Faculty of Graduate Studies of the right to appear in person or to be represented by a student advocate, a fellow student or other full-time member of the University community not receiving payment for appearing or working for legal aid. It is highly encouraged that the student be represented by a student advocate. If the appellant wishes, one (1) member of their immediate family and/or a lawyer may be present but only as silent observers (i.e., they cannot participate in the proceedings). Should an appellant's lawyer be present, so shall be a representative from the University of Manitoba's Legal Counsel. The Faculty of Graduate Studies must be notified of any persons accompanying the appellant at least ten (10) working days prior to the hearing, and at least twenty (20) working days prior to the hearing if a lawyer will be present.

The appellant, respondent, and appeal panel shall have the right to call witnesses to appear before the panel. Witnesses are to be made available for questioning only and will not be privy to the appeal documents or the hearing proceedings in which they are not involved. The appellant must indicate their witness request in their appeal letter. The respondent shall indicate their desire to invite a witness to the Chair of the Appeal Panel no later than five (5) business days after receiving notice that the appeal will proceed to a hearing. It is the responsibility of the party calling witnesses to ensure that the witnesses are informed of the date and time of the hearing.

All documentation that the Appeal Panel will consider shall be made available through the Faculty of Graduate Studies to both the appellant and the respondent at least one (1) week in advance of the hearing with notification of the specific time and location of the hearing. **No additional materials should be presented at the time of the hearing.** In the case where a request is made to submit additional materials, the Chair may postpone the hearing and allow no more than ten (10) working days for the other party to respond to the new materials.

Hearings shall be held in closed session unless at least one (1) party requests an open hearing and all parties involved in the proceedings agree to the request. During the hearing, the appellant or the respondent may request a change in the open or closed nature of the hearing, at which time the Appeal Panel shall determine its procedures.

The Appeal Panel shall convene prior to the arrival of the appellant (and/or representative) and the respondent to discuss the order of proceedings and questions raised by the appeal documents.

The order of proceedings is as follows:



- The appellant and/or representative will be invited to make an opening statement, followed by rounds of questioning by the Panel and then the respondent;
- The respondent will be invited to make an opening statement, followed by rounds of questioning by the Panel and then the appellant and/or representative;
- The Panel will have the opportunity to ask further questions of all parties;
- If applicable, witnesses will be called upon to enter the room individually. The Panel, appellant and/or representative and respondent will have the opportunity to ask questions;
- The appellant and/or representative and respondent will make closing statements. No new information is permitted to be presented at this time;
- The Panel will deliberate in camera (i.e. closed session).

All parts of the meeting required by the Appeal Panel to deliberate or determine the disposition of the appeal shall be held in camera. Such deliberations shall take into account all documentation provided by the appellant and respondent, as well as all testimonies heard during the hearing.

### Disposition

The Chair of the Appeal Panel shall inform the Dean of the Faculty of Graduate Studies in writing of the disposition of the appeal, the reasons for the decision, and any actions that may result. The Dean of the Faculty of Graduate Studies shall, in turn, inform the appellant, their representative, and the department/unit in writing of the disposition of the appeal, the reasons for the decision and any actions that may result.

The appellant shall be informed of their right of appeal to the Senate Committee on Appeals, including relevant time limits. The Dean of the Faculty of Graduate Studies may inform the department/unit of any recommendations brought forward by the Appeal Panel.

### Appeals to Senate

As per the University of Manitoba Governing Documents: Students: Policy: Appeals Procedures (<https://umanitoba.ca/governance/governing-documents-students/#senate-committee-on-appeals>), appeals to the Senate Committee on Appeals shall be filed with the University Secretary within twenty (20) working days after the mailing of the notice of decision from which the appeal is made.

## Discipline Appeals

The specific jurisdiction of each of the Disciplinary Authorities is outlined in:

- Table 1: Jurisdiction of Disciplinary Authorities for Student Academic Misconduct
- Table 2: Jurisdiction of Disciplinary Authorities for Student Non-Academic Misconduct
- Table 3: Disciplinary Actions and Disciplinary Authorities (<https://umanitoba.ca/governance/governing-documents/#students>)

If the appeal is from a decision of the Dean of the Faculty of Graduate Studies, the appeal must be submitted to the Dean of the Faculty of Graduate Studies who will submit it to the Faculty of Graduate Studies Local Discipline Committee (also commonly referred to as the “L.D.C.”)

If the appeal is from a decision of the L.D.C., the appeal must be submitted to the Secretary of the University Discipline Committee (U.D.C.) (<https://umanitoba.ca/governance/governing-documents-students/>

#student-discipline) who will provide the Dean of the Faculty of Graduate Studies with a copy.

### Discipline Appeal Deadlines

If a student wishes to appeal a decision, the notice of appeal must be delivered in writing to the appropriate person(s) within ten (10) working days of the student being notified of the decision the student intends to appeal.

### Appeal of Disciplinary Action

When the appeal is against a disciplinary decision made by the Faculty of Graduate Studies, the appeal routes and procedures as outlined in the following shall prevail: Student Discipline Appeal Procedure (<https://umanitoba.ca/governance/governing-documents/#students>).

The student shall clearly indicate in the notice of appeal whether they are appealing the decision on:

1. the finding of facts;
2. the disposition determined by the disciplinary authority; or
3. both (1) and (2).

## Fee Appeals

Please refer to the Registrar’s Office webpage on fee appeals (<https://umanitoba.ca/registrar/tuition-fees/adjustments-refunds/>). To initiate the Fee Appeal process, the student must complete a Fee Appeal form, available at the former link. For information about Fee Appeals, please visit the Registrar’s Office online or in person at 400 University Centre.

## Term Work Appeals

Students are encouraged to discuss matters relating to grading of term work with their instructor in the first instance. Further appeals of grades on academic term work shall be directed, by the appellant, to the department/unit responsible for the course within ten (10) working days after the grades for term work have been communicated to students. Following receipt of the appropriate appeal form and evidence of payment of the refundable appeal fee, the department/unit shall consider the appeal and provide a decision within fifteen (15) working days. Please refer to the Registrar’s Office website (<https://umanitoba.ca/registrar/grades/appeal-grade/>) for additional information.

If the student has exhausted the term work appeals process through the Registrar’s Office, the student may appeal to the Faculty of Graduate Studies via the academic appeals process. The Faculty of Graduate Studies will only consider the appeal based on procedural error.

## Final Grade Appeals

Please refer to the Registrar’s Office webpage (<https://umanitoba.ca/registrar/grades/appeal-grade/>) on grade appeals. To initiate the Grade Appeal process, the student must complete a Grade Appeal form, available at the former link. For information about Grade Appeals, please visit the Registrar’s Office online or in person at 400 University Centre.

If the student has exhausted the final grade appeals process through the Registrar’s Office, the student may appeal to the Faculty of Graduate Studies via the academic appeals process. The Faculty of Graduate Studies will only consider the appeal based on procedural error.

## Assistance with Appeals

The Office of Student Advocacy & Case Management (<https://umanitoba.ca/student-supports/academic-supports/student-advocacy/>), 520 University Centre, provides information and assistance to students regarding all appeal processes. It is strongly recommended that students contact the Office of Student Advocacy & Case Management to assist them with any appeal they are considering.

## Thesis/Practicum Types

A student/candidate may present a thesis/practicum in one of two acceptable formats:

- Regular style
- Manuscript/grouped manuscript style

The type of thesis/practicum must be approved by the advisory committee and comply with all regulations of the Faculty of Graduate Studies and any supplementary regulations of the department/unit.

## Regular Style

### Prefatory Pages

#### Title Page

The title page should contain the following information:

- the title of the thesis/practicum
- the name of the University
- the degree for which the thesis/practicum is submitted
- the name of the department/unit
- the full name of the author
- the copyright notation ©

The title must be a meaningful description of the content of the research. The author's name should be in full, identical to the name under which they are registered and be consistent on all other documents. A sample title page can be found on this link ([https://umanitoba.ca/faculties/graduate\\_studies/media/ThesisSampleTitlePage.pdf](https://umanitoba.ca/faculties/graduate_studies/media/ThesisSampleTitlePage.pdf)).

#### Abstract

The abstract is expected to provide a concise, accurate account of the thesis/practicum. Recommended length is 350 words. An abstract should contain a statement of the problem, methods, results, and conclusions.

#### Acknowledgements

The content of this single page is left to the discretion of the author. For example, the page may make reference to the student/candidate's advisor/co-advisor and advisory committee, to other individuals who have provided invaluable assistance to the development of the thesis/practicum, and to sources of financial assistance or other support.

#### Dedication

A single page pertaining to a dedication is allowed.

#### Table of Contents

This must list and provide page references to all elements of the thesis/practicum. The numbering and formatting must be identical to the way the material appears in the text. Page numbers should be right justified. A sample table of contents can be found at this link (<http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2020-04/ThesisSampleTOC.pdf>).

#### List of Tables

This should immediately follow the Table of Contents and be of the same format. The list must include the number, name and page number of each table.

#### List of Figures

This should immediately follow the List of Tables and be of the same format as the Table of Contents. The list must include the number, name and page number of each figure.

#### List of Copyrighted Material

On occasion, students/candidates include images, figures, photos and other materials from copyrighted sources. Students must ensure that they have authorization to use copyright protected materials in their thesis under a Copyright Act exemption or with direct permission from the copyright holder. A list of Copyrighted Material should follow the List of Figures and follow the same format as the Table of Contents. For further information on copyright please refer to the following link (<https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/before-you-start/>).

## Format

### Styles

The thesis/practicum should be written in a standard style manual that has been recommended by the department/unit. Manuals recommended by the Faculty of Graduate Studies include but are not limited to:

- American Psychological Association, Publication Manual of the American Psychological Association
- Kate L. Turabian, A Manual for Writers of Term Papers, Theses and Dissertations
- The Modern Language Association of America, MLA Handbook for Writers of Research Papers
- University of Chicago Press, The Chicago Manual of Style

Students should always use the latest edition available. If there is a conflict between the instructions in this guide and the style manual chosen, the former should be followed.

### Spelling

Canadian, British or American spelling is acceptable and one style must be used consistently throughout the document.

### Format

The entire thesis/practicum must be in the same text font, style, and size.

### Margins

The margins must be consistent throughout the thesis/practicum (including appendices, diagrams, maps, photographs, charts, tables, etc.).

### Page Numbers

Each page of the thesis/practicum (including illustrative pages and appendices) must be numbered consecutively.

## Footnotes, References and Appendices

Instructions in the style manual recommended by the department/unit should be followed. Regardless of which style manual is used, format selected must be consistent throughout the document.

## Figures, Illustrations, Photographs and Design Drawings

### Illustrative Material

All illustrative material must be consistent throughout the thesis/practicum. All figures, illustrations, photographs and drawings must be numbered consecutively in Arabic numerals and accompanied with a title. The material should appear as soon as possible after as it is mentioned in the text. All original materials should be of high quality, with sharp and clear images.

### Layout of Tables and Figures

Each table and figure must have a number and title. The number and title should appear at the top or bottom of the table or figure as per style. The title of the table or figure should be as short as possible and indicate the major focus of the material within the table or figure.

## Additional Materials

### Consent and Access to Information Forms

Sample copies of consent forms that were used to obtain consent from participants to take part in the information gathering procedures for the thesis/practicum must be included in an Appendix. Any personal information including signatures must be omitted from the submitted form to meet F.I.P.P.A. regulations ([https://umanitoba.ca/access\\_and\\_privacy/FIPPA.html](https://umanitoba.ca/access_and_privacy/FIPPA.html)).

In some cases, approval from an agency, institution or corporation may have been required before the information gathering procedures could proceed. The original approval form for access should be retained by the student with a copy provided to the Faculty of Graduate Studies upon completion of the thesis/practicum.

### Use of Copyrighted Material

If the thesis/practicum includes copyrighted material (such as images, figures or more than an insubstantial amount of another person's work pursuant to the Copyright Act), students must determine whether there is authorization for reuse of material under the Copyright Act or if permission must be obtained from the copyright holder. A Sample Permission Letter ([https://umanitoba.ca/admin/vp\\_admin/ofp/copyright/media/Permission\\_letter\\_student.docx](https://umanitoba.ca/admin/vp_admin/ofp/copyright/media/Permission_letter_student.docx)) is available on the Copyright Office website (<https://umanitoba.ca/copyright/>). In some cases, copyright holders prefer to use their own permission forms and/or will provide their permission electronically.

Note that obtaining permission may take a considerable amount of time and this must be taken into consideration when meeting a thesis/practicum submission deadline. A reference to written permission having been obtained should be included under the image or text. The original form(s) signed by the copyright holders should be retained by the student as they may need to refer to it from time to time in future. . These forms do not need to be provided to the University of Manitoba and should not be included within the student's thesis/practicum.

In some cases where permission is required the copyright holder cannot be located or the cost is prohibitive to use the text or image. In these situations, the text or image may have to be omitted from the thesis/practicum.

Subsequently, information on where the reader can locate the image or text should be included, such as the URL, title of book/journal, volume and issue number, page number, publisher, and date of publication. A

description of the purpose or significance of the text or image should be provided.

For further information on copyright, see <https://umanitoba.ca/copyright/>

## Manuscript/Grouped Manuscript Style

A thesis/practicum may comprise a paper or collection of papers, which are, or are about to be, published. The number of papers that comprise this style of thesis/practicum will be determined between the student and the advisory committee. The formatting of the thesis/practicum must be consistent throughout the thesis/practicum and the thesis/practicum cannot merely consist of several papers or articles contained within the one document.

Publication, or acceptance for publication, of research results prior to the presentation of the thesis/practicum does not supersede the evaluation of the work by the examination committee (i.e. does not guarantee that the thesis/practicum will be found acceptable). Examiners may specify revisions regardless of the publication status.

The thesis/practicum must follow the same prefatory information; spelling, formatting, margin requirements, page numbering; footnotes and appendices; figures, illustrations photographs and drawings; and, any additional material as those outlined above. There must be an introductory chapter to the entire thesis/practicum that precedes any of the papers. The papers must contribute toward the overall theme that represents the thesis/practicum work and must be smoothly integrated into the flow of the thesis/practicum to produce a unified document. This may require changes or additions to, and re-writing of, any work that has been previously published.

The introductory chapter must explain the connection between the different chapters. This provides a logical link of the integration of the information. Not including an explanation of how the chapters connect may compromise the ability of the examiners to evaluate the thesis/practicum and, accordingly, there may be subsequent consequences.

The thesis/practicum must contain a concluding chapter that includes a discussion on how the entirety of the thesis/practicum, with its findings, provides a distinct contribution to knowledge in the research area.

In the case of multi-authored papers, the nature and extent of the student/candidate's contribution, and those of the other authors, must be explicitly specified in a section of the thesis/practicum entitled "Contributions of Authors".

## Awards Information

**Campus Address/General Office:** 500 University Centre

**Telephone:** (204) 474-9836

**Fax:** (204) 474-7553

**Email Address:** graduate.awards@umanitoba.ca

Graduate students seeking information on scholarships, bursaries, prizes and loans should consult with the Awards Officer in the Faculty of Graduate Studies.

## Graduate Award Programs

The following awards are offered through the Faculty of Graduate Studies, which lists the value and deadline to submit applications. A complete listing of awards is on the FGS website; please see our Funding, Awards and Financial Aid (<https://umanitoba.ca/graduate-studies/funding-awards-and-financial-aid/>) page, or searchable Awards Database ([http://umanitoba.ca/graduate\\_studies/awards/](http://umanitoba.ca/graduate_studies/awards/))

Please note that awards information is subject to change. The most up-to-date information can be found on our website.

### (CIHR) Canadian Institutes of Health Research (<https://cihr-irsc.gc.ca/e/193.html>)

\$ 17,500 CGS Master's

Deadline: December 1. Application can be found on ([https://www.nserc-crsng.gc.ca/index\\_eng.asp](https://www.nserc-crsng.gc.ca/index_eng.asp)) CGSM ([http://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM\\_eng.asp](http://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM_eng.asp)) website. ([https://www.nserc-crsng.gc.ca/index\\_eng.asp](https://www.nserc-crsng.gc.ca/index_eng.asp))

### (NSERC) Natural Sciences and Engineering Research Council ([https://www.nserc-crsng.gc.ca/index\\_eng.asp](https://www.nserc-crsng.gc.ca/index_eng.asp))

#### Postgraduate Scholarship (PGS)

\$21,000 Ph.D. (PGS D)

#### Canada Graduate Scholarship (CGS)

\$17,500 Masters (CGSM) - Deadline: December 1. Application can be found on NSERC ([https://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM\\_eng.asp](https://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM_eng.asp)) website.

\$35,000 Doctoral (CGSD) - Consult department for departmental deadline in September

### (SSHRC) Social Sciences and Humanities Research Council (<https://www.sshrc-crsh.gc.ca/home-accueil-eng.aspx>)

\$17,500 Master's - Deadline: December 1. Application can be found on SSHRC ([https://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM\\_eng.asp](https://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM_eng.asp)) website.

\$20,000 Ph.D. - Consult department/unit for their specific deadline in October

\$35,000 CGS Doctoral - Consult department/unit for their specific deadline in October

### Vanier Canada Graduate Scholarships (<https://vanier.gc.ca/en/home-accueil.html>)

\$50,000 Ph.D.

Deadline to be determined. Please check with Awards Office for details.

### Trudeau Scholars Programme (<https://www.trudeaufoundation.ca/scholarship/>)

Up to \$40,000 per year (plus an additional \$20,000 annually for research-related travel) for up to 3 years.

Deadline: October

### University of Manitoba Graduate Fellowship

\$14,000 for Master's

\$18,000 for Ph.D.

Consult department/unit for their specific deadline in December

# Registration Information

## Information for All Graduate Students

### All Graduate Students General Info

#### Important Notice Regarding Graduate Fees

Registration is not complete until fee payment or fee payment arrangements are made with the Financial Services Office in writing. Students are urged to refer to the website "Fees, Payments and Refunds (<https://umanitoba.ca/registrar/tuition-fees/adjustments-refunds/>)" and/or the graduate fee information.

#### Registration Reminders

Have you:

- Submitted your Progress Report form?
- Met with your advisor or department/unit for program approvals?
- Accessed Aurora Student to check for any timetable updates?
- Accessed Aurora Student to register for your courses?
- Accessed Aurora Student for a fee assessment?
- Paid your fees?

#### Welcome to the Faculty of Graduate Studies

Whether you are a new or returning graduate student, we hope you will familiarize yourself, not only with the information contained in this publication. Remember you are registering in a professional program leading to or supporting your career choice. Registering for courses that meet your department/unit or your advisor's approval is your responsibility. However, your department/unit office will be able to help you if you encounter difficulties in selecting or registering for courses.

#### Re-Registration Deadline

- **All returning graduate students who intend to continue in their programs must re-register and pay fees before September 8.**
- **Any student whose program of study extends over more than one year must re-register for Fall, Winter and Summer terms of each succeeding year of their program until a degree is awarded.**

Students who do not re-register in time will be subject to being "Discontinued" from their graduate programs. Students who have registered but have not paid in time will be subject to late fee payment or cancellation and discontinuation after this date. Students who have been discontinued must apply for readmission to re-enter a graduate program.

#### Returning Students Progress Report

The Progress Report for graduate students in thesis/practicum project programs must be submitted to the Faculty of Graduate Studies prior to registration. Failure to submit this report will result in registration access being denied.

#### Initial Access Times

Access to registration times can be found in your Aurora Student account. Simply log in to Aurora Student, select Enrolment & Academic Records, select Registration, and then Registration Time and Status in order to view your access times for a given term.

### Admission and Registration

Admission and registration in the Faculty of Graduate Studies is by recommendation from a department/unit offering graduate programs. Students are admitted and register in the following categories:

Occasional, pre-Master's, Diploma, Master's or Ph.D. and normally may commence study in September, January or Summer Session.

Students are responsible for meeting the requirements of the program and ensuring they have the prerequisites for the individual courses for which they register. Reference should be made to the current Graduate Calendar for detailed regulations and procedures of the Faculty.

Students wishing to register for courses that are offered by a department/unit outside their major department/unit/unit must get the approval of the offering department/unit.

### Student Status

A student is considered to be full-time if the student is planning to carry the normal academic load of the department/unit during the registration period. Graduate students who do not meet the criteria specified for full-time students should complete the Part-Time Status Form (<https://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2020-07/request-pt-status.pdf>).

This form must be approved by the department/unit head and advisor and submitted to the Faculty of Graduate Studies prior to registration.

### Course Numbers for Graduate Studies

#### Registration for Thesis/Practicum or Comprehensive Examinations:

Students who intend to graduate in the coming year (February, May or October) must register for their thesis, practicum or comprehensive examination requirement. Therefore, you *may* need to register for one of the following:

Course	Title	Hours
GRAD 6000	Summer Research	0
	Only for those students commencing their programs in May or July when courses may not be available.	
GRAD 6100	Visiting Canadian Student Research Course	0
	To formalize the status of visiting Canadian Graduate Student Researchers. Students must meet the terms of the Canadian Graduate Student Research Mobility Agreement (CGSRMA), and submit the Visiting Graduate Student Research Authorization form to be eligible to register.	
GRAD 7000	Master's Thesis	0
	Fall term (Graduation in February or working on thesis during fall term only)	
	Fall & Winter terms (Graduation in May or working on thesis during fall & winter terms)	
	Winter term (Graduation in May or working on thesis during winter term only)	
	Summer term (Graduation in October or working on thesis during summer term only)	
GRAD 7010	Comprehensive Examination	0
	Fall term (Graduation in February or preparing for comprehensive exam during fall term only)	
	Fall & Winter terms (Graduation in May or preparing for comprehensive exam during fall & winter terms)	
	Winter term (Graduation in May or preparing for comprehensive exam in winter term only)	
	Summer term (Graduation in October or preparing for comprehensive exam during summer term only)	
GRAD 7020	Master's Re-registration <sup>1</sup>	0

GRAD 7022	Master's Re-registration	0
MBA and MPA students who are not registering for any courses in Fall, Winter and/or Summer terms must register in this course to retain status.		
GRAD 7030	Master's Practicum	0
Fall term (Graduation in February or working on practicum during fall term only)		
Fall & Winter terms (Graduation in May or working on practicum during fall & winter terms)		
Winter term (Graduation in May or working on practicum during winter term only)		
Summer term (Graduation in October or working on practicum during summer term only)		
GRAD 7050	M.Eng. Project and Report	6
GRAD 7060	Diploma Re-registration <sup>1</sup>	0
GRAD 7090	Design Thesis	0
Fall term (Graduation in February or working on thesis during fall term only)		
Fall & Winter terms (Graduation in May or working on thesis during fall & winter terms)		
Winter term (Graduation in May or working on thesis during winter term only)		
Summer term (Graduation in October or working on thesis during summer term only)		
GRAD 7200	MFA Thesis/Studio Exhibition	0
GRAD 7500	Academic Integrity Tutorial	0
All students are required to successfully complete GRAD 7500 Academic Integrity Tutorial (0 credit hours) within the first term of initial registration. Failure to complete this course will result in suspension of registration privileges.		
GRAD 8000	Doctoral Thesis	0
Fall term (Graduation in February or working on thesis during fall term only)		
Fall & Winter terms (Graduation in May or working on thesis during fall & winter terms)		
Winter term (Graduation in May or working on thesis during winter term only)		
Summer term (Graduation in October or working on thesis during summer term only)		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8020	Doctoral Re-registration <sup>1</sup>	0
Master's Re-registration:		
GRAD 7020	Master's Re-registration (A02) (spanned course – both Fall and Winter term)	
<b>Or</b>		
Ph.D. Re-registration:		
GRAD 8020	Doctoral Re-registration (A02) (spanned course – both Fall and Winter term)	
<b>Language Reading Tests</b>		
FREN 6000	French Reading Knowledge	
FREN 6030	Italian Reading Test	
GRMN 6000	Reading Language Test	
RUSN 6000	Language Reading Test	

FREN 6010	Spanish Reading Test
LATN 6000	Latin Reading Test

<sup>1</sup> The most efficient way to ensure that you are registered in order to retain status as a graduate student is to register in a Re-registration course. Students may register in the re-registration course appropriate to their degree program to retain status only, when not taking any other courses or working on the thesis/ practicum/ comprehensive examination, or in addition to registering in other courses.

## Course Classifications

Students are responsible for determining the correct course classifications, sections and slots in consultation with their Department/unit. Courses with the X, A, or O status must be added to a student's registration by the department/unit, i.e., this cannot be achieved through Aurora Student.

- O - Occasional
  - Course is not part of the program and not included in the GPA (Additional fees will be assessed).
- X - Auxiliary
  - Course is not major requirement of the program but specified as necessary and required by the student's advisor or advisory committee and not included in the GPA.
- A - Audit
  - Course is not part of program, credit is not granted and grade will not be assigned. (Additional fees will be assessed).

## Voluntary Withdrawal Dates

Graduate Students are not allowed to withdraw from courses without permission from their department/unit head on recommendation from their advisor/advisory committee giving approval to the program change.

For further information, contact your home department/unit or the Faculty of Graduate Studies at 204-474-9377, 500 University Centre.

**Website:** <https://umanitoba.ca/graduate-studies/>

**Email:** [graduate\\_studies@umanitoba.ca](mailto:graduate_studies@umanitoba.ca)

## Departmental Information for Aurora Student

### Aurora Grad General Info

For general information on Aurora Student, refer to the Registration Information. Graduate Students in the **following programs/units** must contact their respective units to register: **Law, I.H. Asper School of Business, Individual Interdisciplinary Programs, and St. Boniface College (Education and Canadian Studies).**

Note: registration forms will not be mailed to students. The form can be accessed at the following Graduate Studies website (<https://umanitoba.ca/graduate-studies/forms/>).

# Asper School of Business

## Programs

The University of Manitoba's Asper School of Business offers graduate degrees for those interested in furthering their business and

management understandings and skills. The AACSB accredited programs are:

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Business Administration, M.B.A. (p. 1374)	1-6	63-75	Yes
Finance, M.Fin. (p. 1377)	1	33	Yes
Management, M.Sc. (p. 1379)	1-3	18	
Management, Ph.D. (p. 1381)	4-5	30-36	
Supply Chain Management and Logistics, M.S.C.M. (p. 1383)	2	48	Yes

## Business Administration, M.B.A.

I.H. Asper School of Business

**Dean (Acting):** Dr. Bruno Silvestre

**Associate Dean(s):** Dr. S. Sivaramakrishnan, Dr. S. Gagnon, Dr. Z. Wu, Dr. L. Neville

**Head:** Dr. S. Gagnon

**Campus Address/General Office:** 501 Drake Centre

**Telephone:** 204-474-8448

**Fax:** 204-474-7544

**Email Address:** asperprofgad@umanitoba.ca

**Website:** [umanitoba.ca/asper/](http://umanitoba.ca/asper/) (<http://umanitoba.ca/asper/>)

**Academic Staff:** Please refer to the Asper website ([https://umanitoba.ca/faculties/management/faculty\\_staff/](https://umanitoba.ca/faculties/management/faculty_staff/)) for academic staff information.

- Asper MBA Language Proficiency in English requirements are (one of):
  - IELTS 7.0 (no band score less than 6)
  - TOEFL 100 (internet)
  - MELAB 85
  - CAEL 60
  - PTE (A) 65
  - CanTEST 4.5 in all four sections
  - AEPUCE 85%, if entering AEPUCE with an IELTS of 6.0

\*MBA applicants who graduated from the B.Comm. degree program at University of Manitoba in the last 5 years with a degree GPA of 3.5 are exempt from the GMAT requirement.

\*MBA applicants with a degree GPA of 3.5 or higher who have graduated from the University of Manitoba with a B.Sc. in the last 5 years and have a grade of B+ or higher in Math 1230, 1500, 1501, 1510, 1520 or 1690 or another course in calculus with permission of the Asper School of Business MBA Admissions Committee and a grade of B+ or higher in Statistics 1000, 1001 or 1150 or another course in statistics with permission of the Asper School of Business MBA Admissions Committee would be exempt from the GMAT/GRE requirement.

\*MBA applicants with a degree GPA of 3.5 or higher who have graduated from the University of Manitoba with a B.Eng. in the last 5 years and have a grade of B+ or higher in ENG 3000 and a grade of B+ or higher in Math 1230, 1500, 1501, 1510, 1520 or 1690 or another course in calculus with permission of the Asper School of Business MBA Admissions Committee and a grade of B+ or higher in Statistics 1000, 1001 or 1150 or another course in statistics with permission of the Asper School of Business MBA Admissions Committee would be exempt from the GMAT/GRE requirement

\*MBA applicants with a degree GPA of 3.5 or higher who have graduated from the University of Manitoba with a B.A. in the last five years and have a grade of B+ or higher in two of ECON 2010, 2030, 3010, 3020 and have a grade of B+ or higher in Math 1230, 1500, 1501, 1510, 1520 or 1690 or another course in calculus with permission of the Asper School of Business MBA Admissions Committee and a grade of B+ or higher in Statistics 1000, 1001 or 1150 or another course in statistics with permission of the Asper School of Business MBA Admissions Committee would be exempt from the GMAT/GRE requirement.

\*MBA applicants who hold the CPA designation (CPA Canada) or the CFA designation, are in good standing with their professional body, and have

## Asper M.B.A. Program Information

The Asper Master of Business Administration is a tightly integrated 60 credit hour program, led by internationally-recognized academics and professionals, and conducted in an interactive and dynamic face-to-face learning environment.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Asper MBA Admission Requirements

The Asper MBA program has two intakes: January and August.

Applicants require:

- At least a 3-year Bachelor degree from a recognized educational institution in any discipline
- 3.0 GPA on the last 60 credit hours of university level study. Under circumstances where managerial and/or professional work experience and/or community involvement have demonstrated strong business leadership potential, a lower entry GPA, but not one below 2.5, may be considered for regular admission
- 2 years professional work experience required
- 550 GMAT preferred or equivalent GRE (500 minimum)\*

been practicing in their respective field for the past two years or longer would be exempt from the GMAT/GRE requirement.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Asper MBA program of study (<https://umanitoba.ca/explore/programs-of-study/business-administration-mba/>) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

## Degree Requirements

### Boot Camps and Workshops

Mandatory preparatory boot camps and workshops help develop the necessary skills to succeed in the Asper MBA program and in the business world. The Asper School of Business MBA has three regularly offered pass/fail auxiliary courses (X):

- MSCI 5110 (Math Boot Camp) – online number crunching primer (challenge exam option available).
- MIS 5120 (Information Technology Boot Camp) – online course that provides you with the basics of common productivity software packages used in the business world, with particular focus on Excel (challenge exam option available).
- IDM 5120 – develop the “soft skills” you need to advance your career, such as business etiquette, networking, resume-building and behaviour-based interview skills.

### Program Core

The Program Core consists of 30 credit hours of business fundamentals and strategy, and a foundation in leadership, decision-making methods, and contemporary themes that inform decisions in today's business world.

### Business Foundations

Course	Title	Hours
GMGT 7200	Critical and Creative Thinking	1.5
ACC 7010	Accounting Fundamentals	3
FIN 7000	Managerial Economics	1.5
FIN 7020	Corporate Finance	3
GMGT 7220	Managing People in Organizations	3
OPM 7120	Operations and Supply Chain Management	3
MKT 7010	Marketing Management	3
ACC 7020	Managerial Accounting	1.5
MIS 7120	Management Information Systems	1.5
GMGT 7210	Strategy	3
<b>Total Hours</b>		<b>24</b>

The Strategy Capstone Course, to be taken in the last term of the program, provides a holistic perspective on managing an organization or business by integrating all the functional areas and themes explored in the Program Core.

### Leadership

Course	Title	Hours
IDM 7120	Executive Leadership and Responsibilities	3
IDM 7510	Strategic Leadership and Managing Change	1.5
<b>Total Hours</b>		<b>4.5</b>

### Business Themes

Course	Title	Hours
IDM 7130	Contemporary Themes in Business	1.5
<b>Total Hours</b>		<b>1.5</b>

Contemporary Themes in Business focuses on three themes: International and Emerging Markets, Sustainability, and Entrepreneurship and Innovation. These themes also inform the two Leadership courses and the Strategy Capstone Course. Together, they prepare you for the realities of business – and give you a distinct advantage in today's competitive job market.

### Concentrations and Themes

Tailor your MBA to your passion, your experience and the career you want. Half of the program (30 credit hours) is made up of electives, allowing a world of options to customize your program. Focus your studies on two functional areas, two themes, or a combination of area and theme. You can earn up to two concentrations/themes – the choice is entirely yours. Students can obtain a concentration by taking 12 credit hours of electives in that area or theme.

#### Specialized Concentration

- Financial Analyst

#### Functional Concentrations

- Finance
- Leadership and Organizations
- Marketing
- Supply Chain Management

#### Themed Concentrations

- International and Emerging Markets
- Sustainability
- Entrepreneurship and Innovation

#### Interdisciplinary Concentrations

- Health Administration
- Management of Public Enterprises
- Individual Interdisciplinary Studies

#### General Management Option

- Choose any combination of Asper MBA electives to suit your personal and professional goals.

An Experiential Course is a mandatory component of each of the three themes. It provides hands-on integrated business-related experience through opportunities such as an international study trip, a domestic industry project, stock market simulation, or launching a business.

\*Please note: Not every combination of two themes and/or concentrations may be achieved in any given year/12 month program. GMGT 7210 constitutes the comprehensive examination. The course must be completed at the University of Manitoba normally in the final



term of a student's program, or once all the course pre- and co-requisites are satisfied.

Readings Courses and Industry Projects - With the approval of the MBA Program Committee and the academic area involved, a student can choose to undertake an industry (consulting) project or a readings course. The industry projects and readings courses count as three credit hours of elective coursework. Normally, a student is allowed up to two readings courses, two industry projects, or one readings course and one industry project during the program. An industry or readings course proposal must be submitted to a faculty supervisor and the MBA Program Committee for approval prior to registration for the course. Projects and reading courses can normally only be taken within the Asper School of Business, and normally cannot be counted towards a concentration.

No thesis option is available.

## MBA Co-op Program

MBA students have an option to enrol in the MBA Co-op Program and complete a co-op work term as an elective in their program (IDM 7140 – 3 credit hours). The course consists of a work term assignment of a minimum of 420 hours in business, industry, or government.

To apply for a co-op work term, MBA students must have a degree GPA of at least 3.00 and normally would have completed all 30 credit hours of MBA core courses; at a minimum, students must have completed at least 27 of their program credit hours, including successful completion of IDM 5120. An interview with the Graduate Co-op Office personnel will be required for admission to the Asper MBA Co-op Program and applicants for the MBA Co-op Program will be evaluated based on a complete application.

**Expected Time to Graduate:** 1 - 6 years.

- Full Time: 12 months or up to 2 years.
- Part Time: Take up to six years (the average is three).
- Exemptions: You may qualify for a number of course exemptions, reducing your program course load and cost, if you:
  - Completed a business or management degree (or economics major) in a recognized university degree program, or courses in another MBA program, within the last five years, or
  - Have certain professional designations within a field where you are active and practicing.

## Progression Chart

Course	Title	Hours
<b>Years 1-6</b>		
<b>Required Courses</b>		
MIS 5120	Spreadsheet Skills for Management (AX)	1
MSCI 5110	Basic Quantitative Analysis for Management (AX)	1
IDM 5120	Career Development Seminar (AX)	1
GMGT 7200	Critical and Creative Thinking	1.5
IDM 7130	Contemporary Themes in Business	1.5
FIN 7000	Managerial Economics	1.5
FIN 7020	Corporate Finance	3
GMGT 7220	Managing People in Organizations	3
MKT 7010	Marketing Management	3
IDM 7120	Executive Leadership and Responsibilities	3
ACC 7010	Accounting Fundamentals	3

OPM 7120	Operations and Supply Chain Management	3
IDM 7510	Strategic Leadership and Managing Change	1.5
ACC 7020	Managerial Accounting	1.5
MIS 7120	Management Information Systems	1.5
GMGT 7210	Strategy (program capstone course; ideally completed in the last term of the program)	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Elective Courses</b>		
Select 10-14 Elective Courses <sup>1</sup>		30-42
Co-op for Professional Graduate Programs <sup>2</sup>		
<b>Hours</b>		<b>63-75</b>
<b>Total Hours</b>		<b>63-75</b>

<sup>1</sup> Selections will vary for individuals, depending on chosen concentration(s) – see calendar entry. Total credits hours for the degree is 60 (max 72).

<sup>2</sup> IDM 7140 MBA Co-op elective can be completed any time past the half way point of the program (after 30 credit hours).

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Finance, M.Fin.

I.H. Asper School of Business

**Dean (Acting):** Dr. Bruno Silvestre

**Associate Dean(s):** Dr. S. Sivaramakrishnan, Dr. S. Gagnon, Dr. Z. Wu, Dr. L. Neville

**Head:** Dr. S. Gagnon

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**Telephone:** 204-474-8448

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**Email Address:** asperprofgrad@umanitoba.ca

**Website:** [umanitoba.ca/asper/](http://umanitoba.ca/asper/) (<http://umanitoba.ca/asper/>)

**Academic Staff:** Please refer to the Asper website ([https://umanitoba.ca/faculties/management/faculty\\_staff/](https://umanitoba.ca/faculties/management/faculty_staff/)) for academic staff information.

## Asper M.Fin. Program Information

The Asper Master of Finance is a CFA Institute University Affiliation Program. It is a comprehensive one-year/three-term program that prepares students to write all three levels of exams needed to obtain a Chartered Financial Analyst (CFA) designation, with a focus on the Level 1 exam. The program has been mapped to align with the CFA Program Curriculum.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Asper M.Fin. Admission Requirements

Admission to the Master of Finance program is based on the following criteria:

1. At minimum, a three-year Bachelor degree from a post-secondary recognized educational institution (in any discipline);
2. At a minimum, a 3.0 admission GPA (on 4.5 scale) on the last 60 credit hours of university degree-level study;
3. Results of the Graduate Management Admissions Test (GMAT), with a minimum score of 550.

The GRE will be accepted with a percentile score across its components equivalent to the current acceptable percentile level of the GMAT. The percentile score on the quantitative section of the GMAT or GRE examinations must be at the 60th percentile or higher. GMAT and GRE scores must not be older than five years.

**Note:** GMAT/GRE scores are not required for applicants who have successfully passed the CFA Level 1 examination. GMAT/GRE scores are not required for those applicants who have successfully completed a bachelor degree from the University of Manitoba with a minimum 3.25 GPA and who have also:

Completed FIN 2200 (Corporate Finance) at the Asper School of Business with a minimum grade of B+, within the last five years (if FIN 2200 is completed beyond five years from the term of admission, it may be counted, if the applicant can demonstrate, to the satisfaction of the Admissions Committee, that they have been working in a professional role that makes substantial use of this knowledge; or,

Achieved an average 3.5 GPA across the four Asper finance courses counting toward the finance major requirements within the last five years (if courses are completed beyond five years from the term of admission, they may be counted, if the applicant can demonstrate, to the satisfaction of the Admissions Committee, that they have been working in a professional role that makes substantial use of this knowledge.

4. Language proficiency. Applicants holding secondary school diplomas and/or university degrees from Canada, or from one of the countries on the English Language Proficiency Test Exemption list are exempt from the English Language Proficiency Test requirement. If you do not qualify for an exemption, you must provide an official score from one of these accepted tests:
  - a. IELTS 6.5 (speaking band minimum is 6)
  - b. TOEFL 86 (internet) - Minimum score of 20 is required in each of reading, writing, listening, and speaking categories)
  - c. MELAB 80
  - d. CAEL 60 and 60 on each subject
  - e. PTE (A) 61%
  - f. AEPUCE 65%
  - g. CanTEST - 4.5 in listening and reading; 4.0 in writing and oral interview

Scores older than two years are not acceptable.

5. Two letters of recommendation from persons who are knowledgeable about the applicant's academic ability.

**Note:** Graduates of the Asper MBA program with a Finance concentration are not eligible to take this program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Asper MFin program of study (<https://umanitoba.ca/explore/programs-of-study/finance-mfin/>) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

## Degree Requirements

To complete the Master of Finance degree, students must successfully complete 30 credit hours. Required courses will be taught over the Fall, Winter, and Summer terms, and the program will require 12 months of full-time study to complete.

The required courses are:

Course	Title	Hours
ACC 7010	Accounting Fundamentals	3
FIN 7000	Managerial Economics	1.5

FIN 7020	Corporate Finance	3
FIN 7130	Alternative Markets and Instruments	1.5
FIN 7140	Financial Modeling	3
FIN 7180	Behavioural Finance	3
FIN 7152	Investment Policy	3
FIN 7080	International Finance	3
FIN 7010	Professional Financial Ethics	3
FIN 7192	Portfolio Management	3
FIN 7190	Fixed Income Securities	3
MIS 5120	Spreadsheet Skills for Management (AX – Pass/ Fai)	1
MSCI 5110	Basic Quantitative Analysis for Management (AX – Pass/Fai)	1
IDM 5120	Career Development Seminar (AX – Pass/Fai)	1
<b>Total Hours</b>		<b>33</b>

No thesis option available. A part-time option is also available.

### MFin Co-op Program

MFin students have an option to enrol in the MFin Co-op Program and complete a co-op work term as an additional elective in their program (IDM 7140 – 3 credit hours). The course consists of a work term assignment of a minimum of 420 hours in business, industry, or government.

To apply for a co-op work term, MFin students must have a degree GPA of at least 3.00 and normally would have completed all 30 credit hours of MFin core courses; at a minimum, students must have completed at least 27 of their program credit hours, including successful completion of IDM 5120. An interview with the Graduate Co-op Office personnel will be required for admission to the Asper MFin Co-op Program and applicants for the MFin Co-op Program will be evaluated based on a complete application.

**Expected Time to Graduate:** 1 year

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
MIS 5120	Spreadsheet Skills for Management	1
MSCI 5110	Basic Quantitative Analysis for Management	1
IDM 5120	Career Development Seminar	1
FIN 7000	Managerial Economics	1.5
FIN 7020	Corporate Finance	3
FIN 7010	Professional Financial Ethics	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>10.5</b>
<b>Winter</b>		
ACC 7010	Accounting Fundamentals	3
FIN 7130	Alternative Markets and Instruments	1.5
FIN 7080	International Finance	3
FIN 7152	Investment Policy	3
<b>Hours</b>		<b>10.5</b>

<b>Summer</b>		
FIN 7140	Financial Modeling	3
FIN 7190	Fixed Income Securities	3
FIN 7192	Portfolio Management	3
FIN 7180	Behavioural Finance	3
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
<b>Fall</b>		
IDM 7140	Co-op for Professional Graduate Programs <sup>1</sup>	3
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Students can complete a co-op work term as an additional elective in their program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Management, M.Sc.

I.H. Asper School of Business

**Dean (Acting):** Dr. Bruno Silvestre

**Associate Dean(s):** Dr. S. Sivaramakrishnan, Dr. S. Gagnon, Dr. Z. Wu, Dr. L. Neville

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**Academic Staff:** Please refer to the Asper website ([https://umanitoba.ca/faculties/management/faculty\\_staff/](https://umanitoba.ca/faculties/management/faculty_staff/)) for academic staff information.

## M.Sc. in Management Program Information

Students admitted to the Master of Science in Management degree program will pursue a research-focused degree in one of the departments of Marketing, Finance, Actuarial Mathematics, Business Administration or Supply Chain Management. The M.Sc. program in Management is designed to produce graduates who have an academically more in-depth, rigorous training in their chosen management field than is the case for either B.Comm (Hons.) graduates or MBA graduates. In addition, the program seeks to develop strong research skills to meet the needs of employers as well as to more effectively prepare M.Sc. students for entrance into Ph.D. programs at the University of Manitoba.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.Sc. in Management Admission Requirements

Applicants must possess at least a four-year honours (or equivalent) degree from a recognized university in either a) management/business with a major in the same area or a similar area to be pursued in the M.Sc. or b) a degree from another Faculty with a closely related major. Applicants must provide the following prior to admission:

- A statement of goals and interests;
- An official transcript of academic record with a minimum grade point average of 3.0 on a 4.5 scale (approximately 70% or a "B") in the last 60 credit hours;
- A score on a graduate aptitude test, preferably the GMAT, with a minimum score of 550 (GRE will be accepted with a mean percentile score across the three areas similar to the current acceptable percentile level of the GMAT);
- Three letters of recommendation two of which are from persons who know the candidate's academic ability.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Management M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/management.html](https://umanitoba.ca/faculties/graduate_studies/management.html)) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

## Degree Requirements

The basic program design assumes that students have completed an honours degree or its equivalent. Additional courses may be required subject to the discretion of the advisory committee if it is deemed that the candidate's preparation is not sufficient in his/her area of specialization. The student's advisory committee will make recommendations regarding deficient background, and the final program will be approved by the Graduate Research Program Committee.

All students must complete the following course requirements:

A minimum of 18 credit hours, at 7000 level or above, plus a thesis/practicum. This minimum will include:

1. at least 6 credit hours of required graduate level courses in the student's area of specialization and up to 12 credit hours of optional courses (subject to the approval of the advisory committee) - see area specific requirements below;
2. a thesis or a practicum.

### Business Administration (Industrial Relations/Human Resource Management/Management of Organizations/Organizational Behaviour) Option

Course	Title	Hours
GMGT 7440	Doctoral Seminar in Organizational Theory (Ph.D.)	3
	or GMGT 7410 Doctoral Seminar in Organizational Behaviour (Ph.D.)	
Select one of the following:		3
GMGT 7540	Doctoral Seminar in Research Methods (Ph.D.)	
GMGT 7080	Research Methods	
An equivalent 3-credit hour graduate level course in quantitative methods from another Faculty		
Select four additional optional courses <sup>1</sup>		12
<b>Total Hours</b>		<b>18</b>

- <sup>1</sup> Among them, students are encouraged to take:
1. an additional research methods course (quantitative or qualitative) and either a statistics or econometrics course and
  2. a philosophy of science course.

### Marketing Option

Course	Title	Hours
Select 6 credit units from the following:		6
MKT 7100	Readings in Marketing (Ph.D.)	
MKT 7110	Doctoral Seminar in Marketing (Ph.D.)	
MKT 7120	Ph.D. Seminar in Buyer Behavior (Ph.D.)	
MKT 7080	Selected Topics in Marketing	

Select 6 credit hours of approved research methods coursework at the graduate level	6
Select 6 credit hours of approved coursework relevant to the chosen area of study	6
<b>Total Hours</b>	<b>18</b>

### Supply Chain Management Option

Course	Title	Hours
SCM 7020	Seminar in Supply Chain Management	3
OPM 7120	Operations and Supply Chain Management (recommended) (or other graduate level course in Supply Chain Management)	3
MKT 7080	Selected Topics in Marketing (recommended) (or equivalent graduate level course)	3
Select at least three optional courses <sup>1</sup>		9
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> At least three courses relevant to the student's area of specialization at the 7000 level, from inside or outside the Asper School of Business, subject to the approval of the Curriculum Advisory Committee. Graduate level courses are recommended

### Actuarial Mathematics Option

A total of 18 credit hours plus a thesis/practicum are required.

Course	Title	Hours
<b>Required</b>		
Select two of the following:		6
ACT 7540	Advanced Topics in Actuarial Mathematics	
ACT 7300	Seminars in Actuarial Science	
ACT 7400	Longevity Risk Modeling and Management	
ACT 7600	Applied Statistical Methods in Actuarial Science	
<b>Options</b>		
Select 12 credit hours from the following:		12
ACT 7050	Readings in Quantitative Methods	
ACT 7540	Advanced Topics in Actuarial Mathematics	
ACT 7300	Seminars in Actuarial Science	
ACT 7400	Longevity Risk Modeling and Management	
ACT 7600	Applied Statistical Methods in Actuarial Science	
STAT 7310	Research Tools for Statistics	
ABIZ 7410	Agricultural Finance	
FIN 7020	Corporate Finance	
FIN 7700	Financial Economics	
Other 7000 level courses relevant to the Actuarial Mathematics specialization (e.g. Finance, Investments, etc.) as approved by the Curriculum Advisory Committee		
<b>Total Hours</b>		<b>18</b>

### Finance Option

Course	Title	Hours
<b>Mandatory</b>		
FIN 7700	Financial Economics	
Select one of the following:		3
FIN 7710	Empirical Asset Pricing	
FIN 7712	Seminar in Corporate Finance	

### Options <sup>1</sup>

Select one course in Research Methods from Econometrics courses offered at the Graduate level	3
Select at least one of Microeconomics or Macroeconomics offered at the graduate level	3
Select two optional electives chosen from graduate level courses offered in Finance, Econometrics, Microeconomics or Macroeconomics	6
<b>Total Hours</b>	<b>15</b>

<sup>1</sup> The recommended structure shown below is adjustable depending on the student's background and approval of the student's Curriculum Advisory Committee.

**Expected Time to Graduate:** 1-3 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
Select 6 courses (all at 7000 level or higher) <sup>1</sup>		18
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> See specific program requirements, by area, in the calendar.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Management, Ph.D.

I.H. Asper School of Business

**Dean (Acting):** Dr. Bruno Silvestre

**Associate Dean(s):** Dr. S. Sivaramakrishnan, Dr. S. Gagnon, Dr. Z. Wu, Dr. L. Neville

**Head:** Dr. Z. Wu

**Campus Address/General Office:** 501 Drake Centre

**Telephone:** 204-474-9209

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**Email Address:** [aspergra@umanitoba.ca](mailto:aspergra@umanitoba.ca)

**Website:** [umanitoba.ca/asper/](http://umanitoba.ca/asper/) (<http://umanitoba.ca/asper/>)

**Academic Staff:** Please refer to the Asper website ([https://umanitoba.ca/faculties/management/faculty\\_staff/](https://umanitoba.ca/faculties/management/faculty_staff/)) for academic staff information.

## Ph.D. in Management Program Information

The Doctor of Philosophy program in Management is designed to prepare individuals for teaching and research careers in universities, or for applied research positions in either the private or public sector.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Ph.D. in Management Admission Requirements

An earned Master's degree (MBA preferred), and in exceptional cases, a Bachelor's degree in a management or business discipline from a recognized institution, or a discipline sharing a common origin or a parallel discipline to the applicant's chosen area of concentration, is required.

Prior to admission, the candidate is to provide the following:

- A statement of goals and interests;
- An official transcript of academic record with a minimum grade point average of 3.0 on a 4.5 scale (3.5 preferred), (approximately 70% or a "B") in the last 60 credit hours;

- A score on a graduate aptitude test, preferably the GMAT, with a minimum score of 600 (GRE will be accepted with a mean percentile score across the three areas similar to the current acceptable percentile level of the GMAT);
- Three letters of recommendation from persons who know the candidate's academic ability;
- Evidence of research and teaching ability.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Management Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/management.html](https://umanitoba.ca/faculties/graduate_studies/management.html)) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

## Degree Requirements

The PhD program consists of up to 30 credit hours of courses plus a thesis; 12 credit hours of core requirements (specified by each area) and up to 18 credit hours of other requirements. The Finance option requires up to 27 credit hours of other course requirements, in addition to the 12 credit hours of core requirements. In addition, two zero credit project courses are mandatory for all students. Other requirement courses may be waived based on courses completed in a previous degree (Master's level), while the core and paper requirements must be completed in the Asper PhD program.

### Marketing Core Requirements

Course	Title	Hours
MKT 7110	Doctoral Seminar in Marketing (Ph.D.)	3
MKT 7120	Ph.D. Seminar in Buyer Behavior (Ph.D.)	3
MKT 7080	Selected Topics in Marketing	3
MKT 7100	Readings in Marketing (Ph.D.)	3
<b>Total Hours</b>		<b>12</b>

### Business Administration Core Requirements

Course	Title	Hours
Select one of the following:		3
GMGT 7410	Doctoral Seminar in Organizational Behaviour (Ph.D.)	
GMGT 7440	Doctoral Seminar in Organizational Theory (Ph.D.)	
GMGT 7530	Selected Topics	
Select three of the following:		9
GMGT 7410	Doctoral Seminar in Organizational Behaviour (Ph.D.)	
GMGT 7440	Doctoral Seminar in Organizational Theory (Ph.D.)	
GMGT 7530	Selected Topics	
Topics courses in the area of organizational behaviour, organizational theory, strategy, entrepreneurship, international business, industrial relations and human resource management		
<b>Total Hours</b>		<b>12</b>

## Finance Core Requirements

Course	Title	Hours
FIN 7700	Financial Economics	3
FIN 7710	Empirical Asset Pricing	3
FIN 7712	Seminar in Corporate Finance	3
FIN 7714	Advanced Financial Theory	3
<b>Total Hours</b>		<b>12</b>

## Supply Chain Management Core

Course	Title	Hours
Four 3 credit hour courses from the following:		
SCM 7016	Simulation Models for Operations Management	3
SCM 7018	Seminar in Production & Operations Management	3
SCM 7020	Seminar in Supply Chain Management	3
SCM 7030	DOC SEM IN SC SUSTAINABILITY	3
MSCI 7550	Readings in Management Science (Ph.D.)	3
MSCI 7560	Doctoral Seminar in Management Science (Ph.D.)	3
MSCI 7680	Mathematical Optimization Models	3
OPM 7300	Topics in Advanced Production and Operations Management	3

## Paper Courses

Course	Title	Hours
PHDM 7140	Management Research Project 1 (Ph.D) (pass/fail)	0
PHDM 7150	Management Research Project 2 (Ph.D) (pass/fail)	0
<b>Total Hours</b>		<b>0</b>

## Other Requirements

Course	Title	Hours
PHDM 7110	Doctoral Seminar in Management (Ph.D.)	3
Select three methods or statistics courses at 7000 level or higher <sup>2</sup>		9
Select two minor/cognate courses <sup>3</sup>		6
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Finance students are exempt from this requirement.

<sup>2</sup> Finance students may take up to 6 methods courses (18 credit hours).

<sup>3</sup> At least one of which must be outside the Asper School - Finance students may take up to 3 minor/cognate courses (9 credit hours).

Students who do not have a previous business degree will be required to also audit at least one (but up to three) breadth courses in different disciplines inside the Asper School (but outside their core area of study).<sup>1</sup>

<sup>1</sup> PhD students at the Asper School cannot utilise Asper MBA courses to satisfy any of the program requirements (other than breadth requirements, if needed).

**Expected Time to Graduate:** 4 - 5 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
Select 6 courses (all at 7000 level or higher) <sup>1</sup>		18
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>18</b>

### Year 2

Select 4-6 courses (all at 7000 level or higher)<sup>1</sup> 12-18

PHDM 7140	Management Research Project 1 (Ph.D)	0
PHDM 7150	Management Research Project 2 (Ph.D)	0

**Hours** 12-18

### Year 3

GRAD 8010	Doctoral Candidacy Examination	0
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GRAD 8000	Doctoral Thesis	0
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**Hours** 0

**Total Hours** 30-36

<sup>1</sup> See specific program requirements, by area, in the calendar.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Supply Chain Management and Logistics, M.S.C.M.

I.H. Asper School of Business

**Dean (Acting):** Dr. Bruno Silvestre

**Associate Dean(s):** Dr. S. Sivaramakrishnan, Dr. S. Gagnon, Dr. Z. Wu, Dr. L. Neville

**Head:** Dr. S. Gagnon

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**Website:** [umanitoba.ca/asper/](http://umanitoba.ca/asper/) (<http://umanitoba.ca/asper/>)

**Academic Staff:** Please refer to the Asper website ([https://umanitoba.ca/faculties/management/faculty\\_staff/](https://umanitoba.ca/faculties/management/faculty_staff/)) for academic staff information.

### Asper M.S.C.M Program Information

The Master of Supply Chain Management and Logistics is a professional master's program designed to prepare students for leadership positions within the broad field of supply chain management and logistics.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Registration (p. 1350) section of this Calendar.

#### Asper M.S.C.M. Admission Requirements

To qualify for admission to the Master of Supply Chain Management and Logistics program, you must have a minimum of:

- A three-year bachelor degree from a post-secondary recognized educational institution (in any discipline)
- A 3.0 admission GPA (on 4.5 scale) on the last 60 credit hours of university degree-level study
- Results of the Graduate Management Admissions Test (GMAT) from within the past five years, with a minimum score of 550.
  - The GRE will be accepted with a percentile score across its components equivalent to the current acceptable percentile level of the GMAT. The percentile score on the quantitative section of the GMAT or GRE examinations must be at the 60th percentile or higher. GMAT and GRE scores must not be older than five years.
- GMAT or GRE scores are not required for those applicants who have successfully completed a bachelor degree in any field of study from the University of Manitoba with a minimum 3.25 GPA and who have also:
  - achieved an average 3.5 GPA across the four Asper School of Business supply chain management courses counting toward the supply chain major requirements. All four courses must have been completed within the last five years from the term of admission (if courses are completed beyond five years from the term of admission, they may be counted, if the applicant can demonstrate, to the satisfaction of the Admissions Committee, that they have been working

in a professional role that makes substantial use of this knowledge).

- One of the following English language proficiency test scores from within the past two years, if applicable:
  - **MELAB:** 80%
  - **TOEFL:** 86 (internet) Minimum score of 20 in each of reading, writing, listening and speaking categories.
  - **CanTEST:** 4.5 in listening and reading; band 4.0 in writing and oral interview
  - **IELTS:** 6.5 in the Academic Module with a minimum 6 on the speaking band
  - **AEPUC:** 65%
  - **PTE:** (A) 61%

### Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.S.C.M. program of study (<https://umanitoba.ca/explore/programs-of-study/master-supply-chain-management-and-logistics-mscm/>) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

### Degree Requirements

The Master of Supply Chain Management and Logistics program is a hands-on degree with a practical component, which gives students the skills and knowledge required to work professionally in supply chain management and logistics fields.

The following are the courses required for degree completion (NOTE - a maximum of six (6) credit hours of exemptions are possible for the following courses if the equivalent course(s) were completed with a grade of B+ or higher in the Asper B.Comm. (Hons.) program within five years of starting the Master in Supply Chain Management and Logistics program - MSCI 2150 (Introduction to Management Sciences – 3 credit hours) equivalent to MSCI 7140 (Quantitative Analysis – 3 credit hours) and SCM 3360 (Supply Chain Logistics – 3 credit hours) equivalent to SCM 7040 (Logistics Management – 3 credit hours):

Course	Title	Hours
GMGT 7220	Managing People in Organizations	3
OPM 7120	Operations and Supply Chain Management	3
IDM 7120	Executive Leadership and Responsibilities	3
MSCI 7140	Quantitative Analysis for Management	3
OPM 7300	Topics in Advanced Production and Operations Management	3
OPM 7170	Project Management	3
GMGT 7350	Administration: Selected Topics	3
OPM 7300	Topics in Advanced Production and Operations Management	3
OPM 7180	Sustainable Lean Management	3
SCM 7040	Logistics Management	3
SCM 7042	Purchasing and Procurement in Supply Chains	3
SCM 7044	Supply Relationship Management	3
OPM 7300	Topics in Advanced Production and Operations Management	3



SCM 7046	Sustainable Supply Chain Management	3
SCM 7048	Advanced Supply Chain Management	3
SCM 7050 or SCM 7052	Co-op in Supply Chain Management and Logistics Applied Project in Supply Chain Management and Logistics	3

## Co-op Placement or Practicum

The Master of Supply Chain Management and Logistics degree includes a 4-month graduate co-op placement or practicum in which students gain hands-on experience in the supply chain management field. These placements are made possible by the Stu Clark graduate school's network of connections within Manitoba and across Canada.

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GMGT 7220	Managing People in Organizations	3
OPM 7120	Operations and Supply Chain Management	3
IDM 7120	Executive Leadership and Responsibilities	3
MSCI 7140	Quantitative Analysis for Management	3
OPM 7300	Topics in Advanced Production and Operations Management	3
OPM 7170	Project Management	3
GMGT 7350	Administration: Selected Topics	3
OPM 7300	Topics in Advanced Production and Operations Management	3
OPM 7180	Sustainable Lean Management	3
<b>Hours</b>		<b>27</b>
<b>Year 2</b>		
SCM 7040	Logistics Management	3
SCM 7042	Purchasing and Procurement in Supply Chains	3
SCM 7044	Supply Relationship Management	3
OPM 7300	Topics in Advanced Production and Operations Management	3
SCM 7046	Sustainable Supply Chain Management	3
SCM 7048	Advanced Supply Chain Management	3
SCM 7050 or SCM 7052	Co-op in Supply Chain Management and Logistics or Applied Project in Supply Chain Management and Logistics	3
<b>Hours</b>		<b>21</b>
<b>Total Hours</b>		<b>48</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Clayton H. Riddell Faculty of Environment, Earth, and Resources

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Earth Sciences, M.Sc. (p. 1385)	2	9	
Earth Sciences, Ph.D. (p. 1386)	4	15	
Environment and Geography, M.Env. (p. 1388)	2	12	
Environment and Geography, M.Sc. (p. 1389)	2	12	
Geography, M.A. (p. 1390)	2	12	
Geography, Ph.D. (p. 1391)	4	12	
Natural Resources and Environmental Management, Ph.D. (p. 1393)	4	12-21	
Natural Resources Management, M.N.R.M. (p. 1394)	2	21-30	

## Earth Sciences, M.Sc.

Earth Sciences

**Head:** Dr. Alfredo Camacho

**Campus Address/General Office:** 240 Wallace Building

**Telephone:** 204-474-9371

**Fax:** 204-474-7623

**Email Address:** Riddell.Graduate@umanitoba.ca

**Website:** [umanitoba.ca/environment-earth-resources/earth-sciences/](https://umanitoba.ca/environment-earth-resources/earth-sciences/)  
(<https://umanitoba.ca/environment-earth-resources/earth-sciences/>)

**Academic Staff:** Please refer to the Riddell website (<https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-geological-sciences>) for Faculty information.

## Earth Sciences M.Sc. Program Information

The Master of Science program requires completion of a minimum of 12 credit hours of approved courses, and a research project and thesis.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Earth Sciences M.Sc. Admission Requirements

The normal entry requirement is the equivalent of an Honours B.Sc. degree in Earth Sciences from the University of Manitoba. Students with honours degrees in related disciplines (such as Geography, Soil Science, Biology, Chemistry, Environmental Science, Physics, Mathematics, Engineering Physics, and Earth, Civil and Electrical Engineering) may be accepted by the Graduate Admissions Committee providing their planned degree program involves studies in the Earth sciences. The majority of the required courses taken by the student should normally be from the

Department of Earth Sciences. The research should also be in the Earth sciences

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Earth Sciences program of study (<https://umanitoba.ca/explore/programs-of-study/earth-sciences-msc/>) page.

## Degree Requirements

### Program Requirements

The M.Sc. program requires a thesis plus a minimum of 9 credit hours which includes:

Course	Title	Hours
GEOL 7760	Seminar in Geological Sciences	3
Select a minimum of 6 credit hours of approved courses at the 7000 level		6
<b>Total Hours</b>		<b>9</b>

Depending on the student's background and needs, the Advisory Committee may assign additional courses at the 3000 level or above.

The M.Sc. thesis proposal must normally be submitted within 8 months of the student's commencement in the program. It must demonstrate the student's understanding of the research area and define the research objective including demonstrating that it is a distinct contribution to the

field of study. Further information on the format of the proposal and the method of evaluation is available from the Department of Earth Sciences.

Students must submit progress reports (proposals, results and timetable of thesis work) to the Head on or before February 1 annually. The progress report is generally 1 to 2 pages in length.

An oral examination is required as part of the M.Sc. thesis examination. Further information on the format is available from the Department of Earth Sciences.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GEOL 7760	Seminar in Geological Sciences	3
7XXX	Approved courses at 7000 level	6
3XXX or above	Additional courses at 3000 level or above as assigned by the Advisory Committee	
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9</b>

Coursework is normally completed in Year 1, and thesis is normally completed Year 2 – 3. Adjustments may be made with the supervisor's consultation and approval.

Students are required to complete a M.Sc. thesis proposal (normally within 8 months of start of program). The proposal must include an introduction with citation of relevant literature, the research objectives, the proposed methodology including a timetable, the anticipated significant of the research, and references. A proposed budget must be appended to the proposal.

Students are required to submit a progress report to the Head on or before February 1 annually.

Students must produce a thesis that is appropriate for the M.Sc. degree being sought and must successfully defend their thesis as determined by the assigned examining committee.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and present a completed Program Form to the administrative assistant. The selection of courses and changes in a student's program must be approved by their advisor in the case of Master's students or their advisory committee in the case of doctoral students.

Students should consult the administrative assistant regarding the schedule of graduate course offerings in the department. Please note that some courses require a field component to be run before lectures

begin in the fall. Courses with insufficient enrolment may be cancelled well in advance of the first week of lectures.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Earth Sciences, Ph.D.

Earth Sciences

**Head:** Dr. Alfredo Camacho

**Campus Address/General Office:** 240 Wallace Building

**Telephone:** 204-474-9371

**Fax:** 204-474-7623

**Email Address:** [Riddell.Graduate@umanitoba.ca](mailto:Riddell.Graduate@umanitoba.ca)

**Website:** [umanitoba.ca/environment-earth-resources/earth-sciences](https://umanitoba.ca/environment-earth-resources/earth-sciences) (<https://umanitoba.ca/environment-earth-resources/earth-sciences/>)

**Academic Staff:** Please refer to the Riddell website (<https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-geological-sciences>) for Faculty information.

## Earth Sciences Ph.D. Program Information

The Doctor of Philosophy program requires completion of a minimum of 12 credit hours of approved courses, and a research project and thesis.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Earth Sciences Ph.D. Admission Requirements

The normal entry requirement is the equivalent of a M.Sc. in Earth Sciences. Students with M.Sc. degrees in related fields may be accepted by the Graduate Admissions Committee providing their planned degree program involves studies in the Earth Sciences. The majority of the required courses taken by the student should normally be in the Department of Earth Sciences. The research should also be in the Earth sciences.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Earth Sciences program of study (<https://umanitoba.ca/explore/programs-of-study/earth-sciences-phd/>) page.

## Degree Requirements

### Program Requirements

The Department of Earth Sciences requires that where admission to the Ph.D. program is directly from a Master's degree, a thesis plus the following is required for a total of a minimum of 12 credit hours:

Course	Title	Hours
GEOL 7760	Seminar in Geological Sciences	3
Select a minimum of 9 credit hours (minimum 6 at the 7000 level, maximum 3 at the 3000 or 4000 level)		9
<b>Total Hours</b>		<b>12</b>

In the case of admission to the Ph.D. without a Master's degree, a thesis plus the following is required for a total of a minimum of 15 credit hours:

Course	Title	Hours
GEOL 7760	Seminar in Geological Sciences	3
Select a minimum of 12 credit hours (minimum 9 at the 7000 level, maximum 3 at the 3000 or 4000 level)		12
<b>Total Hours</b>		<b>15</b>

Student progress reports (proposals, results and timetable of thesis work) must be submitted to the Head on or before February 1 annually. Progress reports are generally 1 to 2 pages in length.

**Expected Time to Graduate:** 4 years

### Progression Chart

#### Ph.D. in Earth Sciences (with M.Sc. degree)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>0</b>

#### Years 1-2

GEOL 7760	Seminar in Geological Sciences (continues each term)	3
Select 9 credit hours from the following:		9
7XXX	Approved courses at 7000 level (6 min credit hours)	
3XXX or 4XXX	Approved courses at 3000 or 4000 level (3 max credit hours)	
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>12</b>

#### Years 3-4

GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> For PhD students who have already received credit for GEOL 7200 as part of the Master's degree, another 7000-level course will be taken in place of the GEOL 7200 requirement for the PhD.

#### Ph.D. in Earth Sciences (transfer from Master's program or admitted without Master's degree)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>0</b>

#### Years 1-2

GEOL 7760	Seminar in Geological Sciences (continues each term)	3
Select 12 credit hours of the following:		12
7XXX	Approved courses at 7000 level (9 min credit hours)	
3XXX or 4XXX	Approved courses at 3000 or 4000 level (3 max credit hours)	
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>15</b>

#### Years 3-4

GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>15</b>

Coursework is normally completed in the first 2 years, and thesis is normally completed Year 4–5. Adjustments may be made with the supervisor's consultation and approval.

Students are required to complete a Ph.D. thesis proposal (normally within 12 months of start of program). The proposal must include an introduction with citation of relevant literature, the research objectives, the proposed methodology including a timetable, the anticipated significant of the research, and references. A proposed budget must be appended to the proposal.

Students are required to submit a progress report to the Head on or before February 1 annually.

Students must produce a thesis that is appropriate for the Ph.D. degree being sought and must successfully defend their thesis as determined by the assigned examining committee.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and present a completed Program Form to the administrative assistant. The selection of courses and changes in a student's program must be approved by their advisor in the case of Master's students or their advisory committee in the case of doctoral students.

Students should consult the administrative assistant regarding the schedule of graduate course offerings in the department. Please note that some courses require a field component to be run before lectures begin in the fall. Courses with insufficient enrolment may be cancelled well in advance of the first week of lectures.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Environment and Geography, M.Env.

Environment and Geography

**Head (Acting):** Dr. Michael Campbell

**Campus Address/General Office:** 220 Sinnott Building

**Telephone:** 204-474-9667

**Email Address:** [Riddell.Graduate@umanitoba.ca](mailto:Riddell.Graduate@umanitoba.ca)

**Website:** [umanitoba.ca/environment-earth-resources/environment-and-geography](https://umanitoba.ca/environment-earth-resources/environment-and-geography) (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/>)

**Academic Staff:** Please refer to the website for Faculty information: [umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography](https://umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography) (<https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography>)

## Environment & Geography M.Env. Program Information

The Master of Environment is an interdisciplinary program focusing on basic and applied research that deals with the complex relationships between the environment, earth, natural resources, and society at large.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Environment & Geography M.Env. Admission Requirements

Students must have a minimum GPA of 3.25 in the last 60 credit hours of course work. Applicants with an honours degree or equivalent (including a 4-year advanced degree) in Geography, Environmental Sciences, and/or Environmental Studies or related areas will be considered. Students must be accepted by an advisor prior to submitting an application to enter the program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Environment & Geography M.Env. program of study (<https://umanitoba.ca/explore/programs-of-study/master-environment-menv/>) page.

## Degree Requirements

Master's students are required to complete at least 12 credit hours as follows:

Course	Title	Hours
GEOG 7610	Graduate Seminar in E&G (Masters)	3
Select 6 credit hours from the 7000 level		6
Select 3 credit hours of any other course at the 3000-level or higher		3
<b>Total Hours</b>		<b>12</b>

Students must attend and present their original research at a department seminar.

All students must complete and orally defend a thesis that makes a distinctive contribution to the fields of environment and/or geography.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>First Term</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Other Requirements</b>		
Select 9 credit hours of the following:		9
3XXX or 4XXX	Courses at 3000 or 4000 level (3 max credit hours)	
7XXX	Courses at the graduate level (6 min credit hours)	
GEOG 7610	Graduate Seminar in E&G (Masters)	3
GRAD 7000	Master's Thesis	0
<b>Total Hours</b>		<b>12</b>

Students must attend and present their original research at a department seminar.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with their program advisor/thesis supervisor to determine their course selections. Courses must be listed on the Departmental Registration Approval Form (available from the departmental office) and written approval from the advisor and department head or designate must be obtained. Students are also responsible for obtaining any instructor or special permission which may be required for certain courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Environment and Geography, M.Sc.

Environment and Geography

**Head (Acting):** Dr. Michael Campbell

**Campus Address/General Office:** 220 Sinnott Building

**Telephone:** 204-474-9667

**Email Address:** [Riddell.Graduate@umanitoba.ca](mailto:Riddell.Graduate@umanitoba.ca)

**Website:** [umanitoba.ca/environment-earth-resources/environment-and-geography](https://umanitoba.ca/environment-earth-resources/environment-and-geography/) (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/>)

**Academic Staff:** Please refer to the website for Faculty information: [umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography](https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography) (<https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography>)

## Environment & Geography M.Sc. Program Information

The Master of Science program is an integrative graduate program option for those interested in furthering their academic training in the areas of environmental sciences, including physical geography.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Environment & Geography M.Sc. Admission Requirements

Students must have a minimum GPA of 3.25 in the last 60 credit hours of course work. Applicants with an honours degree or equivalent (including a 4-year advanced degree) in Geography (physical geography specialization) or from a program in the Earth or environmental sciences will be considered. Students must be accepted by an advisor prior to submitting an application to enter the program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc.

Environment & Geography program of study (<https://umanitoba.ca/explore/programs-of-study/environment-and-geography-msc/>) page.

## Degree Requirements

Master's students are required to complete at least 12 credit hours as follows:

Course	Title	Hours
GEOG 7610	Graduate Seminar in E&G (Masters)	3
Select 6 credit hours from the 7000 level		6
Select 3 credit hours of any other course at the 3000-level or higher		3
<b>Total Hours</b>		<b>12</b>

Students must attend and present their original research at a department seminar.

All students must complete and orally defend a thesis that makes a distinctive contribution to the fields of environment and/or geography.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>First Term</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Other Requirements</b>		
Select 9 credit hours of the following:		9
3XXX or 4XXX	Courses at 3000 or 4000 level (3 max credit hours)	
7XXX	Courses at the graduate level (6 min credit hours)	
GEOG 7610	Graduate Seminar in E&G (Masters)	3
GRAD 7000	Master's Thesis	0
<b>Total Hours</b>		<b>12</b>

Students must attend and present their original research at a department seminar.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with their program advisor/thesis supervisor to determine their course selections. Courses must be listed on the Departmental Registration Approval Form (available from the departmental office) and written approval from the advisor and department head or designate must be obtained. Students are also responsible for obtaining any instructor or special permission which may be required for certain courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Geography, M.A.

Environment and Geography

**Head:** Dr. Mark Hanson

**Campus Address/General Office:** 220 Sinnott Building

**Telephone:** 204-474-9667

**Email Address:** [Riddell.Graduate@umanitoba.ca](mailto:Riddell.Graduate@umanitoba.ca)

**Website:** [umanitoba.ca/environment-earth-resources/environment-and-geography](https://umanitoba.ca/environment-earth-resources/environment-and-geography) (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/>)

**Academic Staff:** Please refer to the website for Faculty information: [umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography](https://umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography) (<https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography>)

## Environment & Geography M.A. Program Information

The Master of Arts (Geography) is an integrative graduate program studying the dynamic character, spatial organization and interrelationships among the human and physical characteristics at, and near the Earth's surface.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Environment & Geography M.A. Admission Requirements

Students must have a minimum GPA of 3.25 in the last 60 credit hours of course work. Applicants with an honours degree or equivalent (including a 4-year advanced degree) in Geography (human geography specialization) or from an allied discipline will be considered. Students must be accepted by an advisor prior to submitting an application to enter the program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.A. Geography program of study (<https://umanitoba.ca/explore/programs-of-study/geography-ma/>) page.

## Degree Requirements

Master's students are required to complete at least 12 credit hours as follows:

Course	Title	Hours
GEOG 7610	Graduate Seminar in E&G (Masters)	3
Select 6 credit hours from the 7000 level		6
Select 3 credit hours of any other course at the 3000-level or higher		3
<b>Total Hours</b>		<b>12</b>

Students must attend and present their original research at a department seminar.

All students must complete and orally defend a thesis that makes a distinctive contribution to the fields of environment and/or geography.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>First Term</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Other Requirements</b>		
Select 9 credit hours of the following:		9
3XXX or 4XXX	Courses at 3000 or 4000 level (3 max credit hours)	
7XXX	Courses at the graduate level (6 min credit hours)	
GEOG 7610	Graduate Seminar in E&G (Masters)	3
GRAD 7000	Master's Thesis	0
<b>Total Hours</b>		<b>12</b>

Students must attend and present their original research at a department seminar.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with their program advisor/thesis supervisor to determine their course selections. Courses must be listed on the Departmental Registration Approval Form (available from the departmental office) and written approval from the advisor and department head or designate must be obtained. Students are also responsible for obtaining any instructor or special permission which may be required for certain courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Geography, Ph.D.

Environment and Geography

**Head:** Dr. Mark Hanson

**Campus Address/General Office:** 220 Sinnott Building



**Telephone:** 204-474-9667

**Email Address:** Riddell.Graduate@umanitoba.ca

**Website:** [umanitoba.ca/environment-earth-resources/environment-and-geography](https://umanitoba.ca/environment-earth-resources/environment-and-geography) (<https://umanitoba.ca/environment-earth-resources/environment-and-geography/>)

**Academic Staff:** Please refer to the website for Faculty information: [umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography](https://umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography) (<https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography>)

## Environment & Geography Ph.D. Program Information

The Doctor of Philosophy includes research tracks in the fields of Geography (Human and Physical), Environmental Science, and Environmental Studies.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Environment & Geography Ph.D. Admission Requirements

A 3.5 GPA (or equivalent) in their previous 60 credit hours (or two years of studies for international transcripts) of coursework is normally required. In addition, the prospective student should have or be completing a research driven thesis-based Masters degree in Geography, Environmental Sciences, Environmental Studies and/or related areas. Students must be accepted by an advisor prior to submitting an application to enter the program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Geography program of study (<https://umanitoba.ca/explore/programs-of-study/geography-phd/>) page.

## Degree Requirements

In addition to the minimum 12 credit hour course requirement, students are required to attend and present their original research at two department seminars.

Students are also required to pass a candidacy exam, and complete and successfully defend a dissertation. The dissertation is to be a distinctive contribution to the field and must be of publishable quality.

**Expected Time to Graduate:** 4 years

### Progression Chart

Course	Title	Hours
<b>First Term</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial <sup>1</sup>	0
<b>Other Requirements</b>		

7XXX	Courses at the graduate level	9
GEOG 7620	Graduate Seminar in E&G (PhD 1)	1.5
GEOG 7630	Graduate Seminar in E&G (PhD 2)	1.5
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Unless completed previously in a Master's program, without any intervening terms out of university.

Students are required to attend and present their original research at two department seminars.

### 3 Year Ph.D. in Geography

(transfers from Master's program or admitted without Master's degree)

Course	Title	Hours
<b>First Term</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial <sup>1</sup>	0
<b>Other Requirements</b>		
Select 21 credit hours of the following:		21
3XXX or 4XXX	Courses at 3000 or 4000 level (6 max credit hours)	
7XXX	Courses at the graduate level (15 min credit hours)	
GEOG 7620	Graduate Seminar in E&G (PhD 1)	1.5
GEOG 7630	Graduate Seminar in E&G (PhD 2)	1.5
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Unless completed previously in a Master's program, without any intervening terms out of university.

Students are required to attend and present their original research at two department seminars.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with their program advisor/thesis supervisor to determine their course selections. Courses must be listed on the Departmental Registration Approval Form (available from the departmental office) and written approval from the advisor and department head or designate must be obtained. Students are also responsible for obtaining any instructor or special permission which may be required for certain courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Natural Resources and Environmental Management, Ph.D.

Natural Resources Institute

**Head:** Dr. John Sinclair

**Campus Address/General Office:** 220 Sinnott Building

**Telephone:** 204-474-8373

**Fax:** 204-261-0038

**Email Address:** [nriinfo@umanitoba.ca](mailto:nriinfo@umanitoba.ca)

**Website:** [umanitoba.ca/environment-earth-resources/natural-resources-institute](https://umanitoba.ca/environment-earth-resources/natural-resources-institute) (<https://umanitoba.ca/environment-earth-resources/natural-resources-institute/>)

**Academic Staff:** Please refer to the NRI website (<https://umanitoba.ca/environment-earth-resources/faculty-staff/>) for academic staff information.

## Natural Resources Management Ph.D. Program Information

The Doctor of Philosophy program is aimed at developing independent researchers in the areas of natural resources and the environment.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Natural Resources Management Ph.D. Admission Requirements

An applicant should have a high academic standing in previous university work, a Master's degree in a related discipline, as determined by the NRI Selection Committee, and an area of research interest that may be supported by an NRI faculty member. Students must be accepted by an advisor prior to submitting an application to enter the program. A 3.5 GPA (or equivalent) in their most recent 60 credit hours of coursework and evidence of scholarly ability are required.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Natural Resources Management program of study (<https://umanitoba.ca/explore/programs-of-study/natural-resources-and-environmental-management-phd/>) page.

## Degree Requirements

### Program Requirements

All Ph.D. students will be required to complete a minimum of 12 and a maximum of 21 credit hours of coursework at the 700/7000-level or above, beyond the Master's degree (or its equivalent). A minimum of 6 credit hours of courses must be completed within the Natural Resources Institute and must include NRI 7310 Ph.D. Thesis Research Seminar (3).

Individual programs of study will vary from student to student depending on each student's research interest and the recommendations of each student's advisor and Ph.D. advisory committee. Students will be encouraged to use the pool of Natural Resources Institute required and elective courses as well as appropriate graduate courses available outside of the Natural Resources Institute in order to select the best set of courses to complement their programs.

Student academic progress will be reported annually to the Faculty of Graduate Studies. A minimum Grade Point Average of 3.0, with no grade below C+, must be maintained in order to continue in the program.

**Expected Time to Graduate:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select a minimum of 6 credit hours of NRI courses and select a minimum of 12 and maximum of 21 credit hours of the following or other U of M courses at the 7000 level or above:		12-21
NRI 7310	Ph.D. Thesis Research Seminar (Required)	
NRI 7070	Readings in Natural Resources Management 1	

NRI 7080	Readings in Natural Resources Management 2
NRI 7110	Field Seminar
NRI 7160	Projects in Natural Resources Management 1
NRI 7170	Projects in Natural Resources Management 2
NRI 7180	Sustainable Development and Natural Resources
NRI 7182	Sustainability, Economics, and Natural Resources
NRI 7190	Natural Resources Administration and Law
NRI 7200	The Role of Information Management in Sustainable Resource Use
NRI 7222	Human Dimensions of Natural Resources and Environmental Management
NRI 7232	Ecological Dimensions of Resource and Environmental Management
NRI 7242	Resource and Environmental Management Policy
NRI 7252	Environmental Management Practice
NRI 7290	Environmental Impact Assessment
NRI 7302	Conservation Biology and Biodiversity Management
NRI 7320	Environmental Risk and Hazards
NRI 7330	Water Resources: Analysis, Planning and Management
NRI 7340	Environmental Justice and Ecosystem Health
NRI 7350	Study Design and Quantitative Methods for Resource and Environmental Management
NRI 7360	Qualitative Field Methods for Community-based Resource and Environmental Management
NRI 7370	Sustainable Livelihoods, Food Resources and Community Food Security

<b>Hours</b>	<b>12-21</b>	
<b>Year 2</b>		
Doctoral Thesis	0	
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>	<b>0</b>	
<b>Total Hours</b>	<b>12-21</b>	

The proposal, Candidacy Exam, first draft and oral defence meetings are required. The proposal meeting is held in year 1 followed by data collection, analysis and writing. The Candidacy exam takes place during the second year. For more information on the thesis process, please refer to the PhD student Handbook at the Natural Resources Institute.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and newly admitted students to the Natural Resources Institute are required to see their faculty advisor to complete their Degree Requirement form prior to attempting to register. Appointments can be made by calling the general office. Only courses that have been approved by the faculty advisor will be credited to a student's program.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Natural Resources Management, M.N.R.M.

Natural Resources Institute

**Head:** Dr. John Sinclair

**Campus Address/General Office:** 220 Sinnott Building

**Telephone:** 204-474-8373

**Fax:** 204-261-0038

**Email Address:** [nriinfo@umanitoba.ca](mailto:nriinfo@umanitoba.ca)

**Website:** <https://umanitoba.ca/environment-earth-resources/natural-resources-institute> (<https://umanitoba.ca/environment-earth-resources/natural-resources-institute/>)

**Academic Staff:** Please refer to our website for academic staff information: <https://umanitoba.ca/environment-earth-resources/faculty-staff> (<https://umanitoba.ca/environment-earth-resources/faculty-staff/>)

## M.N.R.M. Program Information

The Master of Natural Resources Management program in natural resources management combines a broad commitment to sustainability with development of well-focused, practical expertise.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.N.R.M. program of study (<https://umanitoba.ca/explore/programs-of-study/natural-resources-management-mnrm/>) page.

## Degree Requirements

### Program Requirements

Students follow an individual study plan that includes a minimum of 21 credit hours (12 credit hours of required course work plus 9 credit hours of elective courses), with the option of up to 30 credit hours, plus a thesis or practicum.

The compulsory courses for the MNRM thesis and practicum streams are:

- NRI 7222 Human Dimensions of Natural Resources and Environmental Management (3)
- NRI 7232 Ecological Dimensions of Resource and Environmental Management (3)
- NRI 7182 Sustainability, Economics, and Natural Resources (3)

In addition:

Thesis Stream

- NRI 7262 Master's Thesis Research Seminar (3)

or

Practicum Stream

- NRI 7380 Project Management in Natural Resources and Environmental Management (3)

The central academic agenda of the required set of courses includes: Assessment of the theoretical foundations and practical applications of progress toward sustainable management of natural resources; understanding of ecosystems as self-organizing and responding systems; examination of conventional and alternative social arrangements, including institutions and tools of governance, as a means of improving human well-being and environmental responsibility; and exposure to theories of resource and environmental management processes and tools.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select 12 credit hours from the following required courses:		12
NRI 7222	Human Dimensions of Natural Resources and Environmental Management	
NRI 7232	Ecological Dimensions of Resource and Environmental Management	
NRI 7262 or NRI 7380	Master's Thesis Research Seminar or Project Management in Natural Resources and Environmental Management	
NRI 7182	Sustainability, Economics, and Natural Resources	
Select 9 to 18 credit hours from the following; or, other U of M courses at the 3000 level or above: <sup>1</sup>		9-18
NRI 7160	Projects in Natural Resources Management 1	
NRI 7170	Projects in Natural Resources Management 2	
NRI 7110	Field Seminar	
NRI 7180	Sustainable Development and Natural Resources	
NRI 7190	Natural Resources Administration and Law	
NRI 7200	The Role of Information Management in Sustainable Resource Use	
NRI 7242	Resource and Environmental Management Policy	
NRI 7252	Environmental Management Practice	
NRI 7290	Environmental Impact Assessment	
NRI 7302	Conservation Biology and Biodiversity Management	
NRI 7320	Environmental Risk and Hazards	
NRI 7330	Water Resources: Analysis, Planning and Management	
NRI 7340	Environmental Justice and Ecosystem Health	
NRI 7350	Study Design and Quantitative Methods for Resource and Environmental Management	
NRI 7360	Qualitative Field Methods for Community-based Resource and Environmental Management	
NRI 7370	Sustainable Livelihoods, Food Resources and Community Food Security	
NRI 7070	Readings in Natural Resources Management 1	
NRI 7080	Readings in Natural Resources Management 2	
<b>Hours</b>		<b>21-30</b>
<b>Year 2</b>		
GRAD 7000 or GRAD 7030	Master's Thesis or Master's Practicum	0

GRAD 7020	Master's Re-registration	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>21-30</b>

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

<sup>1</sup> At least 6 of the 9-18 NRI course credit hours must come from this list.

Most students do not complete all courses in the first year. The thesis committee is set up and the proposal meeting takes place.

The proposal, first draft and oral defence meetings are required. The proposal meeting is held in year 1 followed by data collection, analysis and writing in year 2 leading to a first draft meeting followed by the oral defence document. For more information on the thesis process, please refer to the MNRM student Handbook at the Natural Resources Institute.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and newly admitted students to the Natural Resources Institute are required to see their faculty advisor to complete their Degree Requirement form prior to attempting to register. Appointments can be made by calling the general office. Only courses that have been approved by the faculty advisor will be credited to a student's program.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;

# Faculty of Agricultural and Food Sciences

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Agribusiness and Agricultural Economics, M.Sc. (p. 1397)	2	Varies	
Animal Science, M.Sc. (p. 1399)	2	12	
Animal Science, Ph.D. (p. 1400)	3	9	
Biosystems Engineering, M.Eng. (p. 1401)	1	30	
Biosystems Engineering, M.Sc. (p. 1403)	2	12	
Biosystems Engineering, Ph.D. (p. 1404)	4	12	
Entomology, M.Sc. (p. 1406)	2-3	6	
Entomology, Ph.D. (p. 1407)	3-5	6	
Food Science, M.Sc. (p. 1408)	2	12	
Food Science, Ph.D. (p. 1409)	3.5	6	
Human Nutritional Sciences, M.Sc. (p. 1410)	2	12	
Human Nutritional Sciences, Ph.D. (p. 1411)	4	18	
Plant Science, M.Sc. (p. 1413)	2	12	
Plant Science, Ph.D. (p. 1414)	3-4	12	
Soil Science, M.Sc. (p. 1415)	2	12	
Soil Science, Ph.D. (p. 1416)	3-4	6	

## Agribusiness and Agricultural Economics, M.Sc.

Agribusiness & Agricultural Economics

**Head:** Derek G. Brewin

**Grad Chair:** Julieta Frank

**Campus Address/General Office:** 352 Agriculture Building

**Telephone:** 204-474-9384

**Fax:** 204-261-7251

**Email Address:** [agribusiness@umanitoba.ca](mailto:agribusiness@umanitoba.ca)

**Website:** <http://umanitoba.ca/faculties/afs/dept/agribusiness/>

**Academic Staff:** Please refer to the Faculty of Agricultural and Food Sciences website at <http://umanitoba.ca/faculties/afs/dept/agribusiness/staff/1046.html>

## Agribusiness & Agricultural Economics Program Information

The Master of Science thesis-based program consists of a combination of coursework and a research component.

A Ph.D. in Economics (Economics and Econometrics Stream) (p. 1435) with a research specialization in Agribusiness and Agricultural Economics is offered by the Department of Economics in the Economics and Econometrics Stream with the cooperation of the Department of Agribusiness and Agricultural Economics.

## Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Agribusiness & Agricultural Economics M.Sc. Admission Requirements

Applicants normally require a Bachelor of Science in Agribusiness or a four year Bachelor's degree (or equivalent) in Economics. The following courses or their equivalents are prerequisites to the graduate program:

Course	Title	Hours
MATH 1300	Vector Geometry and Linear Algebra (or an equivalent course in Matrices and Linear Algebra)	3

MATH 1520	Introductory Calculus for Management and Social Sciences (or an equivalent course in Calculus)	3
ECON 2010	Microeconomic Theory 1 (or an equivalent course in microeconomics)	3
ECON 2020	Macroeconomic Theory 1 (or an equivalent course in macroeconomics)	3
ABIZ 3080	Introduction to Econometrics (or an equivalent course in econometrics)	3
The following courses are not required, but may be recommended:		
ECON 3010	Microeconomic Theory 2 (or an equivalent course in microeconomics)	
ECON 3020	Macroeconomic Theory 2 (or an equivalent course in macroeconomics)	

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Agribusiness & Agricultural Economics program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/agbus.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/agbus.html)) page.

## Degree Requirements

The M.Sc. program has three streams:

1. Agricultural Economics
2. Agribusiness
3. Environmental and Resource Economics

All students will be automatically entered into the Agricultural Economics stream and will require approval to move into the Agribusiness or Environmental and Resource Economics streams. Within each stream there is a thesis and a comprehensive option.

### Thesis Route

Students must complete a minimum of 18 credit hours of coursework. Of these 18 credit hours, a minimum of 9 credit hours must be at the 7000 level. Other coursework will normally be at the 7000 level as well. Any exceptions to specific course requirements must be approved by the Department Graduate Advisory Committee (DGAC). Students must submit an acceptable thesis and pass a thesis oral examination as well as present two graduate seminars open to the public. The first presentation will be on the thesis proposal, and the second presentation will be on the completed research. The thesis must be in the area of the student's selected stream.

### Comprehensive Examination Route

Students must complete a minimum of 27 credit hours of coursework with at least 18 credit hours at the 7000 level. Other course work will normally be at the 7000 level as well. Any exceptions to specific course requirements must be approved by the Department Graduate Advisory Committee (DGAC). All students in the comprehensive option must complete a research paper and pass a comprehensive examination based primarily on the paper. These students must present a graduate seminar open to the public based on the completed research. The research paper must be in the area of the student's selected stream.

**Expected Time to Graduate:** 2 years

## Progression Chart

### Thesis Route

#### Agricultural Economics Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following:		3-6
ABIZ 7940 & ABIZ 7950	Production Economics and Advanced Agricultural Demand Analysis	
ECON 7722	Advanced Microeconomic Theory I	
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics as approved by Advisor)	
Select additional courses as approved by Advisor		9-12
GRAD 7000	Master's Thesis	0
<b>Total Hours</b>		<b>12-18</b>

### Agribusiness Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ABIZ 7410	Agricultural Finance	3
XXXX 7XXX	Additional courses in Agribusiness or related area as approved by Advisor	6
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
Select additional courses as approved by Advisor		6
GRAD 7000	Master's Thesis	0
<b>Total Hours</b>		<b>18</b>

### Environmental and Resource Economics Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following:		3-6
ABIZ 7940 & ABIZ 7950	Production Economics and Advanced Agricultural Demand Analysis	
ECON 7722	Advanced Microeconomic Theory I	
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
ABIZ 7430	Advanced Theory of Resource Economics	3
Select an additional course related to Environment and Resources as approved by Advisor		3
Select additional course(s) as approved by Advisor		3-6
GRAD 7000	Master's Thesis	0
<b>Total Hours</b>		<b>15-21</b>

### Comprehensive Examination Route

#### Agricultural Economics Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following:		3-6
ABIZ 7940 & ABIZ 7950	Production Economics and Advanced Agricultural Demand Analysis	
ECON 7722	Advanced Microeconomic Theory I	

XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
Select additional courses as approved by Advisor		18-21
GRAD 7010	Comprehensive Examination	0
<b>Total Hours</b>		<b>24-30</b>

### Agribusiness Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ABIZ 7410	Agricultural Finance	3
XXXX 7XXX	Additional courses in Agribusiness or related area as approved by Advisor	6
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
Select additional courses as approved by Advisor		15
GRAD 7010	Comprehensive Examination	0
<b>Total Hours</b>		<b>27</b>

### Environmental and Resource Economics Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following:		3-6
ABIZ 7940 & ABIZ 7950	Production Economics and Advanced Agricultural Demand Analysis	
ECON 7722	Advanced Microeconomic Theory I	
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
ABIZ 7430	Advanced Theory of Resource Economics	3
Select an additional course related to Environment and Resources as approved by Advisor		3
Select additional courses as approved by Advisor		12-15
GRAD 7010	Comprehensive Examination	0
<b>Total Hours</b>		<b>24-30</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

New and returning students must meet with their program advisor to determine courses prior to registration. Courses must be listed on the departmental approval form available from the Graduate Studies Assistant, and written approval granted from both the advisor and the department head or designate. Students may only register for courses listed and approved at that time. Any course revisions (additions and/or withdrawals) must be approved in the same manner. The signed form must be submitted to the Graduate Studies Assistant, who will then complete the registration process.

Not all courses are offered each year.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Animal Science, M.Sc.

Animal Science

**Head (Acting):** Kim Ominski

**Grad Chair:** Karmin O

**Campus Address/General Office:** 201 Animal Science Building

**Telephone:** 204-474-9383

**Fax:** 204-474-7628

**Email Address:** [animal\\_science@umanitoba.ca](mailto:animal_science@umanitoba.ca)

**Website:** [umanitoba.ca/afs/animal\\_science](http://www.umanitoba.ca/afs/animal_science/) ([http://www.umanitoba.ca/afs/animal\\_science/](http://www.umanitoba.ca/afs/animal_science/))

**Academic Staff:** Please refer to the Faculty at [umanitoba.ca/afs/animal\\_science](http://www.umanitoba.ca/afs/animal_science/) ([http://www.umanitoba.ca/afs/animal\\_science/](http://www.umanitoba.ca/afs/animal_science/))

## Animal Science M.Sc. Program Information

The Master of Science thesis-based program consists of a combination of coursework and a research component with focus in behaviour, genetics, nutrition or physiology of farm animals.



## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Animal Science M.Sc. Admission Requirements

Applicants normally require a Bachelor of Science in Agriculture degree with a major in Animal Science. Students with other degrees (B.Sc. Honours or General) may be accepted and in these instances students, depending on their academic background, may be required to complete a pre-Master's program or to register for courses additional to those normally required in the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Animal Science program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/animalsci.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/animalsci.html)) page.

## Degree Requirements

### Thesis Route

Students must complete a minimum of 9 credit hours of coursework plus ANSC 7140 (12 credit hours in total). Of these 12 credit hours, a minimum of 6 credit hours must be at the 7000 level in the major subject.

A minimum of 3 credit hours must be taken in an ancillary subject. Students must submit an acceptable thesis and pass a thesis oral examination.

### Comprehensive Examination Route

Students must complete a minimum of 30 credit hours of coursework plus ANSC 7140 (33 credit hours in total). Of these 33 credit hours, 12-18 credit hours must be in the major subject at the 7000 level, and 6-12 credit hours must be in an ancillary subject. The remaining required credit hours are to be made up of electives determined in consultation with the Advisory Committee. A comprehensive examination is required.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANSC 7140	Animal Science Seminar	3
ANSC 7XXX	Major subject 7000 level	6
Select an ancillary subject course at the 3000 level or higher		3
GRAD 7000	Master's Thesis	0
<b>Total Hours</b>		<b>12</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/ advisory committee to determine courses. Courses must be listed on the departmental approval form (available from the Animal Science General Office) and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in a like manner.

Not all courses are offered each year.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Animal Science, Ph.D.

Animal Science

**Head (Acting):** Kim Ominski

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**Fax:** 204-474-7628

**Email Address:** [animal\\_science@umanitoba.ca](mailto:animal_science@umanitoba.ca)

**Website:** [umanitoba.ca/afs/animal\\_science/](http://umanitoba.ca/afs/animal_science/) ([http://www.umanitoba.ca/afs/animal\\_science/](http://www.umanitoba.ca/afs/animal_science/))

**Academic Staff:** Please refer to the Faculty at [umanitoba.ca/afs/animal\\_science](http://umanitoba.ca/afs/animal_science) ([http://www.umanitoba.ca/afs/animal\\_science/](http://www.umanitoba.ca/afs/animal_science/))

## Animal Science Ph.D. Program Information

The department offers graduate programs leading to the M.Sc. and Ph.D. degrees in behaviour, genetics, nutrition or physiology of farm animals.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

#### Animal Science Ph.D. Admission Requirements

A candidate must normally complete a M.Sc. degree before entering the Ph.D. program, however, exceptional applicants with an honours Bachelor's degree or equivalent may be permitted to enter the Ph.D. program.

### Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Animal Science program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/animalsci.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/animalsci.html)) page.

### Degree Requirements

#### Directly from M.Sc.

Students must complete 6 credit hours of courses at the 7000 level in addition to ANSC 7390 (9 credit hours in total). Students must pass a candidacy exam, submit an acceptable thesis and pass a thesis oral examination.

#### Directly from Honours Bachelor or transfer from M.Sc.

Students must complete 12 credit hours of courses at the 7000 level in addition to ANSC 7390 (15 credit hours in total). Students must pass a candidacy exam, submit an acceptable thesis and pass a thesis oral examination.

**Expected Time to Graduate:** 3 years (if continuing from an M.Sc. program).

#### Progression Chart

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANSC 7390	Advanced Animal Science Seminar	3
XXXX 7XXX	7000 level course(s)	6
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
<b>Total Hours</b>		<b>9</b>

### Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/ advisory committee to determine courses. Courses must be listed on the departmental approval form (available from the Animal Science General Office) and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in a like manner.

Not all courses are offered each year.

### Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

#### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

#### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

#### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Biosystems Engineering, M.Eng.

Biosystems Engineering

**Head:** D. (Danny) Mann

**Campus Address/General Office:** E2-376 EITC (Engineering Building)

**Telephone:** 204-474-6033

**Fax:** 204-474-7512

**Email Address:** [headbio@umanitoba.ca](mailto:headbio@umanitoba.ca)

**Website:** [umanitoba.ca/engineering/biosystems](https://umanitoba.ca/engineering/biosystems/) (<https://umanitoba.ca/engineering/biosystems/>)

**Academic Staff:** Please refer to the Biosystems Engineering website (<https://umanitoba.ca/engineering/faculty-staff/biosystems-engineering/>) for Faculty information.

## Biosystems Engineering Program Information

The Department of Biosystems Engineering offers graduate programs leading to Master of Science, Master of Engineering, and Doctor of Philosophy degrees. The graduate programs in the department focus on applications of engineering in biological systems. Strong emphasis is placed on assisting graduate students to gain a broad range of skills and experience in conducting interdisciplinary research, in understanding the interrelationships among physical and biological factors, and in written and oral communication.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Biosystems Engineering M.Eng. Admission Requirements

For admission into the M.Eng. program applicants must have a minimum of a Bachelor's degree in engineering. In exceptional cases, based on the candidate's professional experience, this requirement may be waived on the recommendation of the Department Head.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biosystems Engineering M.Eng. program of study (<https://umanitoba.ca/explore/programs-of-study/biosystems-engineering-meng/>) page.

## Degree Requirements

The M.Eng is a course-based degree. A minimum of 30 credit hours of coursework is required. The following conditions must be met:

- A minimum of 18 credit hours must be taken at the 7000 level. GRAD 7050 may be used as a substitute for 6 credit hours of 7000 level coursework. The remaining credit hours must be taken at the 3000 level or above.
- A minimum of 18 credit hours must be taken from any of the Engineering departments including a minimum of 15 credit hours from the Department of Biosystems Engineering.

All courses must be approved by the student's advisor.

**Expected time to graduate:** 12-18 months

### Progression Chart

All students must complete a minimum of 12 credit hours of coursework approved by the faculty advisor.

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
Select a minimum of 18 credit hours must be taken at the 7000 level		18
Select 12 credit hours at the 3000 level or above		12
	<b>Hours</b>	<b>30</b>
	<b>Total Hours</b>	<b>30</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Biosystems Engineering, M.Sc.

Biosystems Engineering

**Head:** D. (Danny) Mann

**Campus Address/General Office:** E2-376 EITC (Engineering Building)

**Telephone:** 204-474-6033

**Fax:** 204-474-7512

**Email Address:** headbio@umanitoba.ca

**Website:** [umanitoba.ca/engineering/biosystems](https://umanitoba.ca/engineering/biosystems) (<https://umanitoba.ca/engineering/biosystems/>)

**Academic Staff:** Please refer to the Biosystems Engineering website (<https://umanitoba.ca/engineering/faculty-staff/biosystems-engineering/>) for Faculty information.

## Biosystems Engineering Program Information

The Department of Biosystems Engineering offers graduate programs leading to Master of Science, Master of Engineering, and Doctor of Philosophy degrees. The graduate programs in the department focus on applications of engineering in biological systems. Strong emphasis is placed on assisting graduate students to gain a broad range of skills and experience in conducting interdisciplinary research, in understanding the interrelationships among physical and biological factors, and in written and oral communication.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Biosystems Engineering M.Sc. Admission Requirements

For admission into the M.Sc. program, applicants are normally required to hold a Bachelor's degree in Biosystems Engineering or equivalent from a recognized university. Applicants with degrees in related areas may be recommended for admission by the Department Head.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biosystems Engineering M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/biosystems-engineering-msc/>) page.

## Degree Requirements

The M.Sc. is a research degree consisting of coursework and a thesis based on original research conducted by the student. In addition to the minimum course requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 1329) of this Calendar, a minimum of 12 credit hours of coursework is required, including at least 6 credit hours of courses at the 7000 level (which must include BIOE 7290) from the Department of Biosystems Engineering. The remaining 6 credit hours must be at the 3000 level or above from any department.

Master of Science students are required to spend at least one academic session in full-time resident graduate study. On recommendation of the

department head, the residence requirement may be waived in special cases.

**Expected time to graduate:** 18-24 months

## Progression Chart

All students must complete a minimum of 12 credit hours of coursework approved by the faculty advisor.

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOE 7290	Biosystems Engineering Seminar 1	3
BIOE 7XXX	Course designated BIOE 7000 or above	3
Select courses designated 3000 or above from any department		6
Thesis Proposal		0
		<b>Hours</b>
		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
		<b>Hours</b>
		<b>0</b>
		<b>Total Hours</b>
		<b>12</b>

Students are expected to demonstrate independence and professionalism during their graduate studies. Students are expected to be present on campus for scheduled classes, regular meetings with the advisor, and research work (unless the research work is being done at a site off-campus). It is understood that progress on research may be limited when the student is taking classes, however, substantial progress is expected during periods when classes are not being taken. Research progress includes tasks such as reviewing scientific literature, collecting experimental data, analyzing experimental data, and paper/thesis writing. The advisory committee will judge whether the academic performance has been satisfactory based on the plans outlined in previous "Progress Reports."

### Thesis Proposal

A thesis proposal (approximately 20 pages) is to be prepared by the M.Sc. student in consultation with the advisor/co-advisor, usually within 12 months of registration. The thesis proposal should include a statement of the thesis topic, a review of the relevant literature, the hypotheses to be tested, the proposed research methodology, and anticipated significance of the research. The thesis proposal should be circulated to the advisory committee prior to being presented orally to the student's advisory committee in a closed session. Unanimous approval by the advisory committee is required. If unanimous approval is not received, the thesis proposal can be revised and resubmitted.

### Master's Thesis

A thesis must be submitted based on original research conducted by the student. The oral examination for the MSc degree, including distribution of the written thesis, will be organized by the student's advisor/co-advisor. Students are expected to present an overview of the work in 20-30 minutes and subsequently answer questions posed by the members of the examining committee.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Biosystems Engineering, Ph.D.

Biosystems Engineering

**Head:** D. (Danny) Mann

**Campus Address/General Office:** E2-376 EITC (Engineering Building)

**Telephone:** 204-474-6033

**Fax:** 204-474-7512

**Email Address:** [headbio@umanitoba.ca](mailto:headbio@umanitoba.ca)

**Website:** [umanitoba.ca/engineering/biosystems](https://umanitoba.ca/engineering/biosystems/) (<https://umanitoba.ca/engineering/biosystems/>)

**Academic Staff:** Please refer to the Biosystems Engineering website (<https://umanitoba.ca/engineering/faculty-staff/biosystems-engineering/>) for Faculty information.

## Biosystems Engineering Program Information

The Department of Biosystems Engineering offers graduate programs leading to Master of Science, Master of Engineering, and Doctor of Philosophy degrees. The graduate programs in the department focus on applications of engineering in biological systems. Strong emphasis is placed on assisting graduate students to gain a broad range of skills and experience in conducting interdisciplinary research, in understanding the interrelationships among physical and biological factors, and in written and oral communication.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Biosystems Engineering Ph.D. Admission Requirements

For admission into the Ph.D. program, applicants are normally required to hold a M.Sc. degree in Biosystems Engineering or equivalent from a recognized university. Applicants with degrees in related areas may be recommended for admission by the Department Head.

Students making exceptional progress while enrolled in the M.Sc. program may request to transfer to the Ph.D. program upon the consent of the department head and based on a recommendation from the student's advisory committee and the Biosystems Engineering Graduate Studies Committee which investigates the student's qualifications and suitability for Ph.D. study. In such cases, the program credit hour requirements shall be recommended at the time of transfer by the student's advisory committee.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biosystems Engineering Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/biosystems-engineering-phd/>) page.

## Degree Requirements

Students are normally required to complete 12 credit hours of coursework, including a seminar course (BIOE 7270), and a thesis. The remaining 9 credit hours at the 7000 level can be taken from any Department.

The Department of Biosystems Engineering offers a Graduate Specialization in Engineering Education (GSEE) at the Doctoral level. The GSEE will require 12 credit hours of coursework at the 7000 level and a thesis on an Engineering Education topic. The coursework requirements include:

Course	Title	Hours
BIOE 7270	Advanced Seminar in Biosystems Engineering	3
EDUA 7840	Qualitative Research Methods in Education	3

or EDUA 7850	Design and Analysis of Educational Research (Quantitative)	
Select two of the following:		6
ENG 7010	The Engineering Design Process	
ENG 7030	The Discipline of Engineering Education	
ENG 7040	Foundations of Engineering Education Research	
<b>Total Hours</b>		<b>12</b>

**Expected time to graduate:** 3 - 4 years

## Progression Chart

All students must complete a minimum of 12 credit hours of coursework approved by the faculty advisor.

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOE 7270	Advanced Seminar in Biosystems Engineering	3
COURSE 7XXX	Courses designated 7000 or above from any department	9
Thesis Proposal		
<b>Hours</b>		<b>12</b>
<b>Years 2-3</b>		
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

Students are expected to demonstrate independence and professionalism during their graduate studies. Students are expected to be present on campus for scheduled classes, regular meetings with the advisor, and research work (unless the research work is being done at a site off-campus). It is understood that progress on research may be limited when the student is taking classes, however, substantial progress is expected during periods when classes are not being taken. Research progress includes tasks such as reviewing scientific literature, collecting experimental data, analyzing experimental data, and paper/thesis writing. Ph.D. students are expected to display increasing independence as they proceed through the doctoral program. The advisory committee will judge whether the academic performance has been satisfactory based on the plans outlined in the previous "Progress Report" form.

### Thesis Proposal

The thesis proposal will normally be reviewed and approved by the advisory committee within the first 12 months of the PhD program. It will consist of a maximum 10-page (double spaced) proposal including sections on objectives & sub-objectives, brief review of relevant literature, proposed methodology, and impact/significance of the proposed research. The PhD student will give a 20-25 minute presentation on the thesis proposal. The advisory committee may ask questions of clarification or offer suggestions for modification of the research objectives and/or proposed methodology. The thesis proposal presentation should not be viewed as an oral examination that must be

passed. The purpose is to set the direction of the students' research with input from the advisory committee.

### Doctoral Candidacy Examination

The candidacy examination consists of two parts (i.e., a written portion and an oral portion) that together comprise the candidacy examination.

### Doctoral Thesis

The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication. The final examination for the PhD degree, which is organized by the Faculty of Graduate Studies, includes two distinct stages: i) examination of the candidate's written thesis by members of the examining committee followed by ii) an oral examination in which the student presents an overview of the work in 20-30 minutes and is expected to answer questions on the subject of the thesis.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Entomology, M.Sc.

Entomology

**Head:** R.W. Currie

**Campus Address/General Office:** 214 Animal Science Building

**Telephone:** 204-474-8077

**Fax:** 204-474-7628

**Email Address:** head\_entomo@umanitoba.ca

**Website:** <http://umanitoba.ca/afs/entomology> (<http://umanitoba.ca/afs/entomology/>)

**Academic Staff:** Please refer to the Entomology website (<https://umanitoba.ca/afs/entomology/>) for Faculty information.

## Entomology Program Information

The Department of Entomology is the only such in Canada, offering programs of study leading to Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Entomology M.Sc. Admission Requirements

Applicants normally require a four-year Bachelor's degree in Agriculture or Science with a suitable selection of courses in insect biology. Academically strong students without this preparation may be admitted to the M.Sc. program but may be expected to take additional courses to ensure that they have a strong foundation of entomological knowledge.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Entomology program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/entomology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/entomology.html)) page.

## Degree Requirements

### Thesis Route

Students must complete a minimum of 6 credit hours of coursework at the 7000 level or above. As part of their academic program, students are required to take ENTM 7150 which is held in the Winter term in each academic year. Students must submit an acceptable thesis and pass a thesis oral examination.

The Department of Entomology offers the M.Sc. degree only through the thesis route.

**Expected Time to Graduate:** 2 - 3 years

### Progression Chart

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENTM 7150	Advanced Entomology 1	3
Select courses at the 7000 level in the area of specialization		3
GRAD 7000	Master's Thesis	0
<b>Total Hours</b>		<b>6</b>

## Registration Requirements

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Entomology, Ph.D.

Entomology

**Head:** R.W. Currie

**Campus Address/General Office:** 214 Animal Science Building

**Telephone:** 204-474-8077

**Fax:** 204-474-7628

**Email Address:** head\_entomo@umanitoba.ca

**Website:** <http://umanitoba.ca/afs/entomology> (<http://umanitoba.ca/afs/entomology/>)

**Academic Staff:** Please refer to the Entomology website (<https://umanitoba.ca/afs/entomology/>) for Faculty information.

## Entomology Program Information

The Department of Entomology is the only such in Canada, offering programs of study leading to Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Entomology Ph.D. Admission Requirements

A candidate must normally complete a M.Sc. degree before entering the Ph.D. program, however, students enrolled in a M.Sc. program who demonstrate exceptional ability may, in the early stages of their program, request transfer to a Ph.D. program. Applicants to the Ph.D. program are required to submit a short proposal of a research project they consider suitable as a Ph.D. research thesis project. The Department Head and potential Advisor may recommend that an applicant take a Qualifying Examination.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Entomology program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/entomology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/entomology.html)) page.

## Degree Requirements

### Directly from M.Sc.

Students must complete a minimum of 6 credit hours of coursework at the 7000 level or above. As part of their academic program, students are required to take ENTM 7220 which is held in the Winter term in each academic year. Students must pass a Candidacy Exam, submit an acceptable thesis and pass a thesis oral examination.

### Transfer from M.Sc.

Students transferring from a M.Sc. to a Ph.D. program are required to take 12 credit hours of coursework at the 7000 level or above. As part of

their academic program, students are required to take ENTM 7220 or hold credit in ENTM 7150. Students must pass a Candidacy Exam, submit an acceptable thesis and pass a thesis oral examination.

**Expected Time to Graduate:** 3 - 5 years

## Progression Chart

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENTM 7220	Advanced Entomology	3
Select courses at the 7000 level in the area of specialization		3
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
<b>Total Hours</b>		<b>6</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:



- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Food Science, M.Sc.

Food and Human Nutritional Sciences

**Head:** Dr. Cristina Rosell

**Grad Chair:** Dr. Harold Aukema

**Campus Address/General Office:** 209 Human Ecology Building

**Telephone:** 204-474-6411

**Fax:** 204-474-7593

**Email Address:** FHNS.GradProgram@umanitoba.ca

**Website:** <https://umanitoba.ca/agricultural-food-sciences/department-food-and-human-nutritional-sciences> (<https://umanitoba.ca/agricultural-food-sciences/department-food-and-human-nutritional-sciences/>)

**Academic Staff:** Please visit our Academic Staff webpage (<https://umanitoba.ca/agricultural-food-sciences/food-human-nutritional-sciences-faculty-and-staff/#academic-staff>)

## Food Science Program Information

The Department offers programs in both food science and human nutritional sciences leading to the Master of Science and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Food Science M.Sc. Admission Requirements

Entrance into the program requires a four-year undergraduate degree in Human Nutritional Sciences, Food Science, or equivalent. Decisions on equivalent degrees or courses needed to bring the student's background to the equivalent of a Human Nutritional Sciences or Food Science degree will be made by the Food and Human Nutritional Sciences Graduate Studies Committee (FHNSGSC). Each student must have an advisor identified before acceptance into the program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Food Science program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/food\\_science.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/food_science.html)) page.

## Degree Requirements

There are two types of Food Science Master's programs in the Department of Food and Human Nutritional Sciences:

## Thesis

Thesis projects may be of a basic research type or of an applied or practical nature relating to the chemistry, physics and/or microbiology of food raw materials, processes and/or products.

As part of the 12 credit hours required in the program, all students are required to take HNSC 7200 (3 CH) or FOOD 7130 (3 CH), plus 3 credit hours in HNSC or FOOD courses at the 7000 level. The remaining 6 credit hours can be from within or outside the department and must include at least 3 credit hours at the 7000 level or above. Reading/Special Topics courses at the Master's level must not exceed 3 credit hours.

## Non-thesis

### Not currently accepting students into this option

Additional coursework plus practical work terms and a comprehensive examination are substituted for a research project and written thesis.

The non-thesis program requires a minimum of 30 credit hours of coursework. Of this total, a minimum of 15 credit hours must be at the 7000 level in Food Science with the remaining courses to be approved by the student's advisory committee.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
FOOD 7130	Food Science Seminar	3
Select 3 credit hours in HNSC or FOOD courses at the 7000 level.		3
Select 6 credit hours from within or outside the department, which must include at least 3 credit hours at the 7000 level or above		6
Thesis Proposal <sup>1</sup>		
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> A written thesis proposal followed by an oral presentation by the student must be assessed and approved by the Advisory Committee within 9 months of commencing the program. Students will be apprised of guidelines and evaluation procedures by the Advisor. The thesis proposal shall include the title, an introduction, literature review, hypothesis, objectives, methodology, references and Gantt chart. Students shall submit their draft thesis proposal to the advisor for feedback prior to circulation to the Advisory Committee. The student then presents orally for 20 minutes and defends the thesis proposal to the members constituting the Advisory Committee.

<sup>2</sup> Students in the thesis route must pass an Oral Examination. The examining committee will grant approval based on the written document and the ability of the student to defend the work completed. Agreement with no more than one dissenting vote on the written thesis and oral defense is required for final approval.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment will be cancelled the first week of classes.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Food Science, Ph.D.

Food and Human Nutritional Sciences

**Head:** Dr. Cristina Rosell

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## Food Science Program Information

The Department offers programs in both food science and human nutritional sciences leading to the Master of Science and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Food Science Ph.D. Admission Requirements

In addition to the admission requirements of the Faculty of Graduate Studies, the student must hold a research-thesis-based Master of Science degree or equivalent in the general areas of food or human nutritional sciences from a recognized university. The student must have attained a minimum University of Manitoba equivalent GPA of 3.5 in Master's coursework. Students with a Master of Science in a different scientific discipline will be considered for admission by the Food and Human Nutritional Sciences Graduate Committee (FHNSGSC) on a case-by-case basis.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Food Science program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/food\\_science.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/food_science.html)) page.

## Degree Requirements

The coursework requirement will consist of a minimum of 6 credit hours at the 7000 level. Of these 6 credit hours, 3 will consist of the seminar course (FOOD 7130, 3 CH or HNSC 7200, 3 CH). Further coursework may be required at the advisory committee's discretion.

**Expected Time to Graduate:** 3.5 years

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
FOOD 7130	Food Science Seminar	3
Course at the 7000 level		3
Thesis Proposal <sup>1</sup>		
		<b>Hours</b>
		<b>6</b>
<b>Years 2-4</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0

GRAD 8000	Doctoral Thesis <sup>3</sup>	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>6</b>

- <sup>1</sup> A written thesis proposal followed by an oral presentation by the student must be assessed and approved by the Advisory Committee within 12 months of commencing the program.
- <sup>2</sup> The candidacy exam will consist of 2 parts:
1. A written work consisting of a complete research grant proposal.
  2. An oral defense of the written work.
- <sup>3</sup> The final examination for the Ph.D. degree proceeds in two (2) stages:
1. Examination of the candidate's thesis by the examining committee;
  2. Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment will be cancelled the first week of classes.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

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All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Human Nutritional Sciences, M.Sc.

Food and Human Nutritional Sciences

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**Grad Chair:** Dr. Harold Aukema

**Campus Address/General Office:** 209 Human Ecology Building

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**Academic Staff:** Please refer to the Academic Staff (<https://umanitoba.ca/agricultural-food-sciences/food-human-nutritional-sciences-faculty-and-staff/#academic-staff>) webpage.

## Human Nutritional Sciences Program Information

The Department offers programs in both food science and human nutritional sciences leading to the Master of Science and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Human Nutritional Sciences M.Sc. Admission Requirements

Entrance into the program requires a four-year undergraduate degree in Human Nutritional Sciences, Food Science, or equivalent. Decisions on equivalent degrees or courses needed to bring the student's background to the equivalent of a Human Nutritional Sciences or Food Science degree will be made by the Food and Human Nutritional Sciences Graduate Studies Committee (FHNSGSC). Each student must have an advisor identified before acceptance into the program.

Students with a three-year undergraduate degree enter at the Pre-Master's level, in which at least 18 credit hours of coursework are required. Pre-Master's students are not eligible for graduate student stipends and do not carry out a research project.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Human

Nutritional Sciences program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/hns.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/hns.html)) page.

## Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Degree Requirements

As part of the 12 credit hours required in the program, all students are required to take HNSC 7200 (3 CH) or FOOD 7130 (3 CH), plus 3 credit hours in HNSC or FOOD courses at the 7000 level. The remaining 6 credit hours can be from within or outside the department and must include at least 3 credit hours at the 7000 level or above. Reading/Special Topics courses at the Master's level must not exceed 3 credit hours.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HNSC 7200	Seminar in Food and Nutrition Research <sup>1</sup>	3
Select 3 credit hours in HNSC or FOOD courses at the 7000 level		3
Select 6 credit hours from within or outside the department, which must include at least 3 credit hours at the 7000 level or above		6
Thesis Proposal <sup>2</sup>		
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Students are required to attend and participate in all regular seminar classes (HNSC 7200) for the duration of their program. In these seminars students also will have duties as chair, discussant and evaluator, as assigned by the seminar coordinator.

<sup>2</sup> A written thesis proposal followed by an oral presentation by the student must be assessed and approved by the Advisory Committee within 9 months of commencing the program. Students will be apprised of guidelines and evaluation procedures by the Advisor. The thesis proposal shall include the title, an introduction, literature review, hypothesis, objectives, methodology, references and Gantt chart. Students shall submit their draft thesis proposal to the advisor for feedback prior to circulation to the Advisory Committee. The student then presents orally for 20 minutes and defends the thesis proposal to the members constituting the Advisory Committee.

<sup>3</sup> Students must pass an Oral Examination. The examining committee will grant approval based on the written document and the ability of the student to defend the work completed. Agreement with no more than one dissenting vote on the written thesis and oral defense is required for final approval.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning or newly admitted graduate and occasional students must see a faculty advisor or the department head, and submit their course plan, prior to registering.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Human Nutritional Sciences, Ph.D.

Food and Human Nutritional Sciences

**Head:** Dr. Cristina Rosell

**Grad Chair:** Dr. Harold Aukema

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**Academic Staff:** Please refer to the Academic Staff (<https://umanitoba.ca/agricultural-food-sciences/food-human-nutritional-sciences-faculty-and-staff/#academic-staff>) webpage.

## Human Nutritional Sciences Program Information

The Department offers programs in both food science and human nutritional sciences leading to the Master of Science and the Doctor of Philosophy degrees.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

#### Human Nutritional Sciences Ph.D. Admission Requirements

In addition to the admission requirements of the Faculty of Graduate Studies, the student must hold a research-thesis-based Master of Science degree or equivalent in the general areas of food or human nutritional sciences from a recognized university. The student must have attained a minimum University of Manitoba equivalent GPA of 3.5 in Master's coursework. Students with a Master of Science in a different scientific discipline will be considered for admission by the Food and Human Nutritional Sciences Graduate Committee (FHNSGSC) on a case-by-case basis.

### Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Human Nutritional Sciences program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/hns.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/hns.html)) page.

### Degree Requirements

The coursework requirement will consist of a minimum of 6 credit hours at the 7000 level. Of these 6 credit hours, 3 will consist of the seminar course (FOOD 7130, 3 CH or HNSC 7200, 3 CH). Further coursework may be required at the advisory committee's discretion.

**Expected Time to Graduate:** 4 years

#### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HNSC 7200	Seminar in Food and Nutrition Research <sup>1</sup>	3
Course at the 7000 level		3
Thesis Proposal <sup>2</sup>		
<b>Hours</b>		<b>6</b>

#### Years 2-4

GRAD 8010	Doctoral Candidacy Examination <sup>3</sup>	0
GRAD 8000	Doctoral Thesis <sup>4</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>6</b>

- Students are required to attend and participate in all regular seminar classes (HNSC 7200) for the duration of their program. In these seminars students will also have duties as chair, discussant and evaluator, as assigned by the seminar coordinator.
- A written thesis proposal followed by an oral presentation by the student must be assessed and approved by the Advisory Committee within 12 months of commencing the program.
- The candidacy exam will consist of 2 parts:
  - A written work consisting of a complete research grant proposal.
  - An oral defense of the written work.
- The final examination of the Ph.D. degree proceeds in two (2) stages:
  - Examination of the candidate's thesis by the examining committee;
  - Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

### Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment will be cancelled the first week of classes.

### Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

#### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

#### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Plant Science, M.Sc.

Plant Science

**Head:** Dr. Douglas Cattani (Acting)

**Campus Address/General Office:** 222 Agriculture Building

**Telephone:** 204-474-8221

**Fax:** 204-474-7528

**Email Address:** [plantscience\\_gradstudies@umanitoba.ca](mailto:plantscience_gradstudies@umanitoba.ca)

**Website:** [http://umanitoba.ca/afs/plant\\_science](http://umanitoba.ca/afs/plant_science) ([http://umanitoba.ca/afs/plant\\_science/](http://umanitoba.ca/afs/plant_science/))

**Academic Staff:** Please refer to the Plant Science staff listing ([https://umanitoba.ca/faculties/afs/dept/plant\\_science/staffs/faculty.html](https://umanitoba.ca/faculties/afs/dept/plant_science/staffs/faculty.html)).

## Plant Science Program Information

The Department of Plant Science offers programs leading to the Master of Science and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Plant Science M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Plant Science program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/plant\\_science.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/plant_science.html)) page.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Degree Requirements

### Research and Thesis

The thesis route will include a thesis and a minimum of 12 credit hours of coursework of which 9 credit hours must be at the 7000 level and include PLNT 7250, a mandatory course.

**Expected Time to Graduate:** 2-2.5 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Year 2</b>		
PLNT 7250	Plant Science Seminar	3
Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Credit hours as determined by advisory committee and student.

**Minimum credit hours required: 12.**

<sup>2</sup> Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/ advisory committee to determine courses. Courses must be listed on the departmental approval form (available from the Plant Science General Office) and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner. Not all courses are offered each year.

## Regulations

### Supplemental Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

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unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Plant Science, Ph.D.

Plant Science

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**Academic Staff:** Please refer to the Plant Science staff listing ([https://umanitoba.ca/faculties/afs/dept/plant\\_science/staffs/faculty.html](https://umanitoba.ca/faculties/afs/dept/plant_science/staffs/faculty.html)).

## Plant Science Program Information

The Department of Plant Science offers programs leading to the Master of Science and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Plant Science Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D.

Plant Science program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/plant\\_science.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/plant_science.html)) page.

## Degree Requirements

A minimum of 12 credit hours at the 7000 level (including PLNT 7420 for which students must register each year of their Ph.D. program) plus a thesis.

**Expected Time to Graduate:** 3.5 -4 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PLNT 7420	Advanced Plant Science Seminar (register for each year)	
Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>		
GRAD 8000	Doctoral Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Year 2</b>		
PLNT 7420	Advanced Plant Science Seminar (register for each year)	
Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>		
GRAD 8010	Doctoral Candidacy Examination (to be completed in Year 2 or Year 3)	0
GRAD 8000	Doctoral Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
PLNT 7420	Advanced Plant Science Seminar (register for each year, credit granted in final year)	3
Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>		
GRAD 8010	Doctoral Candidacy Examination (to be completed in Year 2 or Year 3)	0
GRAD 8000	Doctoral Thesis <sup>2</sup>	0
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Credit hours as determined by advisory committee and student.  
**Minimum credit hours required: 12.**

<sup>2</sup> An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/ advisory committee to determine courses. Courses must be listed on the departmental approval form (available from the Plant Science General Office) and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner. Not all courses are offered each year.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Soil Science, M.Sc.

Soil Science

**Head:** Dr. Francis Zvomuya

**Campus Address/General Office:** 362 Ellis Building

**Telephone:** 204-474-8666

**Fax:** 204-474-7642

**Email Address:** [soilsci.gradstudies@umanitoba.ca](mailto:soilsci.gradstudies@umanitoba.ca)

**Website:** [http://umanitoba.ca/afs/soil\\_science](http://umanitoba.ca/afs/soil_science) ([http://umanitoba.ca/afs/soil\\_science/](http://umanitoba.ca/afs/soil_science/))

**Academic Staff:** Please refer to the Soil Science staff listing (<https://umanitoba.ca/agricultural-food-sciences/department-soil-science/soil-science-faculty-and-staff/>).

## Soil Science Program Information

The Department of Soil Science offers graduate programs leading to the Master of Science and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Soil Science M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. The adequacy of the background of an applicant will be evaluated by the Soil Science Graduate Studies Committee and the Department Head. Normally, a student should have a strong background in soil science and/or a strong background in the basic sciences related to the student's proposed area of study.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Soil Science program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/soil\\_science.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/soil_science.html)) page.

## Degree Requirements

### Research and Thesis

The thesis route will include a thesis and a minimum of 12 credit hours of coursework. The minimum of 12 credit hours will consist of:

SOIL 7220, plus 9 additional credit hours, of which 3 credit hours must be from the Department of Soil Science at the 7000 level.

To meet graduation requirements, all students must have demonstrated, either in their current program or in previous studies:

1. Nine credit hours in fundamental and applied soil sciences at the senior undergraduate level or graduate level;  
**and**
2. Experimental design and statistical analysis - 3 credit hours at the senior undergraduate or graduate level;  
**and**
3. Communication skills – in addition to completing SOIL 7220, students normally will present papers at a scientific meeting.

**Expected Time to Graduate:** 2 to 2.5 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SOIL 7220	Principles of Scientific Research and Communication	3

Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>



GRAD 7000	Master's Thesis	0
	<b>Hours</b>	<b>3</b>
<b>Year 2</b>		
Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>		
GRAD 7000	Master's Thesis	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>3</b>

<sup>1</sup> Credit hours as determined by advisory committee and student.  
**Minimum total credit hours required: 12.**

Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/advisory committee to determine courses. Courses must be listed on the departmental approval form and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Soil Science, Ph.D.

Soil Science

**Head:** Dr. Francis Zvomuya

**Campus Address/General Office:** 362 Ellis Building

**Telephone:** 204-474-8666

**Fax:** 204-474-7642

**Email Address:** [soilsci.gradstudies@umanitoba.ca](mailto:soilsci.gradstudies@umanitoba.ca)

**Website:** [http://umanitoba.ca/afs/soil\\_science](http://umanitoba.ca/afs/soil_science) ([http://umanitoba.ca/afs/soil\\_science/](http://umanitoba.ca/afs/soil_science/))

**Academic Staff:** Please refer to the Soil Science staff listing (<https://umanitoba.ca/agricultural-food-sciences/department-soil-science/soil-science-faculty-and-staff/>).

## Soil Science Program Information

The Department of Soil Science offers graduate programs leading to the Master of Science and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Soil Science Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Soil Science program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/soil\\_science.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/soil_science.html)) page.

## Degree Requirements

Each student's program is individually tailored, but still must satisfy those requirements prescribed by the Department. Where admission to the Ph.D. is from a M.Sc. degree, the course work will be a minimum of 6 credit hours at the 7000 level or higher of which at least 3 credit hours must be from the Department of Soil Science.

Where admission to the Ph.D. is directly from an Honours Bachelor Degree or equivalent, the coursework will be a minimum of 18 credit hours consisting of a minimum of 12 credit hours at the 7000 level (of which at least 6 credit hours must be from the Department of Soil Science) with the balance of the coursework at the 3000 level or above.

To meet graduation requirements, all students must have demonstrated either in their current program or in previous studies:

1. Twelve credit hours in fundamental and applied soil sciences at the senior undergraduate or graduate level;  
**and**
2. Experimental design and statistical analysis - 3 credit hours at the senior undergraduate or graduate level;  
**and**
3. Communication skills – students will have completed SOIL 7220 or a similar course approved by the Department Head. In addition, students will normally present papers at scientific meetings.

**Expected Time to Graduate:** 3.5 - 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SOIL 7220	Principles of Scientific Research and Communication	3
Select courses as determined by advisory committee and student <sup>1</sup>		
GRAD 8000	Doctoral Thesis <sup>2</sup>	0
<b>Hours</b>		<b>3</b>
<b>Year 2</b>		
Select courses as determined by advisory committee and student <sup>1</sup>		
GRAD 8010	Doctoral Candidacy Examination (to be completed in Year 2 or Year 3)	0
GRAD 8000	Doctoral Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
Select courses as determined by advisory committee and student <sup>1</sup>		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis (to be completed in Year 2 or Year 3) <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Credit hours as determined by advisory committee and student.  
**Minimum credit hours required: 6.**

<sup>2</sup> An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/ advisory committee to determine courses. Courses must be listed on the departmental approval form and written approval granted from both the

advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Faculty of Architecture

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Architecture, M.Arch. (p. 1418)	2	48	Yes
City Planning, M.C.P. (p. 1420)	2	39-51	Yes
Design and Planning, Ph.D. (p. 1421)	4	12	
Interior Design, M.I.D. (p. 1422)	1.5-2	21-48	Yes
Landscape Architecture, M.L.Arch. (p. 1424)	4	42-111	Yes

## Architecture, M.Arch.

Architecture

**Head:** Brian T. Rex

**Grad Chair:** Brian T. Rex

**Campus Address/General Office:** 201 Russell Building

**Telephone:** 204-474-6578

**Fax:** 204-474-7532

**Email Address:** gradarch@umanitoba.ca (GradArch@umanitoba.ca)

**Website:** [umanitoba.ca/architecture/](https://umanitoba.ca/architecture/) (<https://umanitoba.ca/architecture/>)

**Academic Staff:** Please see Architecture website (<https://umanitoba.ca/architecture/>) for Faculty information.

## Architecture Program Information

The Master of Architecture thesis-based program consists of a combination of coursework and a design component.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.Arch. Admission Requirements

There are different ways to become eligible to apply for the Master of Architecture Program:

#### DIRECT ENTRY

All applicants must meet the general admission and entrance requirements of the Faculty of Graduate Studies. The entry level into the program will be determined by the Department of Architecture Admission Committee's evaluation of the individual's application and supporting documents. Direct admissions to the M.Arch Program requires that applicants have a minimum of a four-year undergraduate degree in one of the following: Architecture, Architectural Design, Architectural Science, Environmental Design/Architecture option, or the equivalent, from a recognized college or university, with minimum GPA of 3.0 or equivalent B in the last two full years (60 credit hours) of study.

For those applying with a University of Manitoba Bachelor of Environmental Design degree a minimum of "C+" in

courses EVAR 4002, EVAR 4004, EVAR 4008, EVAR 4010 with a minimum GPA of 3.0 in the last two full years (60 credit hours) of study is required.

Please refer to the following web page for more information: [http://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/architecture.html](http://umanitoba.ca/faculties/graduate_studies/admissions/programs/architecture.html) ([http://umanitoba.ca/faculties/architecture/programs/architecture/admissions\\_package.html](http://umanitoba.ca/faculties/architecture/programs/architecture/admissions_package.html))

### ARCHITECTURE MASTER'S PREPARATION (AMP 1 & AMP 2) UNDERGRADUATE PROGRAM

For applicants who have a recognized three or four year undergraduate degree in either a non-design discipline (such as Fine Art, Engineering, Science, Philosophy, Theatre, Psychology, Music, Film, English, History, Art History, Urban Studies, Geography, Commerce, etc)

or

a design-related discipline (such as Interior Design, Landscape Architecture, Industrial Design, etc.) and wish to eventually apply to the Master of Architecture Program.

General Eligibility: All applicants must meet the general admission and entrance requirements set by Environmental Design:Architecture. The entry level into the program will be determined by the Department of Architecture Admissions Committee's evaluation of the individual's application and supporting documents.

**Note:** Upon successful completion of the AMP Program students wishing to continue into the M.Arch Program must officially apply for graduate admission. Evaluation is based on the student's progress in the AMP Program, as evidenced in a portfolio submission, GPA and a Faculty of Graduate Studies application.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Arch. program of study (<https://umanitoba.ca/explore/programs-of-study/architecture-march/>) page.

## Degree Requirements

Degree Requirements: 48 credit hours

### Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) Graduate Option

Students may apply to the Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) graduate option. Students must complete a minimum of two and maximum of three 4-month work

terms to have the Co-op/I option acknowledged on their graduation parchment. For each work term, students must enroll in the appropriate course: ARCG 7150 and, subsequently, ARCG 7250 and/or ARCG 7350. Each course requires submission of a written report and portfolio covering the work completed for the professional assignment. Work term courses are valued at zero credit hours and evaluated as pass/fail. These are above and beyond graduate course requirements. Additional fees will apply.

## Accreditation

In Canada, all provincial/territorial associations/institutes/orders recommend a degree from an accredited professional degree program as a prerequisite for licensure. The Canadian Architectural Certification Board (CACB), which is the sole agency authorized to accredit Canadian professional degree programs in architecture, recognizes two types of accredited degrees: the Master of Architecture (M.Arch) and the Bachelor of Architecture (B. Arch). A program may be granted a six-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

*In 2018 the Master of Architecture program was formally granted a full accreditation term of six years effective July 1, 2018. The term will end on June 30, 2024. The next CACB Maintenance Accreditation Visit is scheduled to take place in spring 2024.*

**Expected Time to Graduate:** 2 years.

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ARCH 7000 & ARCH 7010	Advanced Technology Topics 1 and Advanced Technology Topics 2	3
ARCH 7020 & ARCH 7030	Research Topics: History and Theory 1 and Research Topics: History and Theory 2	3
ARCH 7040	Professional Practice	3
ARCH 7050	Arch Studio 5 and Comprehensive Program Report	9
ARCH 7060	Arch Studio 6	9
ARCH 7350	Legal Aspects of Architectural Practice	3
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
ARCH 7070	Design Research Studio	9
ARCH 7080	Technology Thesis Report	3
Select one of the following:		3
ARCH 7000 & ARCH 7010	Advanced Technology Topics 1 and Advanced Technology Topics 2	
COURSE XXXX	Elective Course at 3000 level or higher as approved by the department	
Select one of the following:		3
ARCH 7020 & ARCH 7030	Research Topics: History and Theory 1 and Research Topics: History and Theory 2	

COURSE XXXX	Elective Course at 3000 level or higher as approved by the department	
GRAD 7090	Design Thesis	0
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>48</b>

Students must complete a minimum of 3 credit hours of Advanced Technology Topics and 3 credit hours Research Topics History Theory courses.

Students may choose to take electives courses to replace the additional 6 credits of Advanced Technology Topics and Research Topics: History Theory Courses.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# City Planning, M.C.P.

City Planning

**Head:** Richard Milgrom

**Campus Address/General Office:** 201 Russell Building

**Telephone:** 204-474-6578

**Fax:** 204-474-7532

**Email Address:** gradarch@umanitoba.ca

**Website:** [umanitoba.ca/architecture/departement-city-planning](https://umanitoba.ca/architecture/departement-city-planning) (<https://umanitoba.ca/architecture/departement-city-planning/>)

**Academic Staff:** Please refer to City Planning website (<https://umanitoba.ca/architecture/departement-city-planning/>) for Faculty information.

## City Planning Program Information

The Master of City Planning is a two-year combined academic and professional program.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.C.P. Admission Requirements

Applicants must meet the entrance requirements of the Faculty of Graduate Studies. Please note that City Planning requires English Language Proficiency test scores above the FGS minimum requirement.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.C.P. program of study (<https://umanitoba.ca/explore/programs-of-study/city-planning-mcp/>) page.

## Degree Requirements

The City Planning graduate program offers two streams to complete the degree – one concludes with a Capstone Project, the other a Thesis/Practicum. The program also coordinates a mentorship program with the Manitoba Professional Planners Institute.

Five core courses are required of all students in the program, along with two courses from a roster of option courses. Students in the Capstone Stream are required to complete two electives; those in the Thesis/Practicum may take electives to support their particular research interests.

Degree requirements: 51 credit hours (Capstone optional); 39 credit hours (Thesis/Practicum Option)

### Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) Graduate Option

Students may apply to the Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) graduate option. Students must complete a minimum of two and maximum of three 4-month work terms to have the Co-op/I option acknowledged on their graduation parchment. For each work term, students must enroll in the appropriate course: ARCG 7150 and, subsequently, ARCG 7250 and/or ARCG 7350.

Each course requires submission of a written report and portfolio covering the work completed for the professional assignment. Work term courses are valued at zero credit hours and evaluated as pass/fail. These are above and beyond graduate course requirements. Additional fees will apply.

**Expected Time to Graduate:** 2 years

## Progression Chart

### Master of City Planning (Capstone Project)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CITY 7410	Planning Design 1	6
CITY 7020	Planning Methods and Techniques II	3
CITY 7030	Planning Theory 1	3
Select one of the following:		6
CITY 7420	Planning Design 2	
CITY 7430	Planning Design 3 (Urban Design)	
Select two Option Courses and/or Electives		6
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
CITY 7340	Urban Development	3
CITY 7310	Law and Local Government	3
CITY 7470	Professional Planning Practice	3
CITY 7050	City Planning Capstone	6
Select one of the following:		6
CITY 7420	Planning Design 2	
CITY 7430	Planning Design 3 (Urban Design)	
CITY 7440	Planning Design 4	
Select two Option Courses and/or Electives		6
<b>Hours</b>		<b>27</b>
<b>Total Hours</b>		<b>51</b>

### Master of City Planning (Thesis/Practicum Stream)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CITY 7410	Planning Design 1	6
CITY 7020	Planning Methods and Techniques II	3
CITY 7030	Planning Theory 1	3
Select one of the following:		6
CITY 7420	Planning Design 2	
CITY 7430	Planning Design 3 (Urban Design)	
CITY 7440	Planning Design 4	
Select two Option courses		6
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
Select one of the following:		6
CITY 7420	Planning Design 2	
CITY 7430	Planning Design 3 (Urban Design)	
CITY 7440	Planning Design 4	

CITY 7340	Urban Development	3
CITY 7310	Law and Local Government	3
CITY 7470	Professional Planning Practice	3
GRAD 7000 or GRAD 7030	Master's Thesis or Master's Practicum	0
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>39</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new students must meet with their faculty advisor within the first month of classes. Students with registration issues should meet with the City Planning Graduate Student advisor during the last two weeks in August or first week in September.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Design and Planning, Ph.D.

Design and Planning

**Head:** Dr. Lisa Landrum

**Grad Chair:** Dr. Lisa Landrum

**Campus Address/General Office:** 201 Russell Building, Faculty of Architecture

**Telephone:** 204-474-8769

**Fax:** 204-474-7532

**Email Address:** [gradarch@umanitoba.ca](mailto:gradarch@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/architecture/programs/Phd/](https://umanitoba.ca/faculties/architecture/programs/Phd/) (<https://umanitoba.ca/faculties/architecture/programs/Phd/>)

**Academic Staff:** Please refer to the Design and Planning website ([https://umanitoba.ca/faculties/architecture/programs/Phd/PhD\\_Advisors.html](https://umanitoba.ca/faculties/architecture/programs/Phd/PhD_Advisors.html)) for a current listing of PhD advisors.

## Design and Planning Program Information

The Faculty of Architecture offers a trans-disciplinary graduate program of study leading to a Doctor of Philosophy degree.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Design and Planning Ph.D. Admission Requirements

Applicants to the Ph.D. in Design and Planning Program must possess the following:

- a Master's degree in a discipline represented by the programs in the Faculty of Architecture (Architecture, City Planning, Environmental Design, Interior Design or Landscape Architecture) or a related field from a recognized institution;
- a cumulative GPA of 3.5 or equivalent in the last two years of full-time university study (60 credit hours);
- evidence of appropriate research capability (a Master's thesis or practicum and/or peer-reviewed publications or presentations);
- a record of appropriate experience in professional practice, post-secondary teaching and/or other pertinent accomplishments and activities.

Admission is contingent on the availability and willingness of a qualified faculty member to supervise the applicant's research and program of studies. Potential applicants must secure consent from an advisor in advance of making a formal application by following the Preliminary Application Process described on the program website.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Design and Planning Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/design\\_planning.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/design_planning.html)) page.

## Degree Requirements

Students must complete a minimum of 12 credit hours at the 7000 level or higher. One 3-credit hour course must address theory and one 3-

credit hour course must address methods appropriate to the student's area of study. At least 6 of the 12 credit hours of courses must be taken within the Faculty of Architecture. Students must additionally complete a Candidacy Examination and Thesis Proposal, submit an acceptable Thesis and pass a Thesis Oral Examination.

**Expected Time to Graduate:** 4-6 years

## Progression Chart

All students must maintain a minimum grade point average of 3.5 (B+) with no grade below 3.0 (B).

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Various Coursework <sup>1</sup>		12
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
Thesis Proposal <sup>3</sup>		0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
GRAD 8000	Doctoral Thesis (Research) <sup>4</sup>	0
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
GRAD 8020	Doctoral Re-registration (as required)	0
GRAD 8020	Doctoral Re-registration (Submission and Oral Defense) <sup>5</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Appropriate coursework will be determined by the student and advisor and approved by the Ph.D. Program Head. Courses must be at the 7000 level or higher. One 3-credit hour course must address theory and one 3-credit hour course must address methods appropriate to the student's area of study. At least 6 of the 12 credit hours must be taken within the Faculty of Architecture.

<sup>2</sup> The Candidacy Examination consists of a formal written review paper(s) and/or research project(s) prepared by the student in response to questions or topics posed by the advisory committee, and an oral presentation by the student followed by questions by the advisory committee. Students must pass both the written and oral components. Students must demonstrate the following: ability to articulate a focused research area; knowledge of significant literature and/or precedents in the area of concentration; understanding and demonstration of suitable research methods.

<sup>3</sup> Upon successful completion of the Candidacy Examination, the student may proceed to write and publically defend a Thesis Proposal. This written proposal will normally consist of 50-100 pages. Upon a successful defense, the Thesis Proposal Form is submitted to the Faculty of Graduate Studies.

<sup>4</sup> Depending on the topic and methodology, the research and preparation of the Thesis may take 1 - 3 years. The Thesis must constitute a distinct contribution to knowledge in the major field of study and be of sufficient merit to be, in the judgment of the examiners, acceptable for publication.

<sup>5</sup> The final version of the thesis must be submitted by the candidate to the Faculty of Graduate Studies following the Thesis Guidelines. All processes for Thesis submission, distribution, identifying external examiners, and the Oral Defense follow Faculty of Graduate Studies regulations.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Interior Design, M.I.D.

Interior Design

**Head:** Kelley Beaverford

**Campus Address/General Office:** 201 Russell Building

**Telephone:** 204-474-6578

**Fax:** 204-474-7532

**Email Address:** gradarch@umanitoba.ca

**Website:** [umanitoba.ca/architecture/department-interior-design](https://umanitoba.ca/architecture/department-interior-design) (<https://umanitoba.ca/architecture/department-interior-design/>)

**Academic Staff:** Please see the Interior Design website (<https://umanitoba.ca/architecture/department-interior-design/>) for Faculty information.

## Interior Design Program Information

The department of Interior Design at the University of Manitoba has a long-established reputation for excellence and leads Canada in the development of the first Master of Interior Design program.

The Department offers two streams within the Master of Interior Design:

- The *first-professional program* is directed towards those interested in pursuing a career in Interior Design practice. The program emphasizes the creation of human-centred and context-based design solutions that respond to the needs of contemporary life. The course of studies consists of the design studio and support courses that develop the methods, processes, technical and theoretical foundations of interior design. There are opportunities for international and cross-cultural study through exchange programs and intersession studios. The program requires a minimum of two full years of study to complete.
- The *post-professional program* is directed to those who already hold a first-professional qualification in Interior Design. The program has a research orientation and is intended to further the knowledge base in specific areas of the discipline. The program requires a minimum of one and one half years of full-time study to complete. For additional information on delivery options and length of study requirements contact the department of Interior Design.

The first-professional program is accredited by the Council for Interior Design Accreditation. Graduates normally proceed to certification from the National Council of Interior Design Qualification (N.C.I.D.Q.) and membership in a professional interior design association. Master of Interior Design graduates are qualified to work nationally and internationally at the forefront of their profession, with a skill-set that includes strategic thinking, entrepreneurship, a research orientation and an ethical and environmentally responsible frame of reference.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.I.D. Admission Requirements

#### FIRST-PROFESSIONAL MASTERS PROGRAM

Applicants with an undergraduate degree in Interior Design or an undergraduate degree in Environmental Design (Interior Environment Option) from the Faculty of Architecture are eligible for direct admission. Applicants with degrees in other fields of study are assessed on a case-by-case basis and may be eligible for admission to a pre-master program of study.

#### POST-PROFESSIONAL MASTERS PROGRAM

A first-professional degree in Interior Design is required for admission.

## Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.I.D. program of study (<https://umanitoba.ca/explore/programs-of-study/interior-design-mid/>) page.

Please note that Interior Design requires English Language Proficiency Test scores above the FGS minimum requirement.

## Degree Requirements

Post-Professional Stream - 21 Credit Hours

First Professional Stream - 48 Credit Hours

### Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) Graduate Option

Students may apply to the Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) graduate option. Students must complete a minimum of two and maximum of three 4-month work terms to have the Co-op/I option acknowledged on their graduation parchment. For each work term, students must enroll in the appropriate course: ARCG 7150 and, subsequently, ARCG 7250 and/or ARCG 7350. Each course requires submission of a written report and portfolio covering the work completed for the professional assignment. Work term courses are valued at zero credit hours and evaluated as pass/fail. These are above and beyond graduate course requirements. Additional fees will apply.

**Expected Time to Graduate:** Post-Professional Stream 1.5 years; Professional Stream, 2 years

### First-Professional Master of Interior Design

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IDES 7180	Theory Seminar 1 - Contemporary Issues in Design	3
IDES 7200	Masters Studio 1 - Strategic Issues	6
IDES 7210	Masters Studio 2 - Events and Making	6
IDES 7240	Sensory Technology 5	3
IDES 7280	Advanced Topics in Contemporary Interior Design Seminar	3
IDES 7290	Work Experience Program (winter/summer)	0
IDES 7170	Design Research Methods	3
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
IDES 7000	Graduate Seminar in Interior Design (Pass/Fail)	3
IDES 7190	Theory Seminar 2 - Critical Perspectives	3



IDES 7220	Masters Studio 3	6
IDES 7230	Sensory Technology 4	3
IDES 7250	Professionalism and Practice	3
Select 6 credit hours in Electives (To be taken during the first 2 years of study - Advisor approval required)		6
GRAD 7030	Master's Practicum	0
<b>Hours</b>		<b>24</b>
<b>Total Hours</b>		<b>48</b>

## Post-Professional Master of Interior Design

Course	Title	Hours
<b>Years 1-2</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IDES 7170	Design Research Methods	3
IDES 7180	Theory Seminar 1 - Contemporary Issues in Design	3
IDES 7190	Theory Seminar 2 - Critical Perspectives	3
IDES 7280	Advanced Topics in Contemporary Interior Design Seminar	3
Select 9 credit hours of Electives (Advisor approval required)		9
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>21</b>
<b>Total Hours</b>		<b>21</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new students must contact the Graduate Student Advisor, between mid-August and commencement of classes, who will determine whether a meeting with the Department Head is required. Timetable changes may occur throughout the summer.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Landscape Architecture, M.L.Arch.

Landscape Architecture

**Head:** Anna Thurmayr

**Grad Chair:** Anna Thurmayr

**Campus Address/General Office:** 201 Russell Building

**Telephone:** 204-474-6578

**Fax:** 204-474-7532

**Email Address:** [gradarch@umanitoba.ca](mailto:gradarch@umanitoba.ca)

**Website:** [umanitoba.ca/architecture/department-landscape-architecture/](https://umanitoba.ca/architecture/department-landscape-architecture/) (<https://umanitoba.ca/architecture/department-landscape-architecture/>)

**Academic Staff:** Please refer to the Landscape Architecture website (<https://umanitoba.ca/architecture/department-landscape-architecture/>) for Faculty information.

## Landscape Architecture Program Information

The program leading to the Master of Landscape Architecture degree at the University of Manitoba was the first graduate program in Canada.

The M.L.Arch. program is accredited by the Canadian Society of Landscape Architects (CSLA) which has reciprocal recognition from the Landscape Architecture Accreditation Board (LAAB) in the United States. Successful completion of a program accredited by the CSLA/LAAB qualifies graduates to sit the Landscape Architecture Registration Exam (LARE), the North America-wide qualification for professional registration. In Manitoba, having an accredited degree plus two years in practice and passing required sections of the LARE is required for professional registration with the Manitoba Association of Landscape Architects (MALA).

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## M.L.Arch. Admission Requirements

Students admitted to the program must have one of three different types of degree with a minimum Grade Point Average (or equivalent) of 3.0 from a university recognized by the Faculty of Graduate Studies:

- a 4-year degree in Landscape Architecture from a university recognized by the Faculty of Graduate Studies or a 4-year degree in Environmental Design from the University of Manitoba;
- a 4-year degree in another design discipline from a university recognized by the Faculty of Graduate Studies;
- a 4-year degree in another discipline from a university recognized by the Faculty of Graduate Studies

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.L.Arch. program of study (<https://umanitoba.ca/explore/programs-of-study/landscape-architecture-mla/>) page.

## Degree Requirements

Study is directed towards the analysis, planning, design, management and stewardship of natural and built environments at scales varying from whole regions to small individual sites. The program emphasizes to integrate and apply knowledge of ecology, socio-cultural factors, economics and aesthetics to create environments that are functional, innovative, sustainable, appropriate and attractive.

Degree Requirements: 42-111 credit hours

### Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) Graduate Option

Students may apply to the Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) graduate option. Students must complete a minimum of two and maximum of three 4-month work terms to have the Co-op/I option acknowledged on their graduation parchment. For each work term, students must enroll in the appropriate course: ARCG 7150 and, subsequently, ARCG 7250 and/or ARCG 7350. Each course requires submission of a written report and portfolio covering the work completed for the professional assignment. Work term courses are valued at zero credit hours and evaluated as pass/fail. These are above and beyond graduate course requirements. Additional fees will apply.

**Expected Time to Graduate:** 2-4 years

## Progression Chart

MLA 1 (non-design) students must take Year 1, 2, and 3 courses (111 credit hours)

MLA 2 (design – non B.E.D (L+U)) students must take Year 2, and 3 courses (75 credit hours)

MLA 3 (B.E.D. (L+U)) students must take Year 3 courses (42 credit hours)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
LARC 6150	Landscape Architecture Communication	3
EVLU 3002	Site Planning	3
EVLU 3000	History of Designed Environments	3

EVLU 3004	Ecology and Design 2	3
EVLU 3010	Landscape and Urbanism Theory	3
EVLU 3012	Site Morphology and Grading	3
LARC 7110	Landscape Architecture Studio 1 <sup>1</sup>	9
EVLU 3008	Studio 4: Networks and Infrastructure	9
<b>Hours</b>		<b>36</b>

### Year 2

EVLU 4000	Philosophy, Ethics and Aesthetics	3
EVLU 4002	Construction Materials	3
EVLU 4008	Plants, Ecosystems and Design	3
EVLU 4016	History of Landscape and Urbanism	3
EVLU 4018	Principles of Urban Design	3
LARC 7222	Landscape Architecture Studio 2	9
EVLU 4014	Studio 6: Emergent Futures	9
<b>Hours</b>		<b>33</b>

### Year 3

LARC 7002	Land Construction and Professional Practice	3
LARC 7330	Landscape Architecture Studio 3	9
LARC 7340	Landscape Architecture Studio 4	9
LARC 7250	Landscape Architecture Theory	3
LARC 7040	Design Research (MLA 2 & 1 non B.E.D. <sup>L+U</sup> may take this course in year 2)	3
LARC 7400	Landscape Topics <sup>2</sup>	3
GRAD 7030	Master's Practicum	0
Select 12 credit hours from the following:		12
LARC 7310	Landscape Design Seminar 1	
LARC 7320	Landscape Design Seminar 2	
ARCG 7102	Studio Topics in Environmental Processes (Summer Session)	
LARC 7020	Field Studies	

**Hours** **42**

### Year 4

GRAD 7030	Master's Practicum <sup>3</sup>	0
<b>Hours</b>		<b>0</b>

**Total Hours** **111**

<sup>1</sup> Review Winter Term studio selection after review of Fall - LARC 7110.

<sup>2</sup> Register after completing LARC 7040.

<sup>3</sup> Register after completing LARC 7400.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new students should meet with the Department Head and must meet with the Graduate Student Advisor before registering. Returning students with registration issues should make an appointment with the Graduate Student Advisor prior to the first week in September. Courses may be cancelled if there is insufficient enrolment.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# School of Art

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Fine Art, M.F.A. (p. 1427)	2	27	

## Fine Art, M.F.A.

Fine Art

**Program Director:** (Acting) Dr. Ed Jurkowski

**Campus Address/General Office:** Room 255 ARTlab

**Telephone:** 204-474-9367

**Fax:** 204-474-7605

**Email Address:** MFAINFO@umanitoba.ca (soadvise@umanitoba.ca)

**Website:** [umanitoba.ca/art/](https://umanitoba.ca/art/) (<https://umanitoba.ca/art/>)

**Academic Staff:** Please refer to the Fine Art website (<https://umanitoba.ca/art/faculty-and-staff-directory/>) for Faculty information.

STDO 7120	Graduate Seminar 2	3
STDO 7130	Graduate Seminar 3	3

### Electives

Select 6 credit hours of approved graduate level elective courses in the School of Art, or with written permission, in another faculty at the University of Manitoba.	6
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### Thesis

GRAD 7200	MFA Thesis/Studio Exhibition	0
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<b>Total Hours</b>	<b>27</b>
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**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
STDO 7010	Studio Concentration 1	3
STDO 7020	Studio Concentration 2	3
STDO 7110	Graduate Seminar 1	3
STDO 7120	Graduate Seminar 2	3
COURSE 7XXX	Graduate level (7000) course supporting studio/research	3
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
STDO 7030	Studio Concentration 3	3
STDO 7040	Studio Concentration 4	3
STDO 7130	Graduate Seminar 3	3
COURSE 7XXX	Graduate level (7000) course supporting studio/research	3
GRAD 7200	MFA Thesis/Studio Exhibition	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>27</b>

Notes:

- MFA Thesis/Studio Exhibition: A written thesis statement and thesis exhibition that shows that the student has developed an original contribution to knowledge in visual art is required. Thesis students must pass an oral examination on the subject of the written statement and exhibition. The exhibition is the primary component of the thesis. This course is graded pass/fail.
- Non-Academic Aspects of the MFA program: MFA students are expected to display a commitment to their studies beyond completion of coursework. Students are expected to enrich their studies by attending exhibitions, lectures by guests at the School of Art or within the broader art community. They are also expected to

## Fine Art Program Information

The School of Art offers a Master of Fine Art in studio practice.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.F.A. Admission Requirements

Persons with a minimum of a four-year degree in fine arts or a four-year degree in another discipline and evidence of artistic experience, with a minimum G.P.A. of 3.0 (B) in the last 60 credit hours of study, may apply for admission to the M.F.A. program. Admission decisions are based on the qualifications of the applicant as well as the ability of the School of Art and the University of Manitoba to serve the applicant's intended program of study and area of specialization.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.F.A. program of study (<https://umanitoba.ca/explore/programs-of-study/fine-art-mfa/>) page.

## Degree Requirements

The program is designed to be completed in two years of full-time study and students are expected to continue their research through the spring and summer. Part-time students are not accepted into the program.

Course Required	Title	Hours
STDO 7010	Studio Concentration 1	3
STDO 7020	Studio Concentration 2	3
STDO 7030	Studio Concentration 3	3
STDO 7040	Studio Concentration 4	3
STDO 7110	Graduate Seminar 1	3

attend and actively participate in open critiques, their own and those of their fellow students, as well as other program activities.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Faculty of Arts

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Anthropology, M.A. (p. 1429)	2	12	
Anthropology, Ph.D. (p. 1430)	4	9	
Classics, M.A. (p. 1431)	2	12-24	
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## Anthropology, M.A.

Anthropology

**Head:** Derek Johnson

**Associate Head:** Julia Gamble

**Grad Chair:** Kathleen Buddle

**Campus Address/General Office:** 432 Fletcher Argue Bldg.

**Telephone:** 204-474-9361

**Fax:** 204-474-7600

**Email Address:** anthro@umanitoba.ca

**Website:** [umanitoba.ca/faculties/arts/departments/anthropology/](http://www.umanitoba.ca/faculties/arts/departments/anthropology/)  
(<http://www.umanitoba.ca/faculties/arts/departments/anthropology/>)

**Academic Staff:** Please refer to the Faculty at [umanitoba.ca/faculties/arts/departments/anthropology/](http://www.umanitoba.ca/faculties/arts/departments/anthropology/) (<http://www.umanitoba.ca/faculties/arts/departments/anthropology/>)

## Anthropology Program Information

The department offers programs leading to the Master of Arts and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Anthropology M.A. Admission Requirements

In addition to the minimum admission requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 1329) of this calendar, an advanced (four year) degree in Anthropology is the normal preparation for the M.A. program. Applicants without a background in Anthropology may be recommended for the Pre-Master's Program consisting of up to 18 hours of courses from the undergraduate, and especially the advanced, curriculum.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Anthropology M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/anthro.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/anthro.html)) page.

## Degree Requirements

Students must complete a minimum number of 12 credit hours of coursework at the 7000 level, including at least 9 credit hours of Anthropology courses. In addition a mandatory pass/fail ANTH 7000 Professional Development in Anthropology Course must be taken. Students must submit an acceptable thesis and pass a thesis oral examination.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANTH 7000	Professional Development in Anthropology	0
ANTH 7XXX	Courses designated ANTH 7000 or above	9
Select a course designated 7000 or above		3
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7020	Master's Re-registration	0
GRAD 7000	Master's Thesis <sup>1</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> The M.A. thesis proposal must be approved by the advisor and committee.

Certain programs of study within anthropology may require courses outside the Department of Anthropology.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor to determine their course load. Courses must be listed on the departmental approval form (available from the Anthropology general office) and written approval granted from both the Advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult

unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Anthropology, Ph.D.

Anthropology

**Head:** Derek Johnson

**Associate Head:** Julia Gamble

**Grad Chair:** Kathleen Buddle

**Campus Address/General Office:** 432 Fletcher Argue Bldg.

**Telephone:** 204-474-9361

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**Email Address:** anthro@umanitoba.ca

**Website:** [umanitoba.ca/faculties/arts/departments/anthropology/](http://www.umanitoba.ca/faculties/arts/departments/anthropology/) (<http://www.umanitoba.ca/faculties/arts/departments/anthropology/>)

**Academic Staff:** Please refer to the Anthropology website (<https://www.umanitoba.ca/faculties/arts/departments/anthropology/>) for Faculty list.

## Anthropology Program Information

The department offers programs leading to the Master of Arts and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

## Anthropology Ph.D. Admission Requirements

Applicants to the Ph.D. graduate program require a M.A. degree in Anthropology. All requirements for the M.A. degree must be completed. Preference will be given to applicants who have demonstrated independent research competence at the Master of Arts level.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Anthropology Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/anthro.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/anthro.html)) page.

## Degree Requirements

Students must complete 9 credit hours of coursework at the 7000 level, including at least 6 credit hours of Anthropology courses. In addition a mandatory pass/fail ANTH 7000 Professional Development in Anthropology Course must be taken. Students must defend a thesis proposal, submit an acceptable thesis, and pass a thesis oral examination.

**Second language requirement:** Ph.D. students are required to pursue training in a language other than English if it is deemed of necessity or benefit to the student's program of study. Determination of language training is made during the first year of the student's program. Language training must be completed prior to the conduct of research activities (post-thesis proposal research activities).

**Expected time to graduation:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANTH 7000	Professional Development in Anthropology	0
ANTH 7XXX	Courses designated ANTH 7000 or above	6
Select a course designated 7000 or above		3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9</b>

Certain programs of study within anthropology may require courses outside the Department of Anthropology.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor to determine their course load. Courses must be listed on the departmental approval form (available from the Anthropology general office) and written approval granted from both the Advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Classics, M.A.

Classics

**Head:** James Chlup

**Grad Chair:** James Chlup

**Campus Address/General Office:** 364 University College

**Telephone:** 204-474-9502|

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**Email Address:** [classics@umanitoba.ca](mailto:classics@umanitoba.ca)

**Website:** <http://umanitoba.ca/classics/>

**Academic Staff:** <http://umanitoba.ca/classics/staff/>



## Classics Program Information

The department offers a program of study leading to the Master of Arts degree.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Classics M.A. Admission Requirements

Demonstrated proficiency in ancient Greek and Latin and an honours B.A. or its equivalent in Greek, Latin or Classics is a prerequisite for admission to the M.A. Program.

Applicants are normally expected to have completed at least 18 credit hours in ancient Greek and Latin, with no fewer than 6 credit hours in each language. Applicants are also expected to have achieved a cumulative grade-point average of 3.5 in the Greek and Latin courses that they have completed. Applicants without these qualifications but with alternative, relevant expertise in the areas of ancient history or archaeology should contact the graduate chair and/or potential advisors before submitting a formal application. Knowledge of French and/or German is not required but is desirable.

Applicants are assessed on the basis of their transcripts (especially the consistent quality of coursework in Classics and related fields), fit of interests with potential advisors, and a statement of research interests. This statement should be submitted with the formal application and should indicate the applicant's areas of interest for the M.A. research thesis.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Classics M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/650.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/650.html)) page.

## Degree Requirements

Students are required to complete 3 credit hours in GRK or LATN courses at the 7000 level, 3 credits of CLAS Archaeology or Ancient History courses at the 7000 level, and 6 additional credit hours at the 7000 level in the area of specialization. In consultation with the advisor, students may elect up to 12 additional credit hours at the 3000, 4000 or 7000 level. The student must complete the thesis/practicum at the University of Manitoba.

**Language Reading Requirements:** Latin and Greek

**Expected Time to Graduate:** 2 years

## Progression Chart

### Master of Arts (Classics) Thesis Route

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

CLAS 7XXX	Courses designated CLASS designated CLAS 7000 or above	3
GRK 7XXX or LATN 7XXX	Course designated GRK 7000 and LATN 7000 or above	3
Select courses at the 7000 level in the area of specialization		6
CLAS 7000	Proseminar in Classical Studies 1	0
CLAS 7002	Proseminar in Classical Studies 2	0
Select up to 12 credit hours in Electives <sup>1</sup>		0-12
<b>Hours</b>		<b>12-24</b>

<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12-24</b>

<sup>1</sup> In consultation with the advisor, students may elect up to 12 additional credit hours at the 3000, 4000 or 7000 level.

Students develop their thesis proposal in consultation with their advisory committee, normally before the end of the first twelve months in the program.

Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

The M.A. thesis proposal must include a description of the proposed work, a bibliography including both ancient sources and a selection of the modern scholarship, and a schedule of completion. The proposal should normally be completed within 10 months following the start of the program and must be approved by the student's advisor.

### Master of Arts (Classics) Major Research Paper Route

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CLAS 7XXX	Courses designated CLASS designated CLAS 7000 or above	3
GRK 7XXX or LATN 7XXX	Course designated GRK 7000 and LATN 7000 or above	3
Select courses at the 7000 level in the area of specialization		6
CLAS 7000	Proseminar in Classical Studies 1	0
CLAS 7002	Proseminar in Classical Studies 2	0
Select up to 12 credit hours at the 3000, 4000 or 7000 level <sup>1</sup>		0-12
<b>Hours</b>		<b>12-24</b>
<b>Year 2</b>		
CLAS 7400	Major Research Paper	0
Select 12 credit hours at the 3000, 4000 or 7000 level <sup>2</sup>		12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>24-36</b>

<sup>1</sup> In consultation with the advisor, students may elect up to 12 additional credit hours at the 3000, 4000 or 7000 level.

<sup>2</sup> Beyond the minimum requirements for the thesis route, students in the Major Research Paper route must take an additional 12 credit hours at the 3000, 4000 or 7000 level, for a total of at least 24 credit hours. At least 18 credit hours of these 24 total hours must be taken at the 7000 level. Courses are selected in consultation with the student's advisor and the Graduate Chair.

Students develop their thesis proposal in consultation with their advisory committee, normally before the end of the first twelve months in the program.

Students will be required to complete a Major Research Paper (MRP). Normally the MRP will be completed in the summer semester after the first two semesters of coursework, prior to commencing the second year of coursework.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Economics, M.A.

Economics

**Head:** Ian Hudson

**Grad Chair:** Ryan Godwin (Economics & Econometrics); Fletcher Baragar (Economics & Society)

**Campus Address/General Office:** 504 Fletcher Argue

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**Fax:** 204-474-7681

**Email Address:** econgrad@umanitoba.ca

**Website:** <http://umanitoba.ca/faculties/arts/departments/economics/>

**Academic Staff:** Please refer to the Economics website (<http://umanitoba.ca/faculties/arts/departments/economics/faculty/faculty.html>) for Faculty information.

## Economics Program Information

The Department of Economics is pleased to offer a Master of Arts and a Doctor of Philosophy program. We also offer Agricultural Economics at the Ph.D. level in conjunction with the Department of Agribusiness and Agricultural Economics as part of the Economics & Econometrics Stream (E&E) Ph.D. program.

The Department has two streams in the graduate program: Economics and Econometrics (E&E), which places greater emphasis on theory (micro and macro), mathematics and statistical methods, and Economics and Society (E&S), which places greater emphasis on how the distribution of wealth and power affects the socioeconomic and physical environment. The graduate program in the E&E stream requires students to take more core courses in theory, mathematics and statistics, while the E&S stream is more individually tailored to the student's research. Applicants to the graduate program in Economics apply to one stream, and are not considered for admission to the other stream. Therefore, applicants are advised to carefully check admission and program requirements to decide which stream provides the best fit.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Economics M.A. Admission Requirements

For consideration for admission to the M.A. program, students proceeding from the University of Manitoba's Pre-M.A. program must have obtained a minimum GPA of 3.5 in at least 24 credit hours of coursework in economics.

Normally, successful applicants for admission to the M.A. program will have completed an Honours degree in economics equivalent to that awarded by the University of Manitoba.

### Stream-Specific Admission Requirements

#### ECONOMICS & ECONOMETRICS STREAM ADMISSION REQUIREMENTS

Applicants should meet the following:

1. A minimum degree GPA of 3.1 from an undergraduate degree that includes fifty-four (54) credit hours of completed economics courses

(or, if the applicant has a double Honours degree, 42 credit hours), which shall include:

Coursework in Mathematical Economics equivalent to the University of Manitoba course ECON 3030, and coursework in Econometrics courses equivalent to ECON 3040 and ECON 4040;

- A grade of B+ or better is normally required in each upper level undergraduate economic theory course completed; and
- Six (6) credit hours of mathematics equivalent to the University of Manitoba courses such as: MATH 1500 and MATH 1310.

### ECONOMICS & SOCIETY STREAM ADMISSION REQUIREMENTS

Applicants should meet the following:

- A minimum degree GPA of 3.1 from a four-year undergraduate program; and
- Completed a minimum of 42 total credit hours in Economics courses.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

#### Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Economics M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/economics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/economics.html)) page.

## Degree Requirements

All thesis programs require a minimum of 15 credits hours of coursework in Economics, plus a thesis. All course and research paper programs require a minimum of 27 credit hours of coursework in Economics, plus a research paper.

**Expected Time to Graduate:** 1 year

**Expected Time to Graduate M.A. Thesis Stream:** 2 years

### Progression Chart

#### Economics & Econometrics Stream (Non-Thesis)

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 6040	Survey of Mathematical Topics for Economists	3
ECON 7010	Econometrics I	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7000	M.A. Research Workshop	3
ECON 7XXX	Four 3-credit hour Elective Courses <sup>1</sup>	12
<b>Total Hours</b>		<b>27</b>

<sup>1</sup> Up to 6 credit hours of elective course work may be at the 4000 level, provided there is not overlap with 7000 level courses.

#### Economics & Society Stream (Non Thesis)

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 6040	Survey of Mathematical Topics for Economists	3
ECON 7010	Econometrics I <sup>1</sup>	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7540	Advanced History of Economic Thought	3
or ECON 7060	Advanced Heterodox Theory	
ECON 7XXX	Four 3-credit hour Elective Courses <sup>2</sup>	12
<b>Total Hours</b>		<b>27</b>

<sup>1</sup> Students without 4000-level Econometrics can substitute ECON 4040 for ECON 7010.

<sup>2</sup> Up to 6 credit hours of elective course work may be at the 4000 level, provided there is not overlap with 7000 level courses.

#### Notes:

Students must complete a research paper approved by their supervisor. Students should begin to plan writing their papers at the start of the Winter term.

#### Economics & Econometrics Stream (M.A. Thesis)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 6040	Survey of Mathematical Topics for Economists	3
ECON 7010	Econometrics I	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7XXX	One 3-credit hour Elective Course	3
Select an additional 6 credit hours (at the 3000 level or higher) in a relevant field		6
<b>Hours</b>		<b>21</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>21</b>

#### Economics & Society Stream Progression Charts (M.A. Thesis)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 6040	Survey of Mathematical Topics for Economists	3
ECON 7XXX	Four 3-credit hour Elective Courses <sup>1</sup>	12
<b>Hours</b>		<b>15</b>

Year 2		
GRAD 7000	Master's Thesis	0
	Hours	0
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> A student may substitute 3 credit hours of 7000-level coursework from a department other than Economics.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registering, all students must meet with a member of the Economics Department Graduate Studies Committee to determine their course load. The course load resulting from this meeting must be listed on the Departmental Course Approval Form, and the form must be signed by a Graduate Studies committee member. The signed form must be submitted to the Graduate Program Assistant, who will then complete the registration process.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

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All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Economics, Ph.D.

Economics

**Head:** Ian Hudson

**Grad Chair:** Ryan Godwin (Economics & Econometrics); Fletcher Baragar (Economics & Society)

**Campus Address/General Office:** 504 Fletcher Argue

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**Website:** <http://umanitoba.ca/faculties/arts/departments/economics/>

**Academic Staff:** Please refer to the Economics website (<http://umanitoba.ca/faculties/arts/departments/economics/faculty/faculty.html>) for Faculty information.

## Economics Program Information

The Department of Economics is pleased to offer a Master of Arts and a Doctor of Philosophy program. We also offer Agricultural Economics at the Ph.D. level in conjunction with the Department of Agribusiness and Agricultural Economics as part of the Economics & Econometrics Stream (E&E) Ph.D. program.

The Department has two streams in the graduate program: Economics and Econometrics (E&E), which places greater emphasis on theory (micro and macro), mathematics and statistical methods, and Economics and Society (E&S), which places greater emphasis on how the distribution of wealth and power affects the socioeconomic and physical environment. The graduate program in the E&E stream requires students to take more core courses in theory, mathematics and statistics, while the E&S stream is more individually tailored to the student's research. Applicants to the graduate program in Economics apply to one stream, and are not considered for admission to the other stream. Therefore, applicants are advised to carefully check admission and program requirements to decide which stream provides the best fit.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Economics Ph.D. Admission Requirements

Normally, the completion of a Master's degree or equivalent from a recognized university and a cumulative GPA of 3.0 or equivalent in the last two previous years of full time university study (60 credit hours) is the minimum requirement for admission to the Ph.D. program. And:

1. Except as provided in 2) below, applicants for admission to the Ph.D. program must have completed the entrance requirements and the program requirements of an M.A. degree in Economics or in Agricultural Economics equivalent to that awarded by the University of Manitoba. A thesis-based Master's is not required.
2. In exceptional cases, applications to either stream may be considered from students who have completed an Honours degree in Economics equivalent to that awarded by the University of Manitoba. In such

cases, the applicant will be required to fulfill, in addition to the requirements below, all coursework requirements for the non-thesis M.A. degree.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Economics Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/economics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/economics.html)) page.

## Degree Requirements

### Common Program Requirements

PhD students must complete a minimum of 27 credit hours of 7000 level coursework beyond their MA program by the end of their second year in the program including ECON 7010; ECON 7650; and ECON 7722.

### Additional Stream-Specific Program Requirements

#### Economics & Econometrics Stream

Students must complete ECON 7010, ECON 7650, ECON 7660, ECON 7722, and ECON 7732, as part of their core requirement in the first year. Students must also complete a minimum of 12 credit hours of elective Economics courses at the 7000 level by the end of their second year in the program, with at least one elective course taken in their first year of the program.

#### Research Paper

Students must complete a research paper by May 15th of their second year in the program.

#### Candidacy Examinations

Students must make their first attempt at the theory candidacy examinations in microeconomic theory and macroeconomic theory at the first opportunity following completion of the theory course requirements. Candidacy exams are written in May and late August / early September.

#### Thesis Proposal

A thesis proposal must be defended in an oral presentation to the thesis advisory committee, and approval for the proposal must be received by Dec. 15th of the student's third year in the program.

#### Economics & Society Stream

In addition to the common core course requirements, students must also take:

Course	Title	Hours
ECON 7540	Advanced History of Economic Thought	3
or ECON 7060	Advanced Heterodox Theory	
Select 6 credit hours from the following:		6
ECON 7060	Advanced Heterodox Theory	
ECON 7130	Advanced Development Economics	
ECON 7140	Topics in Development Economics	
ECON 7170	Topics in Heterodox Economics I	
ECON 7180	Topics in Heterodox Economics II	
ECON 7540	Advanced History of Economic Thought	
ECON 7610	Approaches, Methodologies and Techniques in Economic History	
ECON 7690	Structuralist Theories of Development	

Select 9 credit hours of elective course work selected in consultation with the thesis advisor, from Economics or another cognate department, with a minimum of 3 credit hours at the 7000 level

**Total Hours** **18**

Note: Students without 4000-level econometrics can substitute ECON 4040 for ECON 7010.

#### Candidacy Examinations

Students will sit for a Candidacy Examination in a subject (or subjects) relevant to their general areas of research. Students must make their first attempt at the Candidacy Examination within the first 30 months of their Ph.D. program, and will normally be scheduled for late August.

#### Thesis Proposal

The thesis proposal must be defended in an oral presentation to the thesis advisory committee, and must be received within 12 months following the successful completion of the Candidacy Examination.

**Expected Time to Graduate: 4 years**

## Progression Chart

### Economics & Econometrics Stream

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 7010	Econometrics I	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7660	Advanced Macroeconomic Theory 2	3
ECON 7732	Advanced Microeconomic Theory II	3
ECON 7XXX	One 3-credit hour Elective Course	3

Candidacy examinations in Microeconomic Theory and Macroeconomic Theory are written in May

**Hours** **18**

#### Year 2

ECON 7XXX Three 3-credit hour Elective Courses 9

A research paper must be completed by May 15th

**Hours** **9**

#### Year 3

A thesis proposal must be defended and approved by Dec. 15th

**Hours** **0**

#### Year 4

Students defend their thesis to complete the Ph.D.

**Hours** **0**

**Total Hours** **27**

### Economics & Society Stream

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 7010	Econometrics I <sup>1</sup>	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3

ECON 7540 or ECON 7060	Advanced History of Economic Thought or Advanced Heterodox Theory	3
ECON 7XXX	Two 3-credit hour Elective Courses (from list below) <sup>1</sup>	6
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
ECON 7XXX	Three 3-credit hour Elective Courses <sup>2</sup>	9
Candidacy Examination in a subject (or subjects) relevant to the student's general areas of research will usually be written late August		
<b>Hours</b>		<b>9</b>
<b>Year 3</b>		
A thesis proposal must be defended in an oral presentation to the thesis advisory committee and must be received within 12 months following the successful completion of the Candidacy Examination		
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
Students defend their thesis to complete the Ph.D.		
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>27</b>

<sup>1</sup> Students without 4000-level Econometrics can substitute ECON 4040 for ECON 7010.

<sup>2</sup> A minimum of 3 credit hours must be at the 7000 level.

### Elective Courses

Course	Title	Hours
ECON 7060	Advanced Heterodox Theory	3
ECON 7130	Advanced Development Economics	3
ECON 7140	Topics in Development Economics	3
ECON 7170	Topics in Heterodox Economics I	3
ECON 7180	Topics in Heterodox Economics II	3
ECON 7540	Advanced History of Economic Thought	3
ECON 7610	Approaches, Methodologies and Techniques in Economic History	3
ECON 7690	Structuralist Theories of Development	3

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registering, all students must meet with a member of the Economics Department Graduate Studies Committee to determine their course load. The course load resulting from this meeting must be listed on the Departmental Course Approval Form, and the form must be signed by a Graduate Studies committee member. The signed form must be submitted to the Graduate Program Assistant, who will then complete the registration process.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## English, M.A.

English, Theatre, Film & Media

**Head:** Brenda Austin-Smith

**Grad Chair:** Lucas Tromly

**Campus Address/General Office:** 623 Fletcher Argue Building

**Telephone:** 204-474-7365

**Fax:** 204-474-7669

**Email Address:** [english@umanitoba.ca](mailto:english@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/arts/departments/](https://umanitoba.ca/faculties/arts/departments/)

[English\\_theatre\\_film\\_media/](https://umanitoba.ca/faculties/arts/departments/English_theatre_film_media/) ([https://umanitoba.ca/faculties/arts/departments/English\\_theatre\\_film\\_media/](https://umanitoba.ca/faculties/arts/departments/English_theatre_film_media/))

**Academic Staff:** Please refer to the English, Theatre, Film & Media website ([https://umanitoba.ca/faculties/arts/departments/English\\_theatre\\_film\\_media/faculty/](https://umanitoba.ca/faculties/arts/departments/English_theatre_film_media/faculty/)) for Faculty information.

## English Program Information

The department offers programs leading to the Master of Arts and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### English M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. Students with a bachelor's degree in English, film, or theatre, but who lack an Honours degree, may apply to enter the Pre-Master's program, which is designed to allow such students to attain the equivalent of an Honours B.A. in English. Contact the Department for further information.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the English M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/english.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/english.html)) page.

## Degree Requirements

Requirements for the M.A. degree in English can be met in one of two ways; either a thesis (critical or creative) and 18 credit hours of coursework, of which 12 credit hours will normally be graduate English seminars; or 24 credit hours of coursework, normally composed entirely of graduate seminars.

**Second Language Reading Requirement:** Students are required to have some knowledge of a language other than English. For an MA degree, a grade of C+ or better in 6 credit hours of introductory-level language course(s) satisfies the requirement. See English, Theatre, Film & Media Supplemental Regulations ([http://umanitoba.ca/faculties/graduate\\_studies/admin/supplemental\\_regulations.html](http://umanitoba.ca/faculties/graduate_studies/admin/supplemental_regulations.html)) for further details.

**Expected Time to Graduate:** 2 years

### Progression Chart

#### Thesis MA

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENGL 7XXX	Courses designated 7000 or above offered by the Department of English, Theatre, Film & Media	12
Select 6 credit hours at the 3000 or 4000 level in English (or in a related discipline if appropriate to the student's research program)		6

All courses are subject to the approval of the Graduate Chair.

Thesis Proposal (500-700 words, plus bibliography) <sup>1</sup>		Hours	18
<b>Years 1-2</b>			
Language requirement: either C+ or better in 6 credit hours of auxiliary language coursework at the introductory level, or successful completion of reading test. <sup>2</sup>			0
		Hours	0
<b>Year 2</b>			
GRAD 7000	Master's Thesis <sup>3</sup>		0
		Hours	0
		Total Hours	18

<sup>1</sup> Within two months of the successful completion of coursework, and preferably by the end of the second term in the program, the student, in consultation with the Graduate Chair, will name an Advisor who will supervise the student's development of a thesis proposal for submission to the Graduate Chair as soon as possible thereafter. See the English, Theatre, Film & Media Supplementary Regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>). (section 4.8.1)

<sup>2</sup> See the English, Theatre, Film & Media Supplementary Regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) (Section 4.8.1)

<sup>3</sup> Although the length of the thesis cannot be arbitrarily fixed, the student should aim for between 20,000 and 25,000 words.

#### Coursework MA

Course	Title	Hours	
<b>Year 1</b>			
GRAD 7300	Research Integrity Tutorial	0	
GRAD 7500	Academic Integrity Tutorial	0	
ENGL 7XXX	Courses designated 7000 or above offered by the Department of English, Theatre, Film & Media	18	
All courses are subject to the approval of the Graduate Chair.			
		Hours	18
<b>Years 1-2</b>			
ENGL 7XXX	Courses designated 7000 or above offered by the Department of English, Theatre, Film & Media	6	
Language requirement: either C+ or better in 6 credit hours of auxiliary language coursework at the introductory level, or successful completion of reading test. <sup>1</sup>			0
		Hours	6
		Total Hours	24

<sup>1</sup> See the English, Theatre, Film & Media Supplementary Regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>). (section 4.4.4)

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students (new and returning) must have their courses approved by the graduate chair prior to registering. Any courses added/dropped/changed must be at all times approved by the graduate chair. Only those courses that have been approved will be credited to your program. Courses are subject to cancellation if there is insufficient enrolment.

Students are reminded that they must satisfy the language requirement prior to scheduling their thesis defence.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## English, Ph.D.

English, Theatre, Film & Media

**Head:** Brenda Austin-Smith

**Grad Chair:** Lucas Tromly

**Campus Address/General Office:** 623 Fletcher Argue Building

**Telephone:** 204-474-7365

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**Email Address:** [english@umanitoba.ca](mailto:english@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/arts/departments/English\\_theatre\\_film\\_media/](https://umanitoba.ca/faculties/arts/departments/English_theatre_film_media/) ([https://umanitoba.ca/faculties/arts/departments/English\\_theatre\\_film\\_media/](https://umanitoba.ca/faculties/arts/departments/English_theatre_film_media/))

**Academic Staff:** Please refer to the English, Theatre, Film & Media website ([https://umanitoba.ca/faculties/arts/departments/English\\_theatre\\_film\\_media/faculty/](https://umanitoba.ca/faculties/arts/departments/English_theatre_film_media/faculty/)) for Faculty information.

## English Program Information

The department offers programs leading to the Master of Arts and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### English Ph.D. Admission Requirements

Applicants must normally hold an M.A. degree in English with a GPA of at least 3.5 in their work at the M.A. level.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the English Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/english.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/english.html)) page.

## Degree Requirements

The first year of full-time Ph.D. study will normally include 18 credit hours, at least 12 credit hours of which should be graduate seminars in English literature. This program of studies will be arranged in consultation with the student's advisory committee at a meeting that will take place no later than one week before the start of classes.

Candidacy examinations, consisting of a paper on the student's period of specialization and a paper on the research area, will normally be written in the second year of Ph.D. study. Each paper will be followed by a one-hour oral examination.

**Second Language Reading Requirement:** Graduate students are required to have some knowledge of a language other than English. For PhD degree, a grade of C+ or better in, normally, 6 undergraduate credit hours of (2000 level or equivalent) courses satisfies the requirement.

**Expected Time to Graduate:** 4 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENGL 7XXX	Courses designated 7000 or above offered by the Department of English, Theatre, Film & Media	12
	Select 6 credit hours at the 3000 level or above in any department.	6

All courses are subject to the approval of the Graduate Chair and the Exploratory Committee.

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**Hours** **18**



**Year 2**

GRAD 8010	Doctoral Candidacy Examination <sup>1</sup>	0
November: Period Exam		
May: Special Area Exam		

<b>Hours</b>	<b>0</b>
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**Years 3-4**

GRAD 8000	Doctoral Thesis	0
Thesis Proposal <sup>2</sup>		

Language Requirement: either C+ or better in 6 credit hours of auxiliary language coursework at the intermediate (2000) level, or successful completion of reading test. <sup>3</sup>

Thesis Research and Writing <sup>4</sup>		
<b>Hours</b>	<b>0</b>	

<b>Total Hours</b>	<b>18</b>
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<sup>1</sup> All students must sit for two Candidacy Examinations: a Period Examination and a Special Area Examination. Students in their second year of study in the doctoral program will write and orally defend their Period Examination in November and their Special Area Examination in May. See English, Theatre, Film & Media Supplementary Regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) section 5.8 for details.

<sup>2</sup> See English, Theatre, Film & Media Supplementary Regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) section 5.9 for details.

<sup>3</sup> See English, Theatre, Film & Media Supplementary Regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) section 5.4.1 for details.

<sup>4</sup> See English, Theatre, Film & Media Supplementary Regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) section 5.10 for details.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students (new and returning) must have their courses approved by the graduate chair prior to registering. Any courses added/dropped/changed must be at all times approved by the graduate chair. Only those courses that have been approved will be credited to your program. Courses are subject to cancellation if there is insufficient enrolment.

Students are reminded that they must satisfy the language requirement prior to scheduling their thesis defence.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## French, M.A.

French, Spanish and Italian

**Head:** Maria Inés Martínez

**Grad Chair:** Isabelle Kirouac-Massicotte

**Campus Address/General Office:** 431 Fletcher Argue Building

**Telephone:** 204-474-9313

**Fax:** 204-474-7578

**Email Address:** fsi@umanitoba.ca

**Website:** [umanitoba.ca/fsi/](https://umanitoba.ca/fsi/) (<https://umanitoba.ca/fsi/>)

**Academic Staff:** Please refer to the French, Spanish and Italian website (<https://umanitoba.ca/faculties/arts/departments/fsi/staff/>) for Faculty information.

## French, Spanish and Italian Program Information

For over 50 years the Department of French, Spanish and Italian has offered Master of Arts and Doctor of Philosophy programs in French.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### French M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. Students with other degrees or backgrounds may be eligible

for admission to a pre-Master's program to the satisfaction of the department. Contact the Department for further information.

## Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the French M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/fsi.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/fsi.html)) page.

## Degree Requirements

Students are required to complete 12 credit hours of coursework at the 7000 level and a thesis. Part of the required coursework includes three credit hours of literary theory.

**Expected Time to Graduate:** 1 - 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
FREN 7XXX	Course in critical theory	3
COURSE 7XXX	Courses designated 7000 or above <sup>1</sup>	9
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Up to 6 credits can be taken in an area outside of the department, with permission from the graduate chair.

<sup>2</sup> A minimum of 60 typed pages double spaced in 12-pt font with no more than 2.5 cm margins. The thesis must be written in French.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and newly admitted students must consult with the graduate chair or the department head prior to registration. Students must fill out a pre-registration form which must be signed by the graduate chair or department head and submitted to the Graduate Program Assistant, who will then complete the registration process.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## French, Ph.D.

French, Spanish and Italian

**Head:** Maria Inés Martínez

**Grad Chair:** Isabelle Kirouac-Massicotte

**Campus Address/General Office:** 431 Fletcher Argue Building

**Telephone:** 204-474-9313

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**Email Address:** [fsi@umanitoba.ca](mailto:fsi@umanitoba.ca)

**Website:** [umanitoba.ca/fsi/](https://umanitoba.ca/fsi/) (<https://umanitoba.ca/fsi/>)

**Academic Staff:** Please refer to the French, Spanish and Italian website (<https://umanitoba.ca/faculties/arts/departments/fsi/staff/>) for Faculty information.

## French, Spanish and Italian Program Information

For over 50 years the Department of French, Spanish and Italian has offered Master of Arts and Doctor of Philosophy programs in French.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

## French Ph.D. Admission Requirements

Applicants to the Ph.D. program must normally hold an M.A. degree in French with a GPA of at least 3.0 in their M.A. courses.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the French Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/fsi.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/fsi.html)) page.

## Degree Requirements

Candidates must complete 12 credit hours of coursework at the 7000 level, including a compulsory component of three credit hours of literary theory.

Candidacy examinations consist of one research paper in a distinct area related to the thesis topic, followed by an oral examination. These examinations will normally be completed in the second year of study.

**Expected Time to Graduate:** 4 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
FREN 7XXX	Course in critical theory	3
COURSE 7XXX	Courses designated 7000 or above <sup>1</sup>	9
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 8000	Doctoral Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Up to 6 credits can be taken in an area outside of the department, with permission from the graduate chair.

<sup>2</sup> The thesis must be written in French.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and newly admitted students must consult with the graduate chair or the department head prior to registration. Students must fill out a pre-registration form which must be signed by the graduate chair or department head and submitted to the Graduate Program Assistant, who will then complete the registration process.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## German Studies, M.A.

German and Slavic Studies

**Head:** Stephan Jaeger

**Campus Address/General Office:** 326 Fletcher Argue Building

**Telephone:** 204-474-9151

**Fax:** 204-474-7601

**Email Address:** [german\\_slavic@umanitoba.ca](mailto:german_slavic@umanitoba.ca)

**Website:** [umanitoba.ca/arts/departments/german\\_and\\_slavic/](http://umanitoba.ca/arts/departments/german_and_slavic/) ([http://www.umanitoba.ca/arts/departments/german\\_and\\_slavic/](http://www.umanitoba.ca/arts/departments/german_and_slavic/))

**Academic Staff:** Please refer to the German and Slavic Studies website ([https://umanitoba.ca/faculties/arts/departments/german\\_and\\_slavic/staff/](https://umanitoba.ca/faculties/arts/departments/german_and_slavic/staff/)) for Faculty information.

## German and Slavic Studies Program Information

The department offers programs of study leading to the Master of Arts degree in the fields of German Studies (Culture, Literature, Second Language Acquisition) and Slavic Studies (Russian and/or Ukrainian Culture, Literature). Programs must be arranged in consultation with the Graduate Chair of the department.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. Students with other degrees or backgrounds may be eligible for admission to a Pre-Master's program to the satisfaction of the department.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

The Pre-Master's year will normally consist of 24 credit hours of coursework, of which at least 12 are in the major discipline. At most, one grade of C+ in a course of six credit hours, or two grades of C+ in courses of three credit hours, will be permitted.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the German M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/german\\_slavic.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/german_slavic.html)) page.

## Degree Requirements

Students fulfill the requirements for the Master's degree by doing a combination of coursework and thesis. A minimum of 15 credit hours of coursework is required, including GRMN 7200 / SLAV 7200, GRMN 7210 / SLAV 7210, and 3 other credit hours at the 7000 level in the student's major discipline. The remaining 6 credit hours, designated as ancillary credit, may be taken at the 7000, 4000, 3000 (or in exceptional circumstances the 2000) level and may be in courses in the student's major discipline, or in another program or department, at the discretion of the chair of the Graduate Studies Committee. A thesis prospectus must be submitted to the candidate's M.A. advisor a minimum of two months before the thesis is submitted to the M.A. Committee.

Students for the M.A. in German who received credit for the course GRMN 4200 have already fulfilled the requirement for GRMN 7200; they replace GRMN 7200 with 3 other credit hours on the 7000 level. Students for the M.A. in German who received credit for the course GRMN 4210 have already fulfilled the requirement for GRMN 7210; they replace GRMN 7210 with 3 other credit hours on the 7000 level.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

GRMN/SLAV 7200	Literary and Cultural Theory	3
GRMN/SLAV 7210	Introduction to Second Language Acquisition and Methods of Language Teaching	3
COURSE XXXX	Course related to student's major discipline	3
COURSE XXXX	Ancillary Credit <sup>1</sup>	6
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> The remaining 6 credit hours, designated as ancillary credit, may be taken at the 7000, 4000, 3000 (or in exceptional circumstances the 2000) level and may be in courses in the student's major discipline, or in another program or department, at the discretion of the Chair of Graduate Studies Committee.

<sup>2</sup> Thesis proposal for submission at the end of the first year of study and, at minimum, two months before the thesis is submitted to the Thesis Examining Committee.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration in German or Slavic Studies, students must consult with the graduate chair or the department head.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## History, M.A.

History

**Head:** Roisin Cossar

**Grad Chair (Acting):** Julie Guard

**Campus Address/General Office:** 403 Fletcher Argue Building

**Telephone:** 204-474-8401

**Email Address:** [history@umanitoba.ca](mailto:history@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/arts/departments/history](http://www.umanitoba.ca/faculties/arts/departments/history) (<http://www.umanitoba.ca/faculties/arts/departments/history/>)

**Academic Staff:** Please refer to the History website (<https://umanitoba.ca/faculties/arts/departments/history/members/>) for current staff listing.

## History Program Information

The department offers programs leading to both the Master of Arts and the Doctor of Philosophy degrees. The M.A. program (referred to as the Joint Master's Program or JMP) is a joint degree program offered by the History departments of the University of Manitoba and the University of Winnipeg. Students have the educational and financial resources of both institutions available to them.

### Joint Master's Program

The University of Manitoba and The University of Winnipeg together offer the Joint Master's program, with courses and thesis direction (if applicable) offered at both institutions. Students of a JMP are admitted by the Faculty of Graduate Studies at the University of Manitoba. Graduates of Joint Master's programs receive a joint-institution parchment. Students in the JMP may elect to attend the convocation of either of the two participating universities. The programs are governed by the Joint Discipline Committee (JDC) at the department/unit level, consisting of faculty members of both institutions.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### History M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for

courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the History M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/history.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/history.html)) page.

## Degree Requirements

Students may choose among four versions of the program: first, a course-based M.A.; second, a Major Research Paper M.A.; third, a thesis-based M.A.; and fourth, an M.A. in Archival Studies.

The course-based M.A. requires 21 credit hours of coursework, including HIST 7110 plus 15 credit hours of which of least 12 credit hours must be at the 7000-level in History courses. 3 credit hours may be taken at the 4000 level if course is outside of History. In addition, the student is required to select a major field, and must pass both a written and oral comprehensive examination in that field.

The Major Research Paper M.A. requires 21 credit hours of coursework, including HIST 7110 plus 15 credit hour of which at least 12 credit hours must be at the 7000-level in History courses. 3 credit hours may be taken at the 4000 level if course is outside of History. In addition, the student is required to write a Major Research Paper of approximately 8,000-10,000 words.

The thesis-based M.A. requires 12 credit hours of coursework at the 7000-level including HIST 7110, courses are selected from two areas of historical study and the presentation of a thesis.

The Archival Studies M.A. requires 21 credit hours of courses including HIST 7372, HIST 7382 & HIST 7110, a 3 credit hour elective course at the 7000-level normally outside of History, an Internship (HIST 7394) and a Major Research Paper of approximately 8,000-10,000 words.

**Second Language Reading Requirement:** All graduate students in History are required to demonstrate a reading knowledge of a second language. Candidates who specialize in Canadian History must display a reading knowledge of French and English. Texts for translations are chosen by the History department. Examinations are conducted by faculty in the language departments at the University of Manitoba.

**Expected Time to Graduate:** 4 years

## Progression Chart

### Thesis MA

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HIST 7110	Advanced Historical Methodologies	6
HIST 7XXX	Advanced Studies in XXX History	6

Thesis:

May (or sooner if possible): Submission of Thesis proposal 9 months after entering program

June: Begin research on Thesis

**Hours**

**12**

Year 2		
Course	Title	Hours
FREN 1XXX	Introductory French course to fulfill language requirement	6
Thesis:		
September - April: Research & writing of Thesis in consultation with advisor		
By 15 May: Submit Thesis to examining committee		
July: Oral defense of Thesis		
August: Completion of revisions & submit final version of Thesis to MSpace		
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>18</b>

### Major Research Paper MA

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HIST 7110	Advanced Historical Methodologies	6
HIST 7XXX	Advanced Studies in History	6
HIST 7YYY	Advanced Studies in History	6
HIST 7ZZZ/HIST 4XXX	Advanced Studies in History	3
Major Research Paper (MRP):		
May: Begin research on MRP		
<b>Hours</b>		<b>21</b>
Year 2		
FREN 6000	French Reading Knowledge	0
Major Research Paper (MRP):		
September - April: Research & writing of MRP		
HIST 7776	Major Research Paper	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>21</b>

### Coursework MA

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HIST 7110	Advanced Historical Methodologies	6
HIST 7XXX	Advanced Studies in History	6
HIST 7YYY	Advanced Studies in History	6
HIST 7ZZZ/4XXX	Advanced Studies in History	3
FREN 6000	French Reading Knowledge	0
March-April	Development of Comprehensive Reading List in consultation with major field supervisor	
May-July	Preparation for Comprehensive Exam	
August	Written Comprehensive Exam	
August	Oral Comprehensive Exam	
<b>Total Hours</b>		<b>21</b>

### Archival Studies MA

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
HIST 7372	History of Archiving and Archival Records	6
HIST 7382	Archiving in the Digital Age	6
HIST 7110	Advanced Historical Methodologies	6
<b>Hours</b>		<b>18</b>
Year 2		
FREN 6000	French Reading Knowledge	0
HIST 7776	Major Research Paper	0
HIST 7394	Internship in Archival Studies	0
HIST 7XXX	7000 level History elective (Fall term)	3
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>21</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to see the chair or department head prior to attempting to register.

Students may only register for courses listed and approved on the Departmental Graduate Student Registration Form, available at the time of your meeting with the graduate chair. Any course registration revisions (addition and/or withdrawals) must be approved in the same manner. Your program, including the registration of the right courses, is your responsibility.

Joint Master's and Ph.D. students may take 4000- and 7000- level courses offered by the Department of History at the University of Winnipeg. Consult the History Department, University of Manitoba for information on course offerings and registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet [additional BFAR](#) that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## History, Ph.D.

**Head:** Roisin Cossar

**Grad Chair (Acting):** Julie Guard

**Campus Address/General Office:** 403 Fletcher Argue Building

**Telephone:** 204-474-8401

**Email Address:** [history@umanitoba.ca](mailto:history@umanitoba.ca)

**Website:** [www.umanitoba.ca/faculties/arts/departments/history](http://www.umanitoba.ca/faculties/arts/departments/history) (<http://www.umanitoba.ca/faculties/arts/departments/history/>)

**Academic Staff:** Please refer to the History website (<https://umanitoba.ca/faculties/arts/departments/history/members/>) for current staff listing.

## History Program Information

The department offers programs leading to both the Master of Arts and Doctor of Philosophy Degrees. The M.A. program (referred to as the Joint Master's Program or JMP) is a joint degree program offered by the History departments of the University of Manitoba and the University of Winnipeg. Students have the educational and financial resources of both institutions available to them.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### History Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the History Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/history.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/history.html)) page.

## Degree Requirements

Doctoral candidates are usually expected to take 18 credit hours of History coursework at the 7000 level (a minimum of 12 credit hours at the 7000 level in History is required); take candidacy exams in three fields of historical inquiry; and, present an original dissertation which makes a distinct contribution to historical knowledge, based on primary sources.

**Second Language Requirement:** All graduate students in History are required to demonstrate a reading knowledge of a second language. Candidates who specialize in Canadian History must display a reading knowledge of French and English. Texts for translations are chosen by the History department. Examinations are conducted by faculty in the language departments at the University of Manitoba.

**Expected Time to Graduate:** 6 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HIST 7XXX	Advanced Studies in History	6
HIST 7YYY	Advanced Studies in History	6
HIST 7ZZZ/HIST 4XXX	Advanced Studies in History	6
FREN 6000	French Reading Knowledge (Pass/Fail)	0

Candidacy Exams:

September (upon registration): Select courses which provide best preparation for candidacy exams

September - August (or sooner if possible): Create reading lists to guide self-directed studies in preparation for exams

August (or sooner): Submit reading lists to Graduate Executive Committee for approval

**Hours**

**18**

**Year 2**

Candidacy Exams:

September - May: Reading in preparation for exams

GRAD 8010	Doctoral Candidacy Examination	0
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Doctoral Equivalency Exam - written exams in 1 major & 2 minor fields (Pass/Fail)

1 oral exam - taken after successfully passing written exams

**Hours**

**0**

**Years 2-3**

Doctoral Dissertation:

May - September: Proposal written in consultation with advisor and advisory committee

No later than September: Submission of proposal

GRAD 8000	Doctoral Thesis	0
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**Hours**

**0**

**Years 3-4**

September - April: Dissertation - research & writing continues

May 1	Submit dissertation to examining committee	
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July	Oral defence	
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GRAD 8000	Doctoral Thesis (Completion of revisions & submit final version to MSpace)	
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**Hours**

**0**

**Total Hours**

**18**

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to see the chair or department head prior to attempting to register.

Students may only register for courses listed and approved on the Departmental Graduate Student Registration Form, available at the time of your meeting with the graduate chair. Any course registration revisions (addition and/or withdrawals) must be approved in the same manner. Your program, including the registration of the right courses, is your responsibility.

Pre-Master's, Joint Master's and Ph.D. students may take 4000- and 7000-level courses offered by the Department of History at the University of Winnipeg. Consult the History Department, University of Manitoba for information on course offerings and registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Icelandic, M.A.

**Head:** P.J. Buchan (Acting)

**Campus Address/General Office:** 357 University College

**Telephone:** (204) 474 8487

**Fax:** (204) 261 0021

**Email Address:** [um\\_icelandic@umanitoba.ca](mailto:um_icelandic@umanitoba.ca)

**Website:** <http://umanitoba.ca/icelandic> (<http://umanitoba.ca/icelandic/>)

**Academic Staff:** Please refer to the website for Faculty information: <http://umanitoba.ca/icelandic> (<http://umanitoba.ca/icelandic/>)

## Icelandic Program Information

**Note:** *Admission to this program is currently suspended.*

The Department of Icelandic offers innovative and challenging programs of study leading up to the Master of Arts degree.

## Application Information

Applications are currently not being taken for this program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Degree Requirements

Requirements for the M.A. degree include a thesis and three courses (18 credit hours) at the 7000 level in the Icelandic Department.

**Second Language Reading Requirement:** Yes

**Expected Time to Graduate:** 2 years

## Indigenous Studies, M.A.

Indigenous Studies

**Head:** Dr. Niigaan Sinclair

**Grad Chair:** Dr. David Parent

**Campus Address/General Office:** 215 Isbister Bldg

**Telephone:** 204-474-9899

**Fax:** 204-474-7657

**Website:** [umanitoba.ca/arts/indigenous-studies](http://umanitoba.ca/arts/indigenous-studies) (<https://umanitoba.ca/arts/indigenous-studies/>)

**Academic Staff:** Please refer to the Indigenous Studies (<https://umanitoba.ca/arts/indigenous-studies/faculty-and-staff/>) website for academic staff.

## Indigenous Studies Program Information

For students who wish to engage in primary research, the Graduate Program in Indigenous Studies provides opportunities that lead to a Master of Arts or Doctor of Philosophy degree.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Indigenous Studies M.A. Admission Requirements

For students to be admitted directly into the Master's program, they are required to have the equivalent of an advanced/honours degree with a major in Indigenous Studies. Students with majors in other fields



may apply if they have 30 credit hours in courses relating to Indigenous studies. Students who do not meet this equivalency will be required to take additional courses to meet the requirement for 30 credit hours of Indigenous Studies courses.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Indigenous Studies M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/native\\_studies.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/native_studies.html)) page.

## Degree Requirements

The program requirements include 12 credit hours of required and 6 credit hours of additional coursework at the 4000 level or above for a total of 18 credit hours. A thesis is also required.

Course	Title	Hours
INDG 7230	Methodology and Research Issues in Indigenous Studies	3
INDG 7240	Issues in Colonization	3
INDG 7250	Culture: Theory and Praxis	3
INDG 7280	Indigenous Studies Colloquia (3 terms)	1
Select 6 credit hours at the 4000 level or above <sup>1</sup>		6
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Total Hours</b>		<b>16</b>

<sup>1</sup> INDG 7220 may be taken more than once.

**Expected Time to Graduate:** 2 years

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with the Graduate Program Chair to determine their course load. Prior to registering, students must have written approval from the Graduate Program Chair to take selected courses. All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Indigenous Studies, Ph.D.

Indigenous Studies

**Head:** Dr. Niigaan Sinclair

**Grad Chair:** Dr. David Parent

**Campus Address/General Office:** 215 Isbister Bldg

**Telephone:** 204-474-9899

**Fax:** 204-474-7657

**Website:** [umanitoba.ca/arts/indigenous-studies](https://umanitoba.ca/arts/indigenous-studies/) (<https://umanitoba.ca/arts/indigenous-studies/>)

**Academic Staff:** Please refer to the Indigenous Studies (<https://umanitoba.ca/arts/indigenous-studies/faculty-and-staff/>) website for academic staff.

## Indigenous Studies Program Information

For students who wish to engage in primary research, the Graduate Program in Indigenous Studies provides opportunities that lead to a Master of Arts or Doctor of Philosophy degree.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Indigenous Studies Ph.D. Admission Requirements

For students to be admitted directly into the Ph.D. program, they are required to have a Master's degree in Indigenous Studies or a Master's degree in a related discipline as determined by the Indigenous Studies Graduate Committee.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Indigenous

Studies Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/native\\_studies.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/native_studies.html)) page.

## Degree Requirements

All doctoral students will be required to complete 12 credit hours of course work at the 7000 level.

Course	Title	Hours
INDG 7230	Methodology and Research Issues in Indigenous Studies	3
Select 9 credit hours at the 7000 level		9
Select 6 credit hours in an Indigenous language if this requirement has not already been satisfied		0-6
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Total Hours</b>		<b>12-18</b>

A minimum of 50% of the required 12 credit hours must be completed within the Indigenous Studies department. In addition, students must fulfill a residence requirement of at least one academic year devoted to full-time study at the University of Manitoba.

Upon completion of coursework, students must also complete a Candidacy Exam, and develop and deliver a thesis project of approximately five-six chapters and 150-250 pages in length (although some circumstances may vary).

**Second Language Reading Requirement:** 6 credit hours P/F in any Indigenous language

**Expected Time to Graduate:** 4 years

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with the Graduate Program Chair to determine their course load. Prior to registering, students must have written approval from the Graduate Program Chair to take selected courses. All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Linguistics, M.A.

Linguistics

**Head:** Nicole Rosen

**Grad Chair:** Terry Janzen

**Campus Address/General Office:** 534 Fletcher Argue Building

**Telephone:** 204-474-9596

**Email Address:** [linguistics@umanitoba.ca](mailto:linguistics@umanitoba.ca)

**Website:** [umanitoba.ca/linguistics/](http://umanitoba.ca/linguistics/) (<https://umanitoba.ca/linguistics/>)

**Academic Staff:** Please refer to the Linguistics website (<http://umanitoba.ca/faculties/arts/departments/linguistics/people/>) for current staff listing.

## Linguistics Program Information

The Department of Linguistics offers individualized and flexible graduate programs leading to both the Master of Arts and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Linguistics M.A. Admission Requirements

The M.A. program in Linguistics is strongly research-oriented; admission decisions are, therefore, based only in part on the applicant's academic record; the department's resources and interests also play an important role. A four-year B.A. in linguistics is the normal preparation for the M.A. program. Students without such preparation may be required to complete the Pre-Master's year first.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/

unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Linguistics M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/linguistics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/linguistics.html)) page.

## Degree Requirements

The Master of Arts program in Linguistics requires 18 credit hours of coursework at the graduate level, including Field Methods (LING 7650), Phonology (LING 7550), and Syntax (LING 7630). The remaining courses (9 credit hours) may be taken in either linguistics or related disciplines, subject to approval by the department's graduate committee. In certain cases the graduate committee may require the student to take additional courses. Students are encouraged to complete their coursework by the end of the first year of the program. M.A. candidates must demonstrate proficiency in a second language. In addition to coursework and the language reading requirement, students must complete and successfully defend a thesis.

**Second Language Reading Requirement:** Yes

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
LING 7550	Phonology	3
LING 7650	Field Methods	3
LING 7630	Syntax	3
LING 7XXX	Courses in LING 7000	9
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

#### Notes:

- Students must demonstrate proficiency in a second language.
- Students must propose, write, and defend an original thesis.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their program advisor/thesis supervisor to determine course load. These courses must be approved by the department's Graduate Committee. All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Linguistics, Ph.D.

Linguistics

**Head:** Nicole Rosen

**Grad Chair:** Terry Janzen

**Campus Address/General Office:** 534 Fletcher Argue Building

**Telephone:** 204-474-9596

**Email Address:** [linguistics@umanitoba.ca](mailto:linguistics@umanitoba.ca)

**Website:** [umanitoba.ca/linguistics/](http://umanitoba.ca/linguistics/) (<https://umanitoba.ca/linguistics/>)

**Academic Staff:** Please refer to the Linguistics website (<http://umanitoba.ca/faculties/arts/departments/linguistics/people/>) for current staff listing.

## Linguistics Program Information

The Department of Linguistics offers individualized and flexible graduate programs leading to both the Master of Arts and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Linguistics Ph.D. Admission Requirements

The Ph.D. program in linguistics is strongly research-oriented; admission decisions are, therefore, based only in part on the applicant's academic record; the department's resources and interests also play an important role. Students with a Master's degree in linguistics from the University of Manitoba or with an equivalent degree from elsewhere may be admitted into the Ph.D. program. Students who have a Master's degree but lack the specific course background for admission to the Ph.D. program may be admitted into the M.A. program. After completion of the M.A. course requirements with an average of B+ such students may apply to transfer directly to the Ph.D. program without completing the M.A.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Linguistics Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/linguistics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/linguistics.html)) page.

## Degree Requirements

Ph.D. students will normally complete 18 credit hours coursework at the graduate level. Courses are to be chosen in consultation with the advisor and students are encouraged to complete them by the end of the first year of the program.

### Candidacy Exams

Candidacy Exams are normally written in the second year of the Program. These exams consist of two original research papers of publishable quality in distinct areas of linguistics. Students must pass an oral exam based on each of the two papers.

Ph.D. candidates must demonstrate proficiency in a second language. This will at the same time satisfy the language reading requirement of the Faculty of Graduate Studies. Students who have satisfied this requirement at the M.A. level will be deemed to have met this requirement at the Ph.D. level.

Students must complete and successfully defend a dissertation. In preparation for this step, a written dissertation proposal must be presented and defended orally, normally in the third year.

**Second Language Reading Requirement:** Yes

**Expected Time to Graduate:** 4 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
LING 7550	Phonology	3
LING 7630	Syntax	3

LING 7650	Field Methods	3
LING 7XXX	Courses in LING at 7000	9
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

### Notes:

- Students must demonstrate proficiency in a second language.
- Students must propose, write, and defend an original dissertation.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their program advisor/thesis supervisor to determine course load. These courses must be approved by the department's Graduate Committee. All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet [additional BFAR](#) that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Philosophy, M.A.

Philosophy

**Head:** Rhonda Martens

**Campus Address/General Office:** 450 University College

**Telephone:** 204-474-6878

**Email Address:** [philosophy@umanitoba.ca](mailto:philosophy@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/arts/departments/philosophy/](https://umanitoba.ca/faculties/arts/departments/philosophy/) (<https://umanitoba.ca/faculties/arts/departments/philosophy/>)

**Academic Staff:** Please refer to the Philosophy website (<http://umanitoba.ca/faculties/arts/departments/philosophy/facstaff/facultylist.html>) for staff information.

## Philosophy Program Information

The University of Manitoba offers a Master of Arts degree in philosophy.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Philosophy M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Philosophy M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/philosophy.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/philosophy.html)) page.

## Degree Requirements

Students have three options:

- 15 credit hours in Philosophy, and a major thesis; or
- 18 credit hours in Philosophy, and two research papers; or
- 24 credit hours in Philosophy.

**Second Language Reading Requirement:** A reading knowledge of one foreign language will be required if the thesis topic requires it.

**Expected Time to Graduate:** Students with undergraduate concentration in Philosophy equivalent to approximately nine full courses (54 credit hours) can complete the M.A. degree in one year. Students with a lesser

degree of undergraduate concentration will need more than one year to complete the degree.

## Progression Chart

### Thesis Option

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHIL 7XXX	Courses designated PHIL 7000 or above	6
PHIL 3XXX	Courses designated PHIL 3000 or above	9
Requires completion of one (1) thesis paper approximately 80-100 pages in length		
<b>Total Hours</b>		<b>15</b>

### Research Papers Option

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHIL 7XXX	Courses designated PHIL 7000 or above	12
PHIL 3XXX	Courses designated PHIL 3000 or above	6
Requires completion of two (2) individual research papers, each approximately 40-50 pages in length		
<b>Total Hours</b>		<b>18</b>

### Coursework Option

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHIL 7XXX	Courses designated PHIL 7000 or above	18
PHIL 3XXX	Courses designated PHIL 3000 or above	6
No additional paper required		
<b>Total Hours</b>		<b>24</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students (new and returning) in the Master's and pre-Master's programs of the Department of Philosophy must have their courses approved by the graduate chair prior to registering. Students may only register for, and will only receive credit for, those courses approved by the graduate chair.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Political Studies, M.A.

Political Studies

**Head:** Dr. Andrea Rounce

**Chair:** Dr. Bryan Peeler

**Campus Address/General Office:** 532 Fletcher Argue

**Telephone:** 204-474-9733

**Fax:** 204-474-7585

**Email Address:** Political.Studies@umanitoba.ca

(Political\_Studies@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/arts/departments/political\\_studies/](http://umanitoba.ca/faculties/arts/departments/political_studies/)  
([https://umanitoba.ca/faculties/arts/departments/political\\_studies/](https://umanitoba.ca/faculties/arts/departments/political_studies/))

**Academic Staff:** Please refer to the Political Studies website ([http://umanitoba.ca/faculties/arts/departments/political\\_studies/faculty/3834.html](http://umanitoba.ca/faculties/arts/departments/political_studies/faculty/3834.html)) for staff information.

## Political Studies Program Information

The Department of Political Studies offers a Pre-Master's year, a Master of Arts degree program, as well as a Masters in Public Administration program jointly offered with the University of Winnipeg.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## Political Studies M.A. Admission Requirements

Normally, to be considered for admission to the M.A program in Political Studies, applicants must have successfully completed either the Department's Pre-M.A program, as outlined below, or a B.A (Honours) Program in Political Studies. To be considered for admission, applicants holding a B.A (Honours) degree are expected to have maintained a grade point average of 3.5 (B+) in their last two years of study and to have completed a course in Political Theory. Other applicants will be considered for admission to the M.A program in Political Studies if they hold a B.A (Advanced) with a major in Political Studies, and have a course selection pattern and performance in those courses that is comparable in quality to that of a B.A (Honours) student. Applicants possessing a B.A (Honours) degree in another discipline with an overall grade point average of 3.5 (B+) will also be considered for direct entry into the program primarily on the basis of their completion of Political Studies or directly related courses

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

The Pre-Master's year is designed for students who do not meet the requirements for admission to the Master's program. To be eligible for Pre-Master's study, applicants will normally possess a general Bachelor's degree with a major in Political Studies (30 credit hours including one course in Political Theory), with a minimum cumulative grade point average of 3.0 (B). Applicants possessing a general B.A. in another discipline with a cumulative grade point average of 3.5 (B+) will also be considered for direct entry into the Pre-Master's program, primarily on the basis of their completion of Political Studies or directly related courses.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Political Studies M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/political\\_studies.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/political_studies.html)) page.

## Degree Requirements

The M.A Program consists of two independent streams of study: the Course based with Major Research Paper, and the thesis stream. In consultation with the Graduate Chair/their advisor, Students are expected to select either the comprehensive or thesis stream by December of their first year of study. The main purpose of the thesis-based stream is to provide students with a deep understanding of Political Science and to develop their research skills to a level that allows them to explore a chosen topic in depth. The comprehensive stream is intended to enhance the student's understanding of their chosen subfields.

The thesis stream of the M.A in Political Studies consists of course work, a thesis, and an oral examination. Students in the thesis stream must complete a minimum of 15 credit hours, 12 credit hours must be at the 7000 level in Political Studies. In some cases, and with written permission from the Department's Graduate Committee, students may substitute three (3) credit hours of coursework at the 4000/7000 level in a related discipline. Three (3) credit hours includes Research Methods, and three (3) credit hours includes The Study of Politics. Thesis is normally between 20,000 and 25,000 (80,100 pages) but no more than 30,000

words (120 pages). A waiver of the length requirement may be granted by the Graduate Committee, up request and with support from the Advisor.

The Course-Based Stream (with Major Research Paper) of the M.A in Political Studies consists of course work and a research paper. Students in the course-based stream must complete a minimum of 18 credit hours at the 7000 level in Political Studies. In some cases, and with written permission from the Department's Graduate Committee, students may substitute six (6) credit hours of course work at the 7000 level in a related discipline or may be permitted to take six (6) credit hours at the 4000 level in Political Studies. Includes 3 credits of Research Methods, and 3 credits in The Study of Politics. The Major Research Paper (MRP) normally is 6,000-8,000 words in length (25-30 pages; max 40). Final paper is assessed by the MRP advisor and a second reader. Must achieve a minimum grade of B to pass.

**Expected Time to Graduate:** 2 years (Thesis-based) 1 year (Course-based).

## Progression Chart

### Thesis Option

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
POLS 7100	The Study of Politics	3
POLS 7300	Directed Readings in Public Administration	3
POLS 7XXX	Courses designated POLS 7000 or above	9
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>15</b>

### Notes:

- Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.
- The M.A. thesis proposal must include a literature review, description of the proposed work, and a schedule for completion. The proposal should normally be completed within 10 months following the start of the program and must be approved by the student's advisor.

### Course-Based Option

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
POLS 7100	The Study of Politics	3
POLS 7300	Directed Readings in Public Administration	3
POLS 7XXX	Courses designated POLS 7000 or above	12
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
POLS 7110	Major Research Paper	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to meet with the Graduate Chair/Designate to have their re/registration pre-approved. Except under extenuating circumstances, these re/registration meetings will normally be held by July 1 of the academic year.

Students may need to register for POLS 6010 Manitoba Legislative Internship.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Psychology, M.A.

Psychology

**Head:** Dan Bailis

**Grad Chair:** Melanie Soderstrom

**Campus Address/General Office:** P514 Duff Roblin Building

**Telephone:** 204-474-6377

**Email Address:** [Psychology.GraduateOffice@umanitoba.ca](mailto:Psychology.GraduateOffice@umanitoba.ca)

**Website:** [umanitoba.ca/psychology/](http://umanitoba.ca/psychology/) (<https://umanitoba.ca/psychology/>)

**Academic Staff:** Please refer to the Psychology website (<http://umanitoba.ca/faculties/arts/departments/psychology/people/>) for staff information.

## Psychology Program Information

Graduate study in the Department of Psychology is offered at both the Master of Arts and the Doctor of Philosophy levels. The M.A. program is designed to provide a broad foundation in the scientific approach to psychology, as well as specialized skills. The Ph.D. program provides a higher degree of specialization coupled with more intensive training in research and application.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Psychology M.A. Admission Requirements

Applications for graduate study are accepted from students holding either a B.A. (Honours) or B.Sc. (Honours) degree from the University of Manitoba or its equivalent from another university. Students holding a four-year B.A. (Advanced Major) or B.Sc. (Major) from the University of Manitoba, or another Canadian university, are normally accepted into the pre-M.A. program. However, program areas can recommend applicants for admission to the M.A. program, notwithstanding, if they hold a four-year B.A. or B.Sc. degree from a program at any university recognized by the Faculty of Graduate Studies, that does not provide an opportunity to complete an honours degree and/or an honours thesis.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Psychology M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/psychology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/psychology.html)) page.

## Degree Requirements

Please consult the Supplemental Regulations under the Regulations tab for program requirements.

**Expected Time to Graduate:** 2 years

### Progression Charts

- Students must complete PSYC 7780 no later than their 4th term of registration in MA level

### Basic Course Requirements

Course	Title	Hours
<b>Year 1</b>		
Select one half-course from the defined major		3
PSYC 7200	Quantitative Methods in Psychology 1	3
PSYC 7210	Quantitative Methods in Psychology 2	3
PSYC 7780	M.A. Thesis Proposal Development <sup>1</sup>	0
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
Select one half-course from the defined major		3
Select one ancillary half-course (from the Psychology graduate curriculum, or 3000 level or above from another department)		3
GRAD 7000	Master's Thesis	0
Additional course requirements (if any)		
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Students must complete PSYC 7780 no later than 4th term of registration in MA level.

### Clinical Course Requirements

Course	Title	Hours
<b>Year 1</b>		
PSYC 7200	Quantitative Methods in Psychology 1	3
PSYC 7210	Quantitative Methods in Psychology 2	3
PSYC 7140	Clinical Research Design	3
PSYC 7260	Case Conceptualization and Communication 1	0
PSYC 7320	Foundations of Evidence-Based Treatment	3
PSYC 7520	Ethics and Professional Issues in Clinical Psychology	3
PSYC 7550 or PSYC 7022	Intellectual and Cognitive Assessment or Psycho-educational Assessment and Measurement 1	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PSYC 7780	M.A. Thesis Proposal Development <sup>1</sup>	0
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
PSYC 7080	Child/Youth Psychopathology	3
PSYC 7270	Case Conceptualization and Communication 2	0
PSYC 7280 or PSYC 8230	History and Systems of Psychology or Clinical Neuropsychology	3
PSYC 7290	Psychopathology and Diagnosis	3
PSYC 7910	Clerkship-Practicum in Clinical Psychology	0
PSYC 7920	Clerkship-Practicum in Clinical Psychology	0
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>27</b>

<sup>1</sup> Students must complete PSYC 7780 no later than 4th term of registration in MA level.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all students (new and returning) must meet with their advisor to determine their program of study. Courses must be listed on a



Departmental Program Registration Form. The form must be signed by the advisor and the graduate programs coordinator. Only those courses that have been approved by the graduate office will be credited to a student's program.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Psychology, Ph.D.

Psychology

**Head:** Dan Bailis

**Grad Chair:** Melanie Soderstrom

**Campus Address/General Office:** P514 Duff Roblin Building

**Telephone:** 204-474-6377

**Email Address:** [Psychology.GraduateOffice@umanitoba.ca](mailto:Psychology.GraduateOffice@umanitoba.ca)

**Website:** [umanitoba.ca/psychology/](https://umanitoba.ca/psychology/) (<https://umanitoba.ca/psychology/>)

**Academic Staff:** Please refer to the Psychology website (<http://umanitoba.ca/faculties/arts/departments/psychology/people/>) for staff information.

## Psychology Program Information

Graduate study in the Department of Psychology is offered at both the Master of Arts and the Doctor of Philosophy levels. The M.A. program is designed to provide a broad foundation in the scientific approach to psychology, as well as specialized skills. The Ph.D. program provides a higher degree of specialization coupled with more intensive training in research and application.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Psychology Ph.D. Admission Requirements

Students may be admitted to the doctoral program if they have the equivalent of an M.A. degree in Psychology from the University of Manitoba.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Psychology Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/psychology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/psychology.html)) page.

## Degree Requirements

Please consult the Supplementary Regulations under the Regulations tab for program requirements. Students in the clinical training program have a more extensive program of study, including clinical practice at the Psychological Service Centre, and must complete an internship year at an accredited training site.

**Expected Time to Graduate:** Non-Clinical Programs - 3 years; Clinical Program - 4 years.

### Progression Chart

#### Basic Course Requirements

Course	Title	Hours
<b>Year 1</b>		
	Select one half-course from the defined major	3
	Select one ancillary half-course (from the Psychology graduate curriculum, or 4000 level or above from another department)	3
	Select one half-course in Research Design or Quantitative Methods	3
	Thesis Proposal Development	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (unless completed previously)	0
		<b>Hours</b>
		<b>9</b>
<b>Years 2-4</b>		
	Select one half-course from the defined major	3
GRAD 8010	Doctoral Candidacy Examination	0
PSYC 7790	Ph.D. Dissertation Proposal Development <sup>1</sup>	0
GRAD 8000	Doctoral Thesis	0

Additional course requirements (if any)	
<b>Hours</b>	<b>3</b>
<b>Total Hours</b>	<b>12</b>

<sup>1</sup> Students must complete PSYC 7790 no later than 8th term of registration in PhD level.

### Clinical Course Requirements

Course	Title	Hours
<b>Year 1</b>		
PSYC 7560	Personality and Psychological Assessment	3
PSYC 7082	Intervening with Children and Social Systems	3
PSYC 7930	Clerkship-Practicum in Clinical Psychology	0
PSYC 7940	Clerkship-Practicum in Clinical Psychology	0
PSYC 8110 or PSYC 7130	Program Evaluation and Consultation (with approval) or School Psychology Research Design and Program Evaluation	3
Select one Social Bases of Behaviour Elective (with approval)		3
PSYC 8080	Case Conceptualization and Communication 3	3
PSYC 8430	Cognitive Behaviour Therapy	3
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (unless completed previously)	0
<b>Hours</b>		<b>18</b>
<b>Years 2-4</b>		
PSYC 7790	Ph.D. Dissertation Proposal Development <sup>1</sup>	0
PSYC 8090	Clinical Supervision in Psychology	3
PSYC 7950	Clerkship-Practicum in Clinical Psychology	0
PSYC 7952	Clerkship-Practicum in Clinical Psychology	0
Select one of the following (PhD Ancillary):		3
PSYC 7280	History and Systems of Psychology	
PSYC 8230	Clinical Neuropsychology	
Or a Biological Bases of Behaviour alternative with approval		
Select one Cognitive-Affective Bases Elective (with approval)		3
PSYC 7954	Clerkship-Practicum in Clinical Psychology	0
PSYC 7956	Clerkship-Practicum in Clinical Psychology	0
GRAD 8000	Doctoral Thesis (Year 6)	0
PSYC 7980	Internship in Clinical Psychology (Year 6)	0
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>27</b>

<sup>1</sup> Students must complete PSYC 7790 no later than 8th term of registration in PhD level (3rd year of study).

#### Notes:

- Students should register for GRAD 8010 during the summer of their 1st year of study (see <http://umanitoba.ca/faculties/arts/departments/psychology/media/New-Candidacy-Regulations.pdf>)
- Students should schedule their PhD proposal for the summer of their 2nd year of study

- Students should commence data collection for their PhD their during the summer of their 3rd year of study (strongly recommended)

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all students (new and returning) must meet with their advisor to determine their program of study. Courses must be listed on a Departmental Program Registration Form. The form must be signed by the advisor and the graduate programs coordinator. Only those courses that have been approved by the graduate office will be credited to a student's program.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Public Administration, M.P.A.

Political Studies

**Head:** Dr. Andrea Rounce  
**Chair:** Dr. Susan Prentice  
**Associate Chair & Coop Placement:** Malcolm Bird  
**Campus Address/General Office:** 532 Fletcher Argue  
**Telephone:** 204-474-9733  
**Email Address:** [political.studies@umanitoba.ca](mailto:political.studies@umanitoba.ca)  
 (political\_studies@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/arts/departments/political\\_studies/](https://umanitoba.ca/faculties/arts/departments/political_studies/)  
 ([https://umanitoba.ca/faculties/arts/departments/political\\_studies/](https://umanitoba.ca/faculties/arts/departments/political_studies/))

**Academic Staff:** Please refer to the Political Studies website ([http://umanitoba.ca/faculties/arts/departments/political\\_studies/faculty/3834.html](http://umanitoba.ca/faculties/arts/departments/political_studies/faculty/3834.html)) for staff information.

## Public Administration Program Information

Students admitted prior to Fall 2017 should refer to the Academic Calendar for the year they began their program. See [umanitoba.ca/student/records/academiccalendar\\_archive.html](https://umanitoba.ca/student/records/academiccalendar_archive.html) ([http://umanitoba.ca/student/records/academiccalendar\\_archive.html](http://umanitoba.ca/student/records/academiccalendar_archive.html)) for Calendar archives.

This Master of Public Administration program is offered jointly by the Department of Political Studies ([http://umanitoba.ca/faculties/arts/departments/political\\_studies/master\\_pa/](http://umanitoba.ca/faculties/arts/departments/political_studies/master_pa/)) at the University of Manitoba and the Department of Political Science at the University of Winnipeg. Unless otherwise specified by particular agreements attached to its own creation, it is governed by the general procedures and regulations devised by the two universities for joint master's programs.

### Joint Master's Program

The University of Manitoba and The University of Winnipeg together offer the Joint Master's program, with courses and thesis direction (if applicable) offered at both institutions. Students of a JMP are admitted by the Faculty of Graduate Studies at the University of Manitoba. Graduates of Joint Master's programs receive a joint-institution parchment. Students in the JMP may elect to attend the convocation of either of the two participating universities. The programs are governed by the Joint Discipline Committee (JDC) at the department/unit level, consisting of faculty members of both institutions.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.P.A. Admission Requirements

Applicants for admission to the program must normally be graduates of four-year undergraduate degree programs (or equivalent) from:

- Canadian institutions empowered by law to grant degrees; or
- Colleges and universities outside Canada, which are officially recognized by the Faculty of Graduate Studies.

It is preferred, but not required, that applicants have some formal course background in public administration, political science or economics. Students from other disciplines are also encouraged to apply.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.P.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/public\\_admin.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/public_admin.html)) page.

## Degree Requirements

All students must complete 36 credit hours of study, including 24 credit hours of required courses and 12 credit hours of optional courses, all of which would be at the 7000-level (normally), and 2 mandatory co-op placements (POLS 7800 & POLS 7810). Students with demonstrated professional-work experience with a public sector organization in the area of health or public administration, may request a waiver of the requirement for two co-op placements.

There is no thesis option or comprehensive examination. Students are required, however, to complete a major research paper as part of the Capstone Seminar.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
POLS 7130/9040	Theories and Issues in Public Administration	3
POLS 7132/9250	Public Policy Process and Issues	3
POLS 7136/9340	Governance and Administration	3
POLS 7134/9630	Qualitative Methods and Communications for the Public Sector	3
POLS 7140/9420	Principles of Public Finance for Policy Analysis	3
POLS 7XXX	Option	3
POLS 7800	MPA Co-operative Education Term 1	0
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
POLS 7138/9640	Quantitative Methods for Policy Analysis	3
POLS 7790/9610	International Relations Theory	3
POLS 7980/9620	Professional Development	3
POLS 7XXX	Option	3
POLS 7XXX	Option	3
POLS 7XXX	Option	3
POLS 7810	MPA Co-operative Education Term 2	0
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>36</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students will meet with the Chair or designate. During their meeting courses will be discussed and approved. Students

will complete the Departmental Graduate Student Registration Form. The form will be submitted to the Department Admin, and the registration will be completed on the students behalf. Registration revisions (addition and /or deletion of courses) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Religion, M.A.

Religion

**Head:** Kenneth MacKendrick

**Grad Chair:** Elizabeth Alexandrin (UM) & Carlos Colorado (UW)

**Campus Address/General Office:** 326 Fletcher Argue

**Telephone:** 204-474-9151

**Fax:** 204-474-7601

**Email Address:** Religion@umanitoba.ca

**Website:** [umanitoba.ca/faculties/arts/departments/religion/](http://umanitoba.ca/faculties/arts/departments/religion/) (<http://www.umanitoba.ca/faculties/arts/departments/religion/>)

## Religion Program Information

The Department of Religion offers a Master of Arts and a Doctor of Philosophy in Religion. The M.A. program is a Joint Program in co-

operation with the Department of Religion and Culture at the University of Winnipeg.

### Joint Master's Program

The University of Manitoba and The University of Winnipeg together offer the Joint Master's program, with courses and thesis direction (if applicable) offered at both institutions. Students of a JMP are admitted by the Faculty of Graduate Studies at the University of Manitoba. Graduates of Joint Master's programs receive a joint-institution parchment. Students in the JMP may elect to attend the convocation of either of the two participating universities. The programs are governed by the Joint Discipline Committee (JDC) at the department/unit level, consisting of faculty members of both institutions.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Religion M.A. Admission Requirements

In addition to the minimum admission requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 1329) of this calendar, a four-year B.A. (Honours) degree in Religion is the normal preparation for the M.A. program. Applicants without sufficient background for direct admission to the Joint Master's Program may be recommended to the Pre-Master's Program.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Religion M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/religion.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/religion.html)) page.

## Degree Requirements

Two types of programs are available:

### Thesis Route

1. Student must complete a minimum of 12 credit hours of coursework in Religion at the 7000-level, offered through the U of M or the U of W, or a combination thereof.
2. Students in the JMP program must demonstrate competence in a second language relevant to their program of study.
3. Oral Examination of thesis.

### Coursework-based/Comprehensive Examination Route

1. Students who choose this route must complete a minimum of 24 credit hours of coursework offered through the U of M or the U of W, or a combination thereof. Of the required 24 credit hours, at least 18

credit hours must be in Religion at the 7000-level. Up to 6 credit hours at the 7000-level may be taken in another Department.

2. Students in the JMP program must demonstrate competence in a second language relevant to their program of study.
3. Students are required to present and defend an original paper.

**Language Requirement:** Students must demonstrate competence in a second language that is relevant to their program of study. The language requirement is satisfied by the successful completion of a language translation exam or the successful completion of 6 credit hours of coursework in the selected language that is beyond the 1000-level.

**Expected Time to Graduate:** 2 years

## Progression Chart

### Thesis Route

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
RLGN 7XXX	Courses designated RLGN 7000 level or higher	12
Language Translation Exam		
Submission of Thesis Proposal		
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7020	Master's Re-registration	0
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

### Coursework-based/Comprehensive Route

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
RLGN 7XXX	Courses designated RLGN 7000 level or above	9
Select one course designated 7000 or above		3
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7020	Master's Re-registration	0
RLGN 7XXX	Courses designated RLGN 7000 level or above	9
Select one course designated 7000 or above		3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>24</b>

Certain programs of study within religion may require courses outside the Department of Religion.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

To obtain written approval for courses before registration, all students in the Religion Joint Master's Program must meet either the chair of the Joint Discipline Committee, Religion, or with the department head or designate. All Ph.D. students must meet first with the head, Department of Religion. Course additions and withdrawals must be approved in the same way.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Religion, Ph.D.

Religion

**Head:** Kenneth MacKendrick

**Grad Chair:** Elizabeth Alexandrin

**Campus Address/General Office:** 326 Fletcher Argue

**Telephone:** 204-474-9151

**Fax:** 204-474-7601

**Email Address:** Religion@umanitoba.ca

**Website:** [umanitoba.ca/faculties/arts/departments/religion/](http://umanitoba.ca/faculties/arts/departments/religion/) (<http://www.umanitoba.ca/faculties/arts/departments/religion/>)

## Religion Program Information

The Department of Religion offers a Master of Arts and a Doctor of Philosophy in Religion. The M.A. program is a Joint Program in co-operation with the Department of Religion and Culture at the University of Winnipeg.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Religion Ph.D. Admission Requirements

The department expects applicants to the Ph.D. graduate program to have a thesis-based M.A. degree in Religion (with a minimum cumulative GPA of 3.5) or its equivalent.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Religion Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/religion.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/religion.html)) page.

## Degree Requirements

Students must complete at least 18 credit hours of coursework at the 7000 level. A minimum of 12 credit hours at the 7000 level in Religion is required. Students lacking sufficient background in methodology in the study of Religion may be required to complete an additional 6 credit hours in method and theory in the study of Religion as auxiliary courses, in addition to the mandatory 18 credit hours.

**Language Requirement:** Students must demonstrate competence in the research languages relevant to the proposed doctoral thesis. The language requirement must be satisfied prior to the Candidacy Examinations. Language requirements are normally satisfied by students successfully completing language translation examinations.

**Expected Time to Graduate:** 4 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
RLGN 7XXX	Courses designated RLGN 7000 or above	12
CRSE 7XXX	Courses designated 7000 or above	6
Language Translation Exam		
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>		<b>0</b>

### Year 4

GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All Ph.D. students must meet first with the head, Department of Religion. Course additions and withdrawals must be approved in the same way.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## School Psychology, M.A.

Psychology

**Head:** Dan Bailis

**Grad Chair:** Melanie Glenwright (Acting)

**Campus Address/General Office:** P514 Duff Roblin Building

**Telephone:** 204-474-6377

**Email Address:** psych\_grad\_office@umanitoba.ca

**Website:** [umanitoba.ca/psychology/](http://umanitoba.ca/psychology/) (<https://umanitoba.ca/psychology/>)

**Academic Staff:** Please refer to the Psychology website (<http://umanitoba.ca/faculties/arts/departments/psychology/people/>) for staff information.

## Psychology Program Information

Graduate study in the Department of Psychology is offered at both the Master of Arts and the Doctor of Philosophy levels. The M.A. program is designed to provide a broad foundation in the scientific approach to psychology, as well as specialized skills. The Ph.D. program provides a higher degree of specialization coupled with more intensive training in research and application.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### School Psychology M.A. Admission Requirements

The normal requirement for admission is an Honours B.A. or B.Sc. in Psychology or its equivalent. Students seeking admission with other degrees will usually be required to complete a pre-Master's year to the satisfaction of the department.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the School Psychology M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/psychology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/psychology.html)) page.

## Degree Requirements

Please consult the Supplemental Regulations under the Regulations tab for program requirements.

**Expected Time to Graduate:** 2 years (Comprehensive exam stream) or 3 years (Thesis stream)

### Progression Charts

- Students must complete PSYC 7780 no later than their 4th term of registration in MA level.

#### SCHOOL PSYCHOLOGY 2 YEAR COMPREHENSIVE EXAM STREAM

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PSYC 7012	Ethics, History and Profession of School Psychology 1	3
EDUA 5012	Legal and Administrative Aspects of Schools for Clinicians	3
PSYC 7022	Psycho-educational Assessment and Measurement 1	3
PSYC 7024	Psycho-educational Assessment and Measurement 2	3

PSYC 7030	Learning and Cognitive Impairment	3
PSYC 7040	Teaching Strategies, Learning Styles, and Academic Remediation	3
PSYC 7050	Junior Practicum in School Psychology	3
PSYC 7070	Social, Emotional, and Personality Assessment of Children/Youth	3
PSYC 7080	Child/Youth Psychopathology	3
EDUA 7712	Working with Family, School and Community Systems	3
<b>Hours</b>		<b>30</b>

#### Year 2

PSYC 7060	Senior Practicum in School Psychology	6
PSYC 7090	Behavioural Assessment and Intervention in School Settings	3
PSYC 7120	Consultation and Supervision	3
PSYC 7130	School Psychology Research Design and Program Evaluation	3
PSYC 7820	Interventions I	3
PSYC 7830	Interventions II	3
EDUA 7710	Development in Learning Environments	3
GRAD 7010	Comprehensive Examination	0
<b>Hours</b>		<b>24</b>
<b>Total Hours</b>		<b>54</b>

#### SCHOOL PSYCHOLOGY 3 YEAR THESIS STREAM

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PSYC 7200	Quantitative Methods in Psychology 1	3
PSYC 7210	Quantitative Methods in Psychology 2	3
PSYC 7030 or PSYC 7080	Learning and Cognitive Impairment or Child/Youth Psychopathology	3
EDUA 7712	Working with Family, School and Community Systems	3
Select two of the following:		6
PSYC 7040	Teaching Strategies, Learning Styles, and Academic Remediation	
PSYC 7070	Social, Emotional, and Personality Assessment of Children/Youth	
PSYC 7120	Consultation and Supervision	
<b>Hours</b>		<b>18</b>

#### Year 2

PSYC 7012	Ethics, History and Profession of School Psychology 1	3
EDUA 5012	Legal and Administrative Aspects of Schools for Clinicians	3
PSYC 7022	Psycho-educational Assessment and Measurement 1	3
PSYC 7024	Psycho-educational Assessment and Measurement 2	3
PSYC 7030 or PSYC 7080	Learning and Cognitive Impairment or Child/Youth Psychopathology	3
Select one of the following:		3

PSYC 7040	Teaching Strategies, Learning Styles, and Academic Remediation	
PSYC 7070	Social, Emotional, and Personality Assessment of Children/Youth	
PSYC 7120	Consultation and Supervision	
PSYC 7050	Junior Practicum in School Psychology	3
PSYC 7780	M.A. Thesis Proposal Development <sup>1</sup>	0
<b>Hours</b>		<b>21</b>
<b>Year 3</b>		
PSYC 7060	Senior Practicum in School Psychology	6
PSYC 7090	Behavioural Assessment and Intervention in School Settings	3
PSYC 7820	Interventions I	3
PSYC 7830	Interventions II	3
PSYC 7130	School Psychology Research Design and Program Evaluation	3
Select one of the following (if not completed in 2nd year):		3
PSYC 7040	Teaching Strategies, Learning Styles, and Academic Remediation	
PSYC 7070	Social, Emotional, and Personality Assessment of Children/Youth	
PSYC 7120	Consultation and Supervision	
EDUA 7710	Development in Learning Environments	3
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>24</b>
<b>Total Hours</b>		<b>63</b>

<sup>1</sup> Students must complete PSYC 7780 no later than 4th term of registration in MA level.

**Note:** EDUA 5012 may be waived by the program coordinator for students who do not wish practice in Manitoba schools. A student can request this waiver by emailing the School Psychology Area Group Chair, requesting that the waiver be noted in the student's file. The School Psychology Area Group Chair will forward the email to the Graduate Program Coordinator for recording purposes. This email request needs to be completed prior to completion of the program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all students (new and returning) must meet with their advisor to determine their program of study. Courses must be listed on a Departmental Program Registration Form. The form must be signed by the advisor and the graduate programs coordinator. Only those courses that have been approved by the graduate office will be credited to a student's program.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Slavic Studies, M.A.

German and Slavic Studies

**Head:** Stephan Jaeger

**Campus Address/General Office:** 326 Fletcher Argue Building

**Telephone:** 204-474-9151

**Fax:** 204-474-7601

**Email Address:** [german\\_slavic@umanitoba.ca](mailto:german_slavic@umanitoba.ca)

**Website:** [umanitoba.ca/arts/departments/german\\_and\\_slavic/](http://umanitoba.ca/arts/departments/german_and_slavic/) ([http://www.umanitoba.ca/arts/departments/german\\_and\\_slavic/](http://www.umanitoba.ca/arts/departments/german_and_slavic/))

**Academic Staff:** Please refer to the German and Slavic Studies website ([https://umanitoba.ca/faculties/arts/departments/german\\_and\\_slavic/staff/](https://umanitoba.ca/faculties/arts/departments/german_and_slavic/staff/)) for Faculty information.

## German and Slavic Studies Program Information

The department offers programs of study leading to the Master of Arts degree in the fields of German Studies (Culture, Literature, Second Language Acquisition) and Slavic Studies (Russian and/or Ukrainian Culture, Literature). Programs must be arranged in consultation with the Graduate Chair of the department.



## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Slavic Studies M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. Students with other degrees or backgrounds may be eligible for admission to a Pre-Master's program to the satisfaction of the department.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

The Pre-Master's year will normally consist of 24 credit hours of coursework, of which at least 12 are in the major discipline. At most, one grade of C+ in a course of six credit hours, or two grades of C+ in courses of three credit hours, will be permitted.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Slavic Studies M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/german\\_slavic.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/german_slavic.html)) page.

## Degree Requirements

Students fulfill the requirements for the Master's degree by doing a combination of coursework and thesis. A minimum of 15 credit hours of coursework is required, including GRMN 7200 / SLAV 7200, GRMN 7210 / SLAV 7210, and 3 other credit hours at the 7000 level in the student's major discipline. The remaining 6 credit hours, designated as ancillary credit, may be taken at the 7000, 4000, 3000 (or in exceptional circumstances the 2000) level and may be in courses in the student's major discipline, or in another program or department, at the discretion of the chair of the Graduate Studies Committee. A thesis prospectus must be submitted to the candidate's M.A. advisor a minimum of two months before the thesis is submitted to the M.A. Committee.

Students for the M.A. in German who received credit for the course GRMN 4200 have already fulfilled the requirement for GRMN 7200; they replace GRMN 7200 with 3 other credit hours on the 7000 level. Students for the M.A. in German who received credit for the course GRMN 4210 have already fulfilled the requirement for GRMN 7210; they replace GRMN 7210 with 3 other credit hours on the 7000 level.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

GRMN/SLAV 7200	Literary and Cultural Theory	3
GRMN/SLAV 7210	Introduction to Second Language Acquisition and Methods of Language Teaching	3
COURSE XXXX	Course related to student's major discipline	3
COURSE XXXX	Ancillary Credit <sup>1</sup>	6
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> The remaining 6 credit hours, designated as ancillary credit, may be taken at the 7000, 4000, 3000 (or in exceptional circumstances the 2000) level and may be in courses in the student's major discipline, or in another program or department, at the discretion of the Chair of Graduate Studies Committee.

<sup>2</sup> Thesis proposal for submission at the end of the first year of study and, at minimum, two months before the thesis is submitted to the Thesis Examining Committee.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration in German or Slavic Studies, students must consult with the graduate chair or the department head.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Sociology, M.A.

Sociology and Criminology

**Head:** Andrew Woolford

**Campus Address/General Office:** 320 Isbister Building

**Telephone:** 204-474-9260

**Fax:** 204-261-1216

**Website:** [umanitoba.ca/faculties/arts/departments/sociology/](https://umanitoba.ca/faculties/arts/departments/sociology/) (<http://umanitoba.ca/faculties/arts/departments/sociology/>)

**Academic Staff:** Please refer to Sociology and Criminology Faculty (<https://umanitoba.ca/faculties/arts/departments/sociology/facstaff/4335.html>) for staff information.

## Sociology Program Information

The Department of Sociology and Criminology offers programs that lead to the Master of Arts and Doctor of Philosophy degrees. Both programs provide training in the core areas of the discipline (theory and research methods) and offer a wide range of areas of specialization and theoretical approaches.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Sociology M.A. Admission Information

Students who have completed a 4-year Honours degree in Sociology or equivalent, or a closely related cognate field that includes substantial sociological content and a strong foundation in sociological research methods and theory may enter directly into the Master of Arts program. Students with a general 3-year B.A. in Sociology may be eligible for the Pre-Master's year.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Sociology M.A.

program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/sociology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/sociology.html)) page.

## Degree Requirements

The Master of Arts program in Sociology consists of 18 credit hours of coursework (including 3 credit hours in Research Methods and 3 credit hours in Sociological theory). Students must also complete and successfully defend a thesis.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following Methods courses: <sup>1</sup>		3
SOC 7240	Seminar in Selected Topics in Research and Methods	
SOC 7390	Survey Research Methods	
SOC 7400	Advanced Quantitative Research Methods	
SOC 7420	Qualitative Research Methods for Sociological Inquiry	
SOC 7470	Evaluating Social Programs	
Select one of the following Theory courses:		3
SOC 7190	Seminar in Selected Topics in Sociological Theory	
SOC 7320	Seminar in Political Sociology	
SOC 7430	Seminar in Classical Sociological Theory	
SOC 7440	Seminar in Contemporary Sociological Theory	
SOC 7480	Social Inequality	
SOC 7280	Seminar in Theoretical Criminology	
Select courses designated SOC 7000		12
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Students may take courses outside the department with permission from the Graduate Chair. (See Supplementary Regulations for details.) Auxiliary courses may be taken with permission from the student's advisor and the Graduate Chair. Reading courses are permitted only under exceptional circumstances, and require permission from the Graduate Chair and Department Head.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning Pre-Masters, M.A., and Ph.D. students must meet with the Chair of Graduate Studies in Sociology to discuss their program of study (usually in late August). The Graduate Program Assistant will

then register the student. All course additions and withdrawals must be arranged in a similar fashion.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Sociology, Ph.D.

Sociology and Criminology

**Head:** Andrew Woolford

**Campus Address/General Office:** 320 Isbister Building

**Telephone:** 204-474-9260

**Fax:** 204-261-1216

**Website:** [umanitoba.ca/faculties/arts/departments/sociology/](http://umanitoba.ca/faculties/arts/departments/sociology/) (<http://umanitoba.ca/faculties/arts/departments/sociology/>)

**Academic Staff:** Please refer to Sociology and Criminology Faculty (<https://umanitoba.ca/faculties/arts/departments/sociology/facstaff/4335.html>) for staff information.

## Sociology Program Information

The Department of Sociology and Criminology offers programs that lead to the Master of Arts and Doctor of Philosophy degrees. Both programs provide training in the core areas of the discipline (theory and research

methods) and offer a wide range of areas of specialization and theoretical approaches.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Sociology Ph.D. Admission Requirements

Students who wish to enter the Doctor of Philosophy program must have completed a Master's degree in Sociology or a closely related cognate field that includes substantial sociological content and a strong foundation in sociological research methods and theory.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Sociology Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/sociology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/sociology.html)) page.

## Degree Requirements

Students must complete:

- A minimum of 18 credit hours of coursework (including 3 credit hours in Theory and 6 credit hours in Research Methods);
- A passing grade in two comprehensive examinations in two different subject areas, chosen from the following: Sociological Theory; Sociological Methods; Criminology and Social Justice; Culture and Social Relations; Population Health and Wellness; Power, Privilege, and Resistance, Global Sociology; Social Policy and Practice.
- Successful defense of a dissertation proposal; and
- Successful defense of the completed dissertation.

**Expected Time to Graduate:** 4 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select two of the following Methods courses: <sup>1</sup>		6
SOC 7240	Seminar in Selected Topics in Research and Methods	
SOC 7390	Survey Research Methods	
SOC 7400	Advanced Quantitative Research Methods	
SOC 7420	Qualitative Research Methods for Sociological Inquiry	
SOC 7470	Evaluating Social Programs	
Select one of the following Theory courses:		3
SOC 7190	Seminar in Selected Topics in Sociological Theory	
SOC 7280	Seminar in Theoretical Criminology	
SOC 7320	Seminar in Political Sociology	
SOC 7430	Seminar in Classical Sociological Theory	

SOC 7440	Seminar in Contemporary Sociological Theory	
SOC 7480	Social Inequality	
Select three courses designated SOC 7000 <sup>1</sup>		9
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Students may take courses outside the department with permission from the Graduate Chair. (See Supplementary Regulations for details.) Auxiliary courses may be taken with permission from the student's advisor and the Graduate Chair. Reading courses are permitted only under exceptional circumstances, and require permission from the Graduate Chair and Department Head.

<sup>2</sup> The Doctoral Examination is comprised of 2 Comprehensive Exams each of which normally take 4-6 months of preparation.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning Pre-Masters, M.A., and Ph.D. students must meet with the Chair of Graduate Studies in Sociology to discuss their program of study (usually in late August). The Graduate Program Assistant will then register the student. All course additions and withdrawals must be arranged in a similar fashion.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Faculty of Education

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Curriculum Teaching and Learning, M.Ed. (p. 1468)	2-3	18-30	
Education, Ph.D. (p. 1473)	4	24	
Educational Administration, Foundations and Psychology, M.Ed. (p. 1475)	2-5	18-30	

## Curriculum Teaching and Learning, M.Ed.

Curriculum, Teaching and Learning

**Head / Graduate Chair:** Lilian Pozzer

**Campus Address/General Office:** 203 Education Building

**Telephone:** 204-474-9004

**Fax:** 204-474-7551

**Email Address:** GradPrograms.Education@umanitoba.ca

**Website:** [umanitoba.ca/education/](https://www.umanitoba.ca/education/) (<https://www.umanitoba.ca/education/>)

**Academic Staff:** Please see the Education website (<https://umanitoba.ca/education/faculty-staff/>) for academic staff listing.

## Curriculum, Teaching and Learning Program Information

The Department of Curriculum, Teaching and Learning offers the Master of Education program with specializations in language and literacy; second language education; and studies in curriculum, teaching and learning.

Please note that earning a Master of Education degree does not certify one to teach in the province of Manitoba.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Curriculum, Teaching and Learning Admission Requirements

Applicants must possess:

- For *Language and Literacy* and *Studies in Curriculum Teaching and Learning* specializations: a four-year Bachelor of Education degree, or a two-year After-Degree Bachelor of Education, or a three-year undergraduate degree which includes teacher training, plus a Post-Baccalaureate Diploma in Education (PBDE) with a minimum of at least 18 credit hours at the 5000 level.  
For *Second Language Education* specialization: an acceptable four-year equivalent undergraduate degree from an academic institution recognized by the Faculty of Graduate Studies, or a three-year

undergraduate degree, plus a PBDE which includes at least 18 credit hours at the 5000 level.

- A grade point average of 3.0 or better in the last 60 credit hours of university coursework.
- Normally two years of relevant work experience.
- Appropriate academic and/or professional background for the program area and concentration.
- Applicants may be required to take additional courses within their programs to enhance relevant professional and/or academic experience.

Individuals who graduate from the Certificate in Adult and Continuing Education (CACE) from the University of Manitoba must complete the following courses:

Course	Title	Hours
EDUA 1560	Adult Learning and Development	3
EDUA 1570	Foundations of Adult Education	3
EDUA 1580	Program Planning in Adult Education	3
EDUA 1590	Facilitating Adult Education	3

An additional 100 hours of elective credit through courses, seminars, 100 and workshops

The Faculty of Graduate Studies recognizes a complete CACE program as 15 credit hours towards the admission requirements for the M.Ed.; that is, giving 12 credit hours for the four core courses completed with a grade of 'B' or better and 3 credit hours (non assessable) for the 100 hours of elective study.

Individuals with a three-year undergraduate degree and the four CACE courses listed above must complete an additional 12 credit hours of senior level courses (i.e., 5000 level PBDE courses, 1000 or 2000 level B.Ed. courses, or courses at the 3000 level or above in other faculties) to have the 24 credit hours that are the minimal requirements for satisfying the "honours degree or equivalent" admission requirement. Those with the completed CACE would require an additional 9 credit hours of senior level courses.

Applicants should note that admission to the M.Ed. program is competitive. A number of factors are taken into account in arriving at an admission decision:

1. the capacity of the department to provide the program of study requested by the applicant;
2. the applicant's previous academic background and achievement;
3. the referees' assessment of the applicant;

- the capacity of the department to provide the applicant with an advisor in the program area; and
- the applicant's Statement in Support of their application, including relevant professional experience.

## Transfer of Credit

The granting of advanced credit is subject to the regulations of the Faculty of Graduate Studies and subject to approval of the program advisor and department head.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Ed. Curriculum, Teaching and Learning program of study (<https://umanitoba.ca/explore/programs-of-study/curriculum-teaching-and-learning-med/>) page.

Please note that International applications will be reviewed with the Canadian applications in February and March. All candidates who have applied by the January deadline will be notified of the decision regarding their admission by early April.

## Degree Requirements

The M.Ed. in Curriculum, Teaching and Learning has a thesis-based route and a course-based route with an oral defense. The M.Ed. course-based route at the University of Manitoba is typically a terminal degree. That is, it is insufficient, in number and of itself, as evidence of research capacity for admission into the Ph.D. in Education program at the University of Manitoba.

The following program requirements apply to all specializations in the Department of Curriculum, Teaching and Learning. Specific specialization requirements are listed under each specialization below.

Not all courses are offered every year. Although many courses are offered yearly, most courses are offered in the evening and those wishing to study full-time should consult with the department head.

**Expected Time to Graduate:** full-time: 2 - 3 years; part-time: 4 - 5 years.

## Program by Coursework and Thesis

A minimum of 18 credit hours of coursework. At least 12 credit hours must be at the 7000 level or equivalent. The remaining 6 credit hours may be at the 5000 level or above in the Faculty of Education, and/or at the 3000 level or above in other faculties.

EDUA 5800 or its equivalent, is a requirement of all M.Ed. programs in the Faculty of Education. In addition, thesis students must take 3 credit hours of research methods at the 7000 level in Education. In special circumstances research courses at the 3000 level or above in other faculties may be approved as an appropriate alternative to this requirement.

## Program by Coursework and Comprehensive Option (either Examination or Project) (Course-based)

A minimum of 30 credit hours of coursework. At least 18 credit hours must be at the 7000 level. The remaining 12 credit hours may be at the 5000 level or above in the Faculty of Education, and/or at the 3000 level or above in other faculties.

EDUA 5800 or its equivalent, is a requirement of all M.Ed. programs in the Faculty of Education.

In addition all students must complete 9 credit hours of core courses and 18 credit hours of concentration.

Course-based route students have the option of including a capstone course (EDUB 7540) as part of their 30 credit hours of required coursework. Normally, the capstone course is taken by students as preparation for the culminating activity. Students taking this course can expect to complete significant work towards fulfilling the comprehensive examination requirement.

## Studies in Curriculum, Teaching and Learning Specialization

The Master of Education in Studies in Curriculum, Teaching and Learning includes a range of potential concentrations: arts education (art, drama and music); Canadian Indigenous curriculum; contemplative studies in education; curriculum studies; educational technology; language and literacy curriculum; mathematics education; physical education/health; science education; second language education; social studies education; and teacher professional development. In consultation with their faculty advisors, students will be encouraged to create a program of study that addresses their own interests in a particular curricular field and which enhances the students' understanding of curriculum and its intents and effects. The aim of the program is to develop individuals who are informed, critical, and reflective about curriculum theory and practice in their particular area of concentration. In order to support this aim, courses are designed to provide graduate students with the requisite skills to conduct and to understand research in a variety of formats and paradigms.

Program Requirements are those listed above. Specific course requirements are as follows:

### Thesis Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - Select 6 credit hours from the following:	6
EDUB 7142	Topics in Curriculum, Teaching, and Learning	
EDUB 7330	Inquiry in Curriculum and Instruction	
EDUB 7420	Study of Teaching	
EDUB 7550	Historical and Contemporary Approaches to Curriculum	
EDUB 7560	Theory and Practice of Curriculum Design and Development	
EDUA/B XXXX	Concentration Courses <sup>1</sup>	6
EDUA 5800	Introduction to Educational Research <sup>2</sup>	3
EDUA/B XXXX	Research Methods Course <sup>3</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 2-5</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Select 6 credit hours of 7000 level coursework or a combination of 3 credit hours of 7000 level and 3 credit hours of 5000 level coursework in consultation with program advisor. In addition, up to 6 more credit hours of coursework may be selected from any Faculty of Education 5000 or 7000 level courses.

<sup>2</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

<sup>3</sup> A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

### Course Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - Select 9 credit hours from the following:	9
EDUB 7142	Topics in Curriculum, Teaching, and Learning	
EDUB 7330	Inquiry in Curriculum and Instruction	
EDUB 7420	Study of Teaching	
EDUB 7550	Historical and Contemporary Approaches to Curriculum	
EDUB 7560	Theory and Practice of Curriculum Design and Development	
EDUA/B XXXX	Concentration Courses <sup>1</sup>	18
EDUA 5800	Introduction to Educational Research <sup>2</sup>	3
<b>Hours</b>		<b>30</b>
<b>Years 2-5</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Select 9 credit hours of 7000 level concentration coursework in consultation with program advisor. In addition, select 9 more credit hours of coursework from any Faculty of Education 5000 or 7000 level courses which may include EDUB 7540 Final Seminar in Curriculum, Teaching and Learning (3 credit hours).

<sup>2</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

### Language and Literacy Specialization

Language and Literacy is a broad field encompassing a number of major sub-fields from pre-school to post-secondary levels. The sub-fields include developmental reading, clinical reading, composition studies, rhetoric, oral language development, children's and adolescent literature, response to literature, the language arts associated with listening, representing, viewing, spelling, and handwriting instruction, along with instruction in comprehension. The purpose of the program is to strengthen practitioners' theoretical understanding of one or more of these sub-fields, and to develop skills that will enable them to conduct independent research into language and literacy practices in their chosen area of concentration. Students in the program can anticipate experiences that range from general courses in curriculum development and implementation to specialized courses specific to their own needs and interests.

Program Requirements are those listed above. Specific course requirements are as follows:

### Thesis Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - Select 6 credit hours from the following:	6
EDUB 7530	Curriculum Development and Implementation in Language and Literacy	
EDUB 7070	Classical Research in Reading	
EDUB 7100	Language and Literacy Curriculum Inquiry in the Early Years	
EDUB 7180	Research in Written Composition	
Or any other EDUB 7000 level courses in language and literacy in consultation with program advisor and department head.		
EDUB/7XXX	Concentration Courses (see below)	6
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
EDUA/B XXXX	Research Methods Course <sup>2</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 2-5</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

<sup>2</sup> A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

### Concentration Courses

In consultation with program advisor select 6 credit hours of coursework normally selected from the following course list, or other courses approved by program advisor and department head.

Course	Title	Hours
EDUB 7060	Seminar and Practicum in Clinical Diagnosis and Remediation	6
EDUB 7070	Classical Research in Reading	3
EDUB 7090	Seminar in Reading Processes	3
EDUB 7100	Language and Literacy Curriculum Inquiry in the Early Years	3
EDUB 7110	Research in Language and Literacy Development	3
EDUB 7150	Seminar in Reading and Response to Literature	3
EDUB 7180	Research in Written Composition	3
EDUB 7190	Research in Language for Learning	3
EDUB 7290	Curriculum Research in Early Years: Young Children and Social Semiotics	3
EDUB 7420	Study of Teaching	3
EDUB 7550	Historical and Contemporary Approaches to Curriculum	3
EDUB 7560	Theory and Practice of Curriculum Design and Development	3

In addition, up to 6 more credit hours of coursework may be selected from any Faculty of Education 5000 or 7000 level courses.

### Course Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - Select 9 credit hours from the following:	9
EDUB 7530	Curriculum Development and Implementation in Language and Literacy	
EDUB 7070	Classical Research in Reading	
EDUB 7100	Language and Literacy Curriculum Inquiry in the Early Years	
EDUB 7180	Research in Written Composition	
Or any other EDUB 7000 level courses in language and literacy in consultation with program advisor and department head.		
EDUB/7XXX	Concentration Courses (see below)	18
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
<b>Hours</b>		<b>30</b>
<b>Years 2-5</b>		
GRAD 7010	Comprehensive Examination	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

### Concentration Courses

In consultation with program advisor select 18 credit hours of coursework normally selected from the following course list, or other courses approved by program advisor and department head.

Course	Title	Hours
EDUB 7060	Seminar and Practicum in Clinical Diagnosis and Remediation	6
EDUB 7070	Classical Research in Reading	3
EDUB 7090	Seminar in Reading Processes	3
EDUB 7100	Language and Literacy Curriculum Inquiry in the Early Years	3
EDUB 7110	Research in Language and Literacy Development	3
EDUB 7150	Seminar in Reading and Response to Literature	3
EDUB 7180	Research in Written Composition	3
EDUB 7190	Research in Language for Learning	3
EDUB 7290	Curriculum Research in Early Years: Young Children and Social Semiotics	3
EDUB 7330	Inquiry in Curriculum and Instruction	3
EDUB 7420	Study of Teaching	3
EDUB 7540	Final Seminar in Curriculum, Teaching and Learning	3
EDUB 7550	Historical and Contemporary Approaches to Curriculum	3
EDUB 7560	Theory and Practice of Curriculum Design and Development	3

## Second Language Education Specialization

The purpose of the Master's in Second Language Education (SLE) Program is to further the knowledge of experienced ESL teachers. Courses are designed to enable teachers to reflect on their teaching practices in light of influential and relevant research in second language acquisition/learning, curriculum theory and development, and SLE pedagogy. Students accepted into the program will be introduced to the research methodologies employed in educational research and in SLE, and will have the opportunity to develop expertise in one or more research methodologies.

Program Requirements are those listed above. Specific course requirements are as follows:

### Thesis Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses	12
EDUB 7210	Seminar in E.S.L. Theory and Practice	
EDUB 7212	Critical Applied Linguistics in a Global Context	
EDUB 7220	Research Issues and Application in TESL (Teaching English as a Second Language)	
EDUB 7580	Social, Cultural, and Political Theories in Second Language Acquisition	

In addition, up to 6 more credit hours of coursework may be selected from any Faculty of Education 5000 or 7000 level courses (except EDUB 5580). Advisors may decide that EDUB 5580 is a necessary component for the programs of students who have minimal second/foreign language teaching experience or for other reasons. This course will be added to a student's program as an auxiliary course above and beyond the minimum 18 credit hours.

EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
EDUA/B XXXX	Research Methods Course <sup>2</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 2-5</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

<sup>2</sup> A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

### Course Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses	12
EDUB 7210	Seminar in E.S.L. Theory and Practice	
EDUB 7212	Critical Applied Linguistics in a Global Context	



EDUB 7220	Research Issues and Application in TESL (Teaching English as a Second Language)	
EDUB 7580	Social, Cultural, and Political Theories in Second Language Acquisition	
EDUA/B XXXX	Concentration Courses (see below)	15
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
<b>Hours</b>		<b>30</b>
<b>Years 2-5</b>		
GRAD 7010	Comprehensive Examination	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

### Concentration Courses

In consultation with program advisor select 15 credit hours of coursework with a minimum of 9 credit hours at the 7000 level from the following course list, or other courses approved by program advisor and department head (except EDUB 5580). Advisors may decide that EDUB 5580 is a necessary component for the programs of students who have minimal second/foreign language teaching experience or for other reasons. This course will be added to a student's program as an auxiliary course above and beyond the minimum 30 credit hours.

Course	Title	Hours
EDUA 7270	Seminar in Cross-Cultural Education 1	3
EDUA 7280	Seminar in Cross-Cultural Education 2	3
EDUA 7420	Program Planning in Adult Education	3
EDUB 5510	ESL Materials Development and Practicum	3
EDUB 5520	Grammar in ESL Learning and Instruction	3
EDUB 5530	ESL and Content Instruction	3
EDUB 5540	Vocabulary and Pronunciation Instruction	3
EDUB 7070	Classical Research in Reading	3
EDUB 7180	Research in Written Composition	3
EDUB 7330	Inquiry in Curriculum and Instruction	3
EDUB 7420	Study of Teaching	3
EDUB 7540	Final Seminar in Curriculum, Teaching and Learning	3
EDUB 7550	Historical and Contemporary Approaches to Curriculum	3
EDUB 7560	Theory and Practice of Curriculum Design and Development	3

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

### Registration Times and Status

Students are able to view their registration times on Aurora Student ([https://aurora.umanitoba.ca/banprod/twbkwbis.P\\_GenMenu/?name=homepage](https://aurora.umanitoba.ca/banprod/twbkwbis.P_GenMenu/?name=homepage)) select Enrolment & Academic Records, select Registration, and then Registration Times and Status to view registration dates and times for a given term.

Students must ensure that courses to be taken have been approved and entered on their program approval form. If not approved, students should meet with their program advisor to select and approve the courses to be taken.

### Continuing Courses (CO's)

The deadline for completion is normally not later than one year from the end of the term in which the course was originally registered. If the course is not completed by August 31, students must re-register for the course(s) for the next term in order to finish the course and to receive a grade.

### Occasional Students

Prior to registration, students must obtain written permission from the department head for 7000 level Education courses. This permission must be submitted to the Office of Graduate and Professional Programs, and Research prior to attempting to register.

### Registration for Student Initiated Courses

Prior to registration for student initiated courses, students must have the Student Initiated Form approved by their instructor and the department head and submitted to the Office of Graduate and Professional Programs, and Research. Upon receipt of the form, a Faculty of Education staff will schedule the course and contact the student with further instructions.

### Registering for Courses Offered in Other Faculties

Education graduate students wanting to register for graduate courses outside the Faculty of Education are encouraged to contact the department concerned for registration procedures. In some cases, written approval may be required from the instructor and department head of the course requested. The written approval must be presented to the Office of Graduate and Professional Programs, and Research prior to attempting to register.

### Students Registered in Other Faculties or Schools

Students registered in other faculties or schools wishing to register for an Education course may do so after a certain date. For details, see the Class Schedule schedule link on Aurora (<https://aurora.umanitoba.ca/>) for a given term and given course.

### Visiting Students

Students who are working on a graduate program at another institution and wish to register for a graduate course at the University of Manitoba with the express purpose of having credit transferred to their home university must apply for admission to the Faculty of Graduate Studies by the published application deadline dates. Also, a letter of permission from their home university must be submitted to the Office of Graduate and Professional Programs, and Research, Faculty of Education prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult

unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Education, Ph.D.

Education

**Head:** Melanie Janzen

**Campus Address/General Office:** 203 Education Building

**Telephone:** 204-474-9004

**Fax:** 204-474-7551

**Email Address:** [GradPrograms.Education@umanitoba.ca](mailto:GradPrograms.Education@umanitoba.ca)

**Website:** [umanitoba.ca/education/](https://umanitoba.ca/education/) (<https://www.umanitoba.ca/education/>)

**Academic Staff:** Please see the Education website (<https://umanitoba.ca/education/faculty-staff/>) for academic staff listing.

## Education Ph.D. Program Information

The Education PhD program educates teaching professionals as researchers, leading to a Doctor of Philosophy degree. Applications for doctoral studies in Education are made to either a specific *cohort* or the *individualized* program (<http://umanitoba.ca/education> (<http://umanitoba.ca/education/>)).

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

## Education Ph.D. Admission Requirements

Successful applicants must possess:

1. an earned Master's degree from a recognized institution;
2. appropriate academic background as defined by the program area to which admission is being sought (see the Education website (<https://umanitoba.ca/education/programs-study/#phd-in-education>) for a listing of program areas and associated admission requirements);
3. appropriate research capability as evidenced by one of:
  - i. thesis from a recognized institution;
  - ii. major research paper from a recognized institution plus a successfully completed 3 credit-hour 7000-level (or equivalent) research methods course;
  - iii. major contribution to a research article published in a refereed journal plus a successfully completed 3 credit-hour 7000-level (or equivalent) research methods course; or
  - iv. a research/scholarly/creative product and coursework equivalent to one of the above (3i to 3iii).
4. normally, appropriate occupational or service experience, such as:
  - i. educational or administrative work or service in a school, post-secondary or similar setting;
  - ii. practice in school counseling, psychology, or related profession;
  - iii. work, service, or practice equivalent to (4i) or (4ii).

Please note that earning a Ph.D. in Education does not certify one to teach in the province of Manitoba.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Education program of study (<https://umanitoba.ca/explore/programs-of-study/education-phd/>) page.

## Degree Requirements

Twenty-four (24) credit hours of coursework are subject to the following regulations:

- a. 12 credit hours of coursework at the 7000 level must be in the student's program area and must include the program core coursework common to all students in the program area (See the Education web site for specifics [www.umanitoba.ca/education](http://www.umanitoba.ca/education) (<http://www.umanitoba.ca/education/>)).
- For students admitted to study in an *individualized* program rather than to a defined program area, the program area coursework is specific to the individual student and is defined by the Advisory Committee rather than by members of a defined program area;
- b. 6 credit hours must be in a cognate area(s); and
- c. 6 credit hours must be in research methods/analysis.

Note: EDUA 5800 Introduction to Educational Research (3 credit hours) or an equivalent course is a pre-requisite or concurrent course to most Education 7000 level research courses. Applicants without this course will be required to take the course as an Occasional Student (O) and pay the appropriate course fee. This will be in addition to Ph.D. course requirements.

Where necessary, the student may be required to complete additional background coursework, as an auxiliary course or as an Occasional (O) student. If the latter, the student must pay the appropriate course fee.

**Expected Time to Graduate:** 3 - 4 years

## Progression Chart

Course	Title	Hours
<b>Years 1-2</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select 12 credit hours in Program Area Courses <sup>1</sup>		12
Select 6 credit hours in Cognate Area Courses <sup>1</sup>		6
Select 6 credit hours in Research Methods / Analysis Courses <sup>1</sup>		6
<b>Hours</b>		<b>24</b>
<b>Years 2-3</b>		
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>24</b>

- <sup>1</sup>
- A minimum of 18 credit hours of coursework must be at the 7000 level.
  - All courses taken in the Faculty of Education must be at the 7000 level or above.
  - Courses taken outside the Faculty of Education must be at the 3000 level or above.
  - A minimum of 12 credit hours of coursework must be taken in the Faculty of Education.
  - When relevant to the student's area of research and study, students are encouraged to take courses outside of the Faculty of Education of the University of Manitoba.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

### Registration Times and Status

Students are able to view their registration times on Aurora Student ([https://aurora.umanitoba.ca/banprod/twbkwbis.P\\_GenMenu/?name=homepage](https://aurora.umanitoba.ca/banprod/twbkwbis.P_GenMenu/?name=homepage)) select Enrolment & Academic Records, select Registration, and then Registration Times and Status to view registration dates and times for a given term.

Students must ensure that courses to be taken have been approved and entered on their program approval form. If not approved, students should meet with their program advisor to select and approve the courses to be taken.

### Continuing Courses (CO's)

The deadline for completion is normally not later than one year from the end of the term in which the course was originally registered. If the course is not completed by August 31, students must re-register for the

course(s) for the next term in order to finish the course and to receive a grade.

### Occasional Students

Prior to registration, students must obtain written permission from the department head for 7000 level Education courses. This permission must be submitted to the Office of Graduate & Professional Programs, and Research prior to attempting to register.

### Registration for Student Initiated Courses

Prior to registration for student initiated courses, students must have the Student Initiated Form approved by their instructor and the department head and submitted to the Office of Graduate & Professional Programs, and Research. Upon receipt of the form, a Faculty of Education staff will schedule the course and contact the student with further instructions.

### Registering for Courses Offered in Other Faculties

Education graduate students wanting to register for graduate courses outside the Faculty of Education are encouraged to contact the department concerned for registration procedures. In some cases, written approval may be required from the instructor and department head of the course requested. The written approval must be presented to the Office of Graduate & Professional Programs, and Research prior to attempting to register.

### Students Registered in Other Faculties or Schools

Students registered in other faculties or schools wishing to register for an Education course may do so after a certain date. For details, see the Class Schedule schedule link on Aurora (<https://aurora.umanitoba.ca/>) for a given term and given course.

### Visiting Students

Students who are working on a graduate program at another institution and wish to register for a graduate course at the University of Manitoba with the express purpose of having credit transferred to their home university must apply for admission to the Faculty of Graduate Studies by the published application deadline dates. Also, a letter of permission from their home university must be submitted to the Office of Graduate & Professional Programs, and Research, Faculty of Education prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Educational Administration, Foundations and Psychology, M.Ed.

Educational Administration, Foundations and Psychology

**Head (Acting) / Graduate Chair:** Charlotte Enns

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**Website:** [umanitoba.ca/education/](https://www.umanitoba.ca/education/) (<https://www.umanitoba.ca/education/>)

**Academic Staff:** Please see the Education website (<https://umanitoba.ca/education/faculty-staff/>) for academic staff listing.

## Educational Administration, Foundations and Psychology Program Information

The Department of Educational Administration, Foundations, and Psychology offers a Master of Education degree with specializations in the areas of adult and post-secondary education; counselling psychology; cross-cultural, sociological, and philosophical foundations in education; educational administration; and inclusive education.

Please note that earning a Master of Education does not certify one to teach in the province of Manitoba.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Educational Administration, Foundations and Psychology Admission Requirements

Applicants must possess:

- A four-year Bachelor of Education degree, or two-year After-Degree Bachelor of Education, or a four-year bachelor's degree (or academically equivalent degree/program) from an academic institution recognized by the Faculty of Graduate Studies, or a three-year undergraduate degree, plus a Post-Baccalaureate Diploma in Education (PBDE) with a minimum of 18 credit hours at the 5000 level.
- A grade point average of 3.0 or better in the last 60 credit hours of university coursework.
- Normally, two years of relevant work experience.
- Appropriate academic and/or professional background for the program area and concentration.

The Counselling Psychology and Inclusive Education specializations require specific prerequisite coursework that must be completed prior to the start of the M.Ed. program.

Individuals who graduate from the Certificate in Adult and Continuing Education (CACE), University of Manitoba must complete the following courses:

Course	Title	Hours
EDUA 1560	Adult Learning and Development	3
EDUA 1570	Foundations of Adult Education	3
EDUA 1580	Program Planning in Adult Education	3
EDUA 1590	Facilitating Adult Education	3

An additional 100 hours of elective credit through courses, seminars, 100 and workshops

The Faculty of Graduate Studies recognizes a complete CACE program as 15 credit hours towards the admission requirements for the M.Ed.; that is, giving 12 credit hours for the four core courses completed with a grade of 'B' or better and 3 credit hours (non assessable) for the 100 hours of elective study.

Individuals with a three-year undergraduate degree and the four courses listed above must complete an additional 12 credit hours of senior level courses (i.e., 5000 level PBDE courses, 1000 or 2000 level B.Ed. courses, or courses at the 3000 level or above in other faculties) to have the 24 credit hours that are the minimal requirements for satisfying the "honours degree or equivalent" admission requirement. Those with the completed CACE would require an additional 9 credit hours of senior level courses.

Applicants should note that admission to the M.Ed. program is competitive. A number of factors are taken into account in arriving at an admission decision:

1. the capacity of the department to provide the program of study requested by the applicant;
2. the applicant's previous academic background and achievement;
3. the referees' assessment of the applicant;
4. the capacity of the department to provide the applicant with an advisor in the program area; and
5. the applicant's Statement in Support of their application, including relevant professional experience.

For full application requirements, see M.Ed. Educational Administration, Foundations and Psychology program of study (<https://umanitoba.ca/explore/programs-of-study/educational-administration-foundations-and-psychology-med/>) page.

## Transfer of Credit

The granting of advanced credit is subject to the regulations of the Faculty of Graduate Studies and subject to approval of the program advisor and department head.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Ed. Educational Administration, Foundations and Psychology program of study (<https://umanitoba.ca/explore/programs-of-study/educational-administration-foundations-and-psychology-med/>) page.

## Degree Requirements

The M.Ed. in Educational Administration, Foundations and Psychology has a thesis-based route and a course-based route. The M.Ed. course-based route at the University of Manitoba is typically a terminal degree. That is, it is insufficient, in number and of itself, as evidence of research capacity for admission into the Ph.D. in Education program at the University of Manitoba.

The following program requirements apply to all specializations in the Department of Educational Administration, Foundations and Psychology. Specific specialization requirements are listed under each specialization below.

Not all courses are offered every year. The graduate course offering schedule is posted on the Faculty's website. Although we offer many courses yearly, most of our courses are offered in the evening and those wishing to study full-time should consult with the department head.

**Expected Time to Graduate:** full-time: 2 - 3 years; part time: 4 - 5 years.

### Program by Coursework and Thesis

- A minimum of 18 credit hours of coursework. At least 12 credit hours must be at the 7000 level or equivalent. The remaining 6 credit hours may be at the 5000 level or above in the Faculty of Education and/or at the 3000 level or above in other faculties.
- EDUA 5800 or its equivalent, is a requirement of all M.Ed. programs in the Faculty of Education. In addition, thesis students must take 3 credit hours of research methods at the 7000 level. In special circumstances research courses at the 3000 level or above in other faculties may be approved as an appropriate alternative to this requirement.

### Program by Coursework and Comprehensive Examination (Course-based)

- A minimum of 30 credit hours of coursework. At least 18 credit hours must be at the 7000 level or equivalent. The remaining 12 credit hours may be at the 5000 level or above in the Faculty of Education and/or at the 3000 level or above in other faculties.
- EDUA 5800 or its equivalent, is a requirement of all M.Ed. programs in the Faculty of Education.

## Progression Charts

### Adult and Post-Secondary Education Specialization

The specialization is designed to serve the professional needs of a diverse group of students in continuing, workplace and professional education development; college teaching, administration and student services; university teaching, student services, and administrative

management; local and international community development, program delivery, and administration.

Program Requirements are those listed above. Specific course requirements are as follows:

#### Thesis Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7402	Development of Adult Education and Post-Secondary Education	3
EDUA 7404	Lifelong Learning in Educational Settings	3
EDUA/B XXXX	Concentration Courses (see below)	6
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
EDUA/B XXXX	Research Methods Course <sup>2</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 2-5</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

<sup>2</sup> A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

#### Concentration Courses

Select 6 credit hours of coursework from the following course list, or other courses approved by program advisor and department head.

Course	Title	Hours
EDUA 7406	Topics in Adult and Post-Secondary Education	3
EDUA 7412	Governance of Post-Secondary Education	3
EDUA 7414	Seminar in the Administration of Post-Secondary Education	3
EDUB 7416	Teaching and Learning in Post-Secondary Education	3
EDUA 7420	Program Planning in Adult Education	3
EDUA 7810	Evaluating Educational Programs	3
EDUB 7390	Curriculum in Vocational Education	3
EDUB 7420	Study of Teaching	3
EDUB 7430	Trends in Vocational Education	3
EDUB 7450	Seminar in Educational Technology	3
EDUB 7460	Information Technology and Education	3
EDUB 7560	Theory and Practice of Curriculum Design and Development	3

#### Course Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7402	Development of Adult Education and Post-Secondary Education	3

EDUA 7404	Lifelong Learning in Educational Settings	3
EDUA 7408	Seminar in Adult and Post-Secondary Education	3
EDUA/B XXXX	Concentration Courses (see below)	9
COURSE XXXX	Elective Courses	9
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
<b>Hours</b>		<b>30</b>
<b>Years 2-5</b>		
GRAD 7010	Comprehensive Examination	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

### Concentration Courses

Select 9 credit hours of coursework from the following course list, or other courses approved by program advisor and department head.

Course	Title	Hours
EDUA 7406	Topics in Adult and Post-Secondary Education	3
EDUA 7412	Governance of Post-Secondary Education	3
EDUA 7414	Seminar in the Administration of Post-Secondary Education	3
EDUB 7416	Teaching and Learning in Post-Secondary Education	3
EDUA 7420	Program Planning in Adult Education	3
EDUA 7810	Evaluating Educational Programs	3
EDUB 7390	Curriculum in Vocational Education	3
EDUB 7420	Study of Teaching	3
EDUB 7430	Trends in Vocational Education	3
EDUB 7450	Seminar in Educational Technology	3
EDUB 7460	Information Technology and Education	3
EDUB 7560	Theory and Practice of Curriculum Design and Development	3

Elective Courses: Students are required to take 9 credit hours of approved elective courses.

## Counselling Psychology (formerly Guidance and Counselling) Specialization

The purpose of the Master's Program in Counselling Psychology is to prepare counselling graduates who are able to integrate critical knowledge and understanding of the theoretical bases of counselling, the counselling process and outcome research, and current professional issues in counselling, with competent ongoing development of counselling skills. The model of training is scientist-practitioner with an emphasis on reflective practice.

Specifically, the graduate program is designed to help students with the development of generic skills of individual and group counselling; the capacity to conduct research and to interpret current research; a knowledge of the latest developments in counselling and literature in the field; education/training in group leadership and communication skills; a knowledge of career development, career information and job search skills; the principles, processes and methods of interviewing children, adolescents and adults; and the skills of measurement and evaluation.

The program provides an array of supervised practicum placements that support a more specialized experience to meet individual needs and interests. Graduates find employment in a wide range of settings, including schools, community agencies, clinics, hospitals, business and industry, rehabilitation centres, government service and private practice.

In addition to the Program Requirements listed above, admission to the Counselling Psychology specialization requires the following prerequisite coursework, which must be completed prior to the start of the M.Ed. program [may be taken in the Post-Baccalaureate Diploma in Education (PBDE) program of the Faculty of Education, or its equivalent].

Course	Title	Hours
A minimum of 6 credit hours of university coursework at the 5000 level consisting of (or their equivalent):		
EDUA 5480	Counselling Skills	3
EDUA 5500	Theories and Issues in Counselling	3

### Thesis Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7520	Practicum Seminar in Counselling <sup>1</sup>	6
EDUA 7550	Theories of Counselling	3
EDUA XXXX	Concentration Courses (see below)	3
EDUA 5800	Introduction to Educational Research <sup>2</sup>	3
EDUA/B XXXX	Research Methods Course <sup>3</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 2-5</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> EDUA 7520 is a 3-hour weekly seminar offered over fall and winter terms taken concurrently with a minimum of 180 hours of supervised practicum experience in a selected placement. Students are required to be available September to April during the day for a minimum of one to one-and-a-half days per week for the practicum component.

<sup>2</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

<sup>3</sup> A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

### Concentration Courses

Select 3 credit hours of coursework from the following course list, or other courses approved by program advisor and department head.

Course	Title	Hours
EDUA 7510	Seminar in Current Issues in Counselling	3
EDUA 7530	Group Counselling: Theory and Practice	6
EDUA 7540	Programs in Career Development	3
EDUA 7750	Topics in Educational Psychology <sup>1</sup>	3
EDUA 7760	Interview Techniques with Children and Adolescents	3

<sup>1</sup> EDUA 7750 requires program advisor approval.

**Course Based**

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7520	Practicum Seminar in Counselling <sup>1</sup>	6
EDUA 7550	Theories of Counselling	3
EDUA XXXX	Concentration Courses (see below)	18
EDUA 5800	Introduction to Educational Research <sup>2</sup>	3
<b>Hours</b>		<b>30</b>
<b>Years 2-5</b>		
GRAD 7010	Comprehensive Examination	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> EDUA 7520 is a 3-hour weekly seminar offered over fall and winter terms taken concurrently with a minimum of 180 hours of supervised practicum experience in a selected placement. Students are required to be available September to April during the day for a minimum of one to one-and-a-half days per week for the practicum component.

<sup>2</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

**Concentration Courses**

Select 18 credit hours of coursework from the following course list, or other courses such as 5000 level Guidance and Counseling courses or courses from other Faculties, approved by program advisor and department head.

Course	Title	Hours
EDUA 7510	Seminar in Current Issues in Counselling	3
EDUA 7530	Group Counselling: Theory and Practice	6
EDUA 7540	Programs in Career Development	3
EDUA 7750	Topics in Educational Psychology <sup>1</sup>	3
EDUA 7760	Interview Techniques with Children and Adolescents	3

<sup>1</sup> EDUA 7750 requires program advisor approval.

**Cross-cultural, Sociological, and Philosophical Foundations in Education (formerly Social Foundations of Education) Specialization**

The aim of Cross-cultural, Sociological, and Philosophical Foundations in Education is to develop educational researchers who are critical and reflective about educational theory and practice. Theories from the humanities and the social sciences will guide students as they examine, criticize, and explain the meanings, intents and the effects of education in both its institutional and non-institutional forms.

The Master's Program in Cross-cultural, Sociological, and Philosophical Foundations in Education is designed to promote the understanding of normative educational thought and practice and to probe assumptions about education and schooling. The analysis is multi-dimensional and interdisciplinary.

Program Requirements are those listed above. Specific course requirements are as follows:

**Thesis Based**

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7XXX	Select two of the following core courses:	6
EDUA 7200	Philosophy of Education	
EDUA 7210	Educational Sociology	
EDUA 7270	Seminar in Cross-Cultural Education 1	
EDUA XXXX	Concentration Courses (see below)	6
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
EDUA/B XXXX	Research Methods Course <sup>2</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 2-5</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

<sup>2</sup> A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

**Concentration Courses**

Select 6 credit hours of coursework from the following course list, or other courses selected from the Curriculum, Teaching and Learning Department, the Faculty of Arts at the University of Manitoba or other universities, and approved by program advisor and department head.

Course	Title	Hours
EDUA 7230	Social Criticism in Education	3
EDUA 7240	Values in Education	3
EDUA 7250	Comparative Education	3
EDUA 7270	Seminar in Cross-Cultural Education 1	3
EDUA 7280	Seminar in Cross-Cultural Education 2	3
EDUA 7300	History of Canadian Education from 1867	3
EDUA 7340	Seminar in Educational Thought	3

**Course Based**

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7200	Philosophy of Education	3
EDUA 7210	Educational Sociology	3
EDUA 7270	Seminar in Cross-Cultural Education 1	3
EDUA XXXX	Concentration Courses (see below)	18
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
<b>Hours</b>		<b>30</b>
<b>Years 2-5</b>		
GRAD 7010	Comprehensive Examination	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

### Concentration Courses

Select 18 credit hours of coursework from the following course list, or other courses selected from the Curriculum, Teaching and Learning Department, the Faculty of Arts at the University of Manitoba or other universities, and approved by program advisor and department head.

Course	Title	Hours
EDUA 7230	Social Criticism in Education	3
EDUA 7240	Values in Education	3
EDUA 7250	Comparative Education	3
EDUA 7280	Seminar in Cross-Cultural Education 2	3
EDUA 7300	History of Canadian Education from 1867	3
EDUA 7340	Seminar in Educational Thought	3

### Educational Administration Specialization

The Master's Program in Educational Administration is designed to develop leadership for the province's school systems and to provide students with an in-depth and theoretical understanding of educational administration as both a moral and a technical endeavour.

Students in this program will benefit from their prior experiences as teachers or administrators in an educational organization. This experience need not be restricted to public schools. Experience is important because the program takes seriously the relationship between theory and practice in education.

### Provincial Certification

It is expected that all candidates in the Master's Program with a specialization in Educational Administration will attain provincial certification in Educational Administration (Certificate in School Leadership) by the time they complete their Master's degree. In some instances, this may require additional coursework. Certification is granted by Manitoba Education and not by the Faculty of Education or the University of Manitoba.

Program Requirements are those listed above. Specific course requirements are as follows:

### Thesis Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7010	Educational Administration as a Field of Study and Practice	3
EDUA 7050	Theoretical Perspectives on Educational Administration	3
EDUA XXXX	Concentration Courses (see below)	6
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
EDUA/B XXXX	Research Methods Course <sup>2</sup>	3
<b>Hours</b>		<b>18</b>

### Years 2-5

GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

<sup>2</sup> A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

### Concentration Courses

In consultation with program advisor select 6 credit hours of coursework of which at least 3 credit hours must be at the 7000 level from the following course list, or other courses approved by program advisor and department head,

Course	Title	Hours
EDUA 5040	Personnel Administration in Education	3
EDUA 5100	Issues in the Administration of Education	3
EDUA 7020	Politics of Education	3
EDUA 7030	Educational Finance	3
EDUA 7040	Legal Aspects of Education	3
EDUA 7060	Organizational Planning and Development in Education	3
EDUA 7070	The Analysis of Educational Organizations	3

### Course Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7010	Educational Administration as a Field of Study and Practice	3
EDUA 7050	Theoretical Perspectives on Educational Administration	3
Select one of the following:		3
EDUA 7200	Philosophy of Education	
EDUA 7210	Educational Sociology	
EDUA 7270	Seminar in Cross-Cultural Education 1	
EDUA XXXX	Concentration Courses (see below)	12
COURSE XXXX	Elective Courses	6
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
<b>Hours</b>		<b>30</b>

### Years 2-5

GRAD 7010	Comprehensive Examination	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

### Concentration Courses

In consultation with program advisor select 12 credit hours of coursework from the following course list, or other courses approved by program advisor and department head.



Course	Title	Hours
EDUA 5040	Personnel Administration in Education	3
EDUA 5100	Issues in the Administration of Education	3
EDUA 7020	Politics of Education	3
EDUA 7030	Educational Finance	3
EDUA 7040	Legal Aspects of Education	3
EDUA 7060	Organizational Planning and Development in Education	3
EDUA 7070	The Analysis of Educational Organizations	3

Elective Courses: Students are required to take 6 credit hours of approved elective courses.

## Inclusive Education (formerly Inclusive Special Education) Specialization

The Master's Program in Inclusive Education (IE) is designed not only to develop skills needed to serve students with special needs directly, but also to develop leadership and research skills for assisting educators and other professionals working on behalf of persons with disabilities. To this end, the graduate courses are designed to enable graduate students to conduct research in a variety of formats and paradigms, to lead in the professional development of their colleagues, to foster program development at their workplaces, and to provide clinical or consultant services to classroom teachers. Courses in the program are focused on topics in inclusive education as a profession, on applied learning theories and assessment of learning, on critical thinking, and on research methods and findings in this field. Graduates from the program work in a variety of callings: as administrators, clinicians, consultants, program leaders, resource and special education teachers. Many graduates also are active in research, educational program development, advocacy groups, teacher education and professional development.

### Certification in Special Education

This provision may not apply to applicants with certification requirements in an allied non-teaching field or who are pursuing a M.Ed. in Inclusive Education after undergraduate work in an allied non-teaching field. It is expected that most students in the M.Ed. Program with specialization in Inclusive Education will attain provincial certification in special education by the time they complete their Master's degree. Students who already have provincial certification at the time of entry into the program will therefore not need to take any prerequisite coursework for this purpose. Those who do not already have provincial certification, however, should expect to take additional credit hours of coursework to fulfil this requirement. The precise number and nature of the additional work will depend on the prior academic background of the student, as well as on the specific courses taken to complete the M.Ed. degree. To assess the additional work needed informally, it is recommended that students consult with their Faculty Advisor early in their program, and also obtain and read a copy of the special education certification guidelines published by Manitoba Education. Official assessment of required coursework, however, can only be done by providing Manitoba Education and Advanced Learning with a complete set of academic transcripts and requesting a formal assessment from them. Certification is granted by Manitoba Education and Advanced Learning not by the Faculty of Education or the University of Manitoba.

In addition to the Program Requirements listed above, admission to the Inclusive Education specialization requires the following prerequisite coursework, which must be completed prior to beginning the M.Ed. program:

A minimum of 18 credit hours of university level coursework at the 5000 level or equivalent with a Grade Point Average of 3.0 (B) or better, consisting of:

Course	Title	Hours
EDUA 5602	Introduction to Inclusive Education	6
EDUA 5632	Assessment and Instruction in Inclusive Education	6
Select 6 credit hours from the following:		6
EDUA 5612	Field Experience in Inclusive Education	
EDUA 5620	Teaching Children Through Alternative and Augmented Communication	
EDUA 5642	Inclusive Education: Transition from School to Adult Life	
EDUA 5662	Delivering Supports for Inclusive Education	
EDUA 5680	Promoting Responsible Behaviour in Educational Settings	
EDUA 5730	Recent Developments in Educational Psychology 1 (N.B. where content is specific to IE)	
EDUA 5740	Recent Developments in Educational Psychology 2 (N.B. where content is specific to IE)	

Or equivalent approved courses from other universities.

**Total Hours** **18**

### Thesis Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7602	Seminar in Inclusive Education	6
EDUA XXXX	Concentration Courses (see below)	6
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
EDUA/B XXXX	Research Methods Course <sup>2</sup>	3
<b>Hours</b>		<b>18</b>
<b>Years 2-5</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

<sup>2</sup> A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

### Concentration Courses

Select 6 credit hours of coursework with a minimum of 3 credit hours at the 7000 level from the following course list, or other courses approved by program advisor and department head.

Course	Title	Hours
EDUA 7610	Behavioural Issues in Educational Settings	3
EDUA 7630	Advanced Assessment and Instruction in Inclusive Education	3
EDUA 7652	Field Experience in Inclusive Education	6
EDUA 7740	Topics in Educational Psychology <sup>1</sup>	3
EDUA 7750	Topics in Educational Psychology <sup>1</sup>	3
EDUA 5612	Field Experience in Inclusive Education	6

EDUA 5620	Teaching Children Through Alternative and Augmented Communication	3
EDUA 5642	Inclusive Education: Transition from School to Adult Life	3
EDUA 5662	Delivering Supports for Inclusive Education	3
EDUA 5680	Promoting Responsible Behaviour in Educational Settings	3

<sup>1</sup> EDUA 7740 and EDUA 7750 require program advisor approval.

### Course Based

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7602	Seminar in Inclusive Education	6
EDUA XXXX	Concentration Courses (see below)	21
EDUA 5800	Introduction to Educational Research <sup>1</sup>	3
<b>Hours</b>		<b>30</b>
<b>Years 2-5</b>		
GRAD 7010	Comprehensive Examination	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> EDUA 5800 is a pre-requisite to all EDUA and EDUB research methods courses.

### Concentration Courses

Select 21 credit hours of coursework with a minimum of 12 credit hours at the 7000 level from the following course list, or other courses approved by program advisor and department head.

Course	Title	Hours
EDUA 7610	Behavioural Issues in Educational Settings	3
EDUA 7630	Advanced Assessment and Instruction in Inclusive Education	3
EDUA 7652	Field Experience in Inclusive Education	6
EDUA 7740	Topics in Educational Psychology 1 <sup>1</sup>	3
EDUA 7750	Topics in Educational Psychology 2 <sup>1</sup>	3
EDUA 5612	Field Experience in Inclusive Education	6
EDUA 5620	Teaching Children Through Alternative and Augmented Communication	3
EDUA 5642	Inclusive Education: Transition from School to Adult Life	3
EDUA 5662	Delivering Supports for Inclusive Education	3
EDUA 5680	Promoting Responsible Behaviour in Educational Settings	3

<sup>1</sup> EDUA 7740 and EDUA 7750 require program advisor approval.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

### Registration Times and Status

Students are able to view their registration times on Aurora Student ([https://aurora.umanitoba.ca/banprod/twbkwbis.P\\_GenMenu/?name=homepage](https://aurora.umanitoba.ca/banprod/twbkwbis.P_GenMenu/?name=homepage)) select Enrolment & Academic Records, select Registration, and then Registration Times and Status to view registration dates and times for a given term.

Students must ensure that courses to be taken have been approved and entered on their program approval form. If not approved, students should meet with their program advisor to select and approve the courses to be taken.

### Continuing Courses (CO's)

The deadline for completion is normally not later than one year from the end of the term in which the course was originally registered. If the course is not completed by August 31, students must re-register for the course(s) for the next term in order to finish the course and to receive a grade.

### Occasional Students

Prior to registration, students must obtain written permission from the department head for 7000 level Education courses. This permission must be submitted to the Office of Graduate & Professional Programs, and Research prior to attempting to register.

### Registration for Student Initiated Courses

Prior to registration for student initiated courses, students must have the Student Initiated Form approved by their instructor and the department head and submitted to the Office of Graduate & Professional Programs, and Research. Upon receipt of the form, a Faculty of Education staff will schedule the course and contact the student with further instructions.

### Registering for Courses Offered in Other Faculties

Education graduate students wanting to register for graduate courses outside the Faculty of Education are encouraged to contact the department concerned for registration procedures. In some cases, written approval may be required from the instructor and department head of the course requested. The written approval must be presented to the Office of Graduate & Professional Programs, and Research prior to attempting to register.

### Students Registered in Other Faculties or Schools

Students registered in other faculties or schools wishing to register for an Education course may do so after a certain date. For details, see the Class Schedule schedule link on Aurora (<https://aurora.umanitoba.ca/>) for a given term and given course.

### Visiting Students

Students who are working on a graduate program at another institution and wish to register for a graduate course at the University of Manitoba with the express purpose of having credit transferred to their home university must apply for admission to the Faculty of Graduate Studies by the published application deadline dates. Also, a letter of permission from their home university must be submitted to the Office of Graduate & Professional Programs, and Research, Faculty of Education prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Faculty of Graduate Studies

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Applied Health Sciences, Ph.D. (p. 1483)	4	18	
Disability Studies, M.A. (p. 1486)	2	24	
Disability Studies, M.Sc. (p. 1487)	2	24	
Individual Interdisciplinary Studies, Master's (p. 1489)	2	60	
Individual Interdisciplinary Studies, Ph.D. (p. 1490)	4	60	
Peace and Conflict Studies, M.A. (p. 1491)	2	18-30	
Peace and Conflict Studies, Ph.D. (p. 1493)	4	24	

## Applied Health Sciences, Ph.D.

Applied Health Sciences

**Program Director:** Dr. Sandra Webber

**Campus Address/General Office:** 202 Active Living Centre

**Telephone:** 204-474-7806

**Email Address:** ahs\_phd@umanitoba.ca

**Website:** [umanitoba.ca/faculties/graduate\\_studies/admissions/programs/510.html/](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/510.html/) ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/510.html/](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/510.html/))

**Academic Staff:** Please refer to the Faculty of Graduate Studies website ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/510.html/](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/510.html/)).

## Applied Health Sciences Program Information

This program is a multi-unit, research-based Doctor of Philosophy in Applied Health Sciences, coordinated by Kinesiology and Recreation Management, and Medical Rehabilitation.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Applied Health Sciences Admission Requirements

Applicants would normally possess a research-based Master's degree in a discipline or profession consistent with Applied Health Sciences. Applicants who do not possess a research-based Master's degree, but who have some research experience will be assessed on a case-by-case basis, as will those with professional Master's degrees.

Prior to admission to the Ph.D. program, the applicant will be required to specify their area of research interest, and to have corresponded with an eligible Ph.D. advisor(s) (member of the Faculty of Graduate Studies), who is (are) a faculty member (primary appointment) in one of

the two participating units, and who is (are) willing to accept them into the program.

Elements taken into consideration in determining the acceptance of the applicant into the program: grade-point average in Master's courses, previous courses taken, specific research interest of the applicant, student's rationale for choosing to apply to this program as opposed to a uni-discipline degree, current profile of students in the program, research funding and facilities availability through the proposed advisor(s) for the proposed research, and financial support for the applicant.

No admission tests are required for this program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Applied Health Sciences Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/510.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/510.html)) page.

## Degree Requirements

The coursework requirement will consist of a minimum of twelve credit hours of 7000-level coursework (18 credit hours of coursework for students entering program without a research-based Master's Degree).

Students will be required to take AHS 7000, a lecture/seminar course in which faculty members from the participating academic units take part (3 credits). This course is designed to promote in students advanced knowledge, skills, and abilities needed to evaluate and conduct multidisciplinary, applied health research.

Nine credit hours may be chosen from a combination of graduate courses from the participating units or from other faculties outside the participating units that offer graduate courses related to applied health sciences (3 credits).

Students who entered the program without a research-based Master's degree are required to take AHS 7010 over the first two years of their program.

Courses must be selected by the student in consultation with the advisor. All courses must be recorded on the "AHS Internal Program Approval

Form”, and submitted to the AHS Program Assistant for approval by the AHS Program Director.

Students in the program will also be required to take part in a monthly seminar in Applied Health Sciences with mandatory attendance for two years (Year 1: AHS 7002; Year 2: AHS 7004), a requirement for graduation.

Students will also be required to take part in yearly research-related activities (e.g. AHS Research Day) involving student presentations. The monthly seminars will consist of an admixture of presenters from the University of Manitoba and from outside, with the focus on applied health science issues. Poster and oral presentations will involve directed research projects, research proposals, and applied health sciences issues.

An Advisory Committee will be established for each student within three months of registration into the Ph.D. program. Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during their program. The advisory committee must consist of a minimum of three (3) members, all of whom must be members of the Faculty of Graduate Studies. Advisory committees may, in addition, include one (1) non-voting guest member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies.

Students will be expected to complete a candidacy exam, consisting of an oral and written component, normally before the end of the second year of their program. The student must pass the written and oral phases of the exam to be considered a candidate for the Ph.D. degree. Students must have completed all coursework prior to taking the candidacy exam.

The student’s thesis research proposal must be approved by the Advisory Committee normally before the end of the second year after admission to the program. The research proposal, in the form of a document outlining the rationale and background for the study, specific objectives, and methods and procedures will be presented by the candidate in an oral format. Following the oral presentation, the candidate will defend their proposal.

The research program, culminating in the preparation and defense of a doctoral thesis, will be conducted according to the regulations of the Faculty of Graduate Studies of the University of Manitoba.

**Expected time to graduation:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
AHS 7000	Research and Practice in Applied Health Sciences	3
Select 9 credit hours from a combination of graduate courses <sup>1</sup>		9
AHS 7002	Seminar I Applied Health Sciences	0
<b>Hours</b>		<b>12</b>
<b>Years 1-2</b>		
AHS 7010	Introductory Research Project in Applied Health Sciences <sup>2</sup>	0-6
<b>Hours</b>		<b>0-6</b>
<b>Year 2</b>		
AHS 7004	Seminar II Applied Health Sciences	0

GRAD 8010	Doctoral Candidacy Examination <sup>3</sup>	0
Thesis Proposal <sup>4</sup>		
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis <sup>5</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12-18</b>

<sup>1</sup> Nine credit hours may be chosen from a combination of graduate courses from the participating units or from other faculties outside the participating units that offer graduate courses related to applied health sciences (3 credits). Courses must be selected by the student in consultation with the advisor. All courses must be recorded on the “AHS Internal Program Approval Form”, and submitted to the AHS Program Assistant for approval by the AHS Program Director.

<sup>2</sup> **This course is only for students who were accepted into the program without a research-based Master’s degree.**

<sup>3</sup> Candidacy Exam:

- normally before the end of the 2nd year after admission
- no later than one year prior to expected graduation date
- course work must be completed

<sup>4</sup> Thesis Proposal:

- normally before the end of the 2nd year after admission
- no later than one year prior to expected graduation date
- independent from candidacy exam
- before research begins

<sup>5</sup> The candidate will be recommended for the Ph.D. degree upon receipt by the Faculty of Graduate Studies of favourable reports by the thesis examining committee, a corrected copy of the electronic version of the thesis submitted to MSpace, final approval and release forms, and providing all other degree requirements have been satisfied.

### Note:

- Regular attendance is expected of all students. Unexcused absence of a total of more than 3 hours of class time (including late arrival and/or early departure from class) may result in the student being required to withdraw from the course or may result in an “F” grade being assigned.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies ‘GRAD’ courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Collaborative PhD

The Collaborative PhD Program at the University of Manitoba is intended to provide an opportunity for outstanding graduate students to receive training at both the University of Manitoba and a collaborating university outside of Canada. Students spend a period in residence and complete portions of their program of study, and fulfill all requirements of, each university. Each of the collaborating universities awards a PhD degree that explicitly notes that the completed program was based on a collaborative PhD program and names the collaborating university (this information will be provided on both the transcript and parchment).

The program is intended to provide students with exposure to research and scholarship at two universities. In this way students receive a more diverse educational experience and have the opportunity to establish a wide network of collaborations. Similarly, faculty members at the University of Manitoba involved in supervising a student engaged in a collaborative PhD program can benefit from establishing or strengthening collaborations with researchers at other institutions.

Outstanding students wishing to benefit from studying both at the University of Manitoba and at a collaborating university are encouraged to apply for admission to the Collaborative PhD Program (such a program is often referred to as a 'cotutelle' for such programs involving a university in France).

Please note this program is only open for Fall admission.

## What is a Collaborative PhD Program?

- A program of study and research defined jointly by advisors from the University of Manitoba and a collaborating university

- The student is jointly supervised by the two advisors in conjunction with an advisory committee drawn from the two universities.
- The university at which the student will spend more time in residence is typically designated as the 'Lead' university, and the other university as the 'Partner' university
- The student is required to maintain full-time registration at both the University of Manitoba and the collaborating university and must spend a period of time in residence at both universities (minimally, one year at each).
- The thesis is defended only once at one of the universities with an examining committee comprised of, at minimum, the advisory committee plus an external examiner who has no affiliation to either university and is appointed following the Policies and Procedures of the Lead university.
- A PhD degree is awarded by the University of Manitoba and by the collaborating university. The student receives a parchment from each university, which indicates that the PhD was awarded in conjunction with the collaborating university.

## If the University of Manitoba is to Serve as the Lead University

- The student must have been admitted to a PhD program at the University of Manitoba. If not currently enrolled in a PhD program, then the student must apply for admission to a specific unit-based program at the University of Manitoba.
- Following admission, the student must contact the Faculty of Graduate Studies to request entry to a Collaborative program.
- The collaborative program agreement must be defined and presented as part of this request. Completing this agreement will require the student to identify an advisor both at the University of Manitoba and at a collaborating university, and work with both advisors to define a program of study using the template provided.
- Transition to a collaborative program must be completed within a maximum of three years after admission to a PhD program at the University, and before either the thesis proposal is developed or the candidacy examination is written. The collaborating university may also have rules regarding entry to a collaborative program and it is the responsibility of the student to ensure these are met.
- When an approved agreement is in place, the student must collect all appropriate signatures and include the signed agreement with the request. The student must also apply for admission to the collaborating university and in doing so will be required to provide all information required under their application process.
- If admitted to the collaborating university, and an approved collaborative program agreement in place, then the student will be allowed entry to the collaborative PhD program.

## If the University of Manitoba is to Serve as the Partner University

- The student must apply for admission to the collaborative PhD Program at the University of Manitoba.
- The collaborative program agreement must be defined and presented as part of the admission application. Completing this agreement will require the student to identify an advisor both at the University of Manitoba and at a collaborating university, and work with both advisors to define a program of study using the template provided. The agreement must include all appropriate signatures.

- Transition to a collaborative program must be completed before either any thesis proposal is developed or any candidacy examination is written. The collaborating university may also have rules regarding entry to a collaborative program and it is the responsibility of the student to ensure these are met.
- If admitted to the University of Manitoba with an approved collaborative program agreement in place, then the student will be admitted to the collaborative PhD program.

## Disability Studies, M.A.

Disability Studies

**Program Director:** Dr. Nancy E. Hansen

**Campus Address/General Office:** 128 Education Building

**Telephone:** 204-474-7017

**Fax:** 204-474-6676

**Email Address:** [disability\\_studies@umanitoba.ca](mailto:disability_studies@umanitoba.ca)

**Website:** [umanitoba.ca/disability\\_studies/](https://umanitoba.ca/disability_studies/) ([https://umanitoba.ca/disability\\_studies/](https://umanitoba.ca/disability_studies/))

**Academic Staff:** Please refer to the Disability Studies website ([https://umanitoba.ca/disability\\_studies/contents/staff.html](https://umanitoba.ca/disability_studies/contents/staff.html)) for current staff listing.

## Disability Studies Program Information

The focus of the program allows students to examine the policies and practices of all societies in order to understand the social, rather than the physical or psychological determinants, of the experience of disability. This focus shifts the emphasis from a prevention, treatment, remediation paradigm to a social, cultural, political one.

We offer an interdisciplinary Master's Degree Program in Disability Studies. We also offer a graduate level Option in Disability Studies that is available to both Master's and Doctoral students.

Students in the Master's Program will have the opportunity to apply their undergraduate degrees and work experience to pursue advanced interdisciplinary research and scholarship. Students taking the Option in Disability Studies will complement their major program area of study with course work which analyses the social construction of disability.

### OPTION IN DISABILITY STUDIES

The Option in Disability Studies is offered to students in faculties and departments that currently have a graduate program. Upon completion of the requirements, a concentration in Disability Studies will be recorded on the student's transcript. For information concerning the option, interested students are directed to their student advisor or to the Director of Disability Studies.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Disability Studies M.A. Admission Requirements

Graduates of honours or equivalent programs at the University of Manitoba (or equivalent from other recognized universities) with a minimum Grade Point Average (GPA) of 3.0 in the last 60 credit hours, are eligible for direct admission to a course of study leading to the Master

of Arts degree. Students who have completed a University of Manitoba Pre-Master's program with a minimum GPA of 3.0 are also eligible for admission. Pre-Master's programs taken at other universities may be accepted.

Students with undergraduate degrees from a wide range of disciplines – such as Architecture, Arts, Education, Human Ecology, Engineering, Law, Management, Medical Rehabilitation, Medicine, Nursing, Physical Education and Recreation Studies, Science, Social Work and Women's Studies - will be considered eligible to apply if they meet the above requirements.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Disability Studies M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/disability\\_studies.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/disability_studies.html)) page.

## Degree Requirements

All students in the Disability Studies Program are required to complete 24 credit hours of coursework plus a thesis.

### All Students

Course	Title	Hours
DS 7010	Disability Studies	6
DS 7020	History of Disability	3
DS 7030	Evaluation and Application of Research Methods in Disability Studies	3
DS 7040	Selected Topics in Disability Studies	3
<b>Total Hours</b>		<b>15</b>

### M.A. Students

Course	Title	Hours
Select one external 3 credit hour research methods course		3
Select two 3 credit hour elective courses in the arts and social sciences area, above the 4000 level		6

**Expected time to graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Core Courses</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
DS 7010	Disability Studies	6
DS 7020	History of Disability	3
DS 7030	Evaluation and Application of Research Methods in Disability Studies	3
DS 7040	Selected Topics in Disability Studies	3
<b>Electives</b>		
Select two electives in the arts and social sciences area above the 4000 level		6
<b>External Research Methods Course</b>		
Select one 3 credit hour external research methods course in the arts and social sciences area above the 4000 level		3
<b>Thesis</b>		

GRAD 7000	Master's Thesis <sup>1,2</sup>	0
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

<sup>2</sup> Each student is required to develop a written thesis proposal under the mentorship of his or her Advisor and Advisory Committee. The student's Advisor will give tentative approval of the proposal for presentation to the Advisory Committee. The student must present the proposal orally to the Committee in a closed meeting. At least two weeks prior to the date of the oral presentation, the student will ensure that all members of the Advisory Committee receive the proposal. The Advisory Committee must formally approve the thesis proposal before the student can proceed with the research. Revisions requested by the advisory committee must be completed in a timely manner and be approved by the advisory committee. Research involving human participants or animal subjects requires ethics approval prior to initiation of research.

### Option in Disability Studies

The Option in Disability Studies requirements are DS 7010 and either DS 7020 or DS 7030.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Disability Studies, M.Sc.

Disability Studies

**Program Director:** Dr. Nancy E. Hansen

**Campus Address/General Office:** 128 Education Building

**Telephone:** 204-474-7017

**Fax:** 204-474-6676

**Email Address:** [disability\\_studies@umanitoba.ca](mailto:disability_studies@umanitoba.ca)

**Website:** [umanitoba.ca/disability\\_studies/](https://umanitoba.ca/disability_studies/) ([https://umanitoba.ca/disability\\_studies/](https://umanitoba.ca/disability_studies/))

**Academic Staff:** Please refer to the Disability Studies website ([https://umanitoba.ca/disability\\_studies/contents/staff.html](https://umanitoba.ca/disability_studies/contents/staff.html)) for current staff listing

## Disability Studies Program Information

The focus of the program allows students to examine the policies and practices of all societies in order to understand the social, rather than the physical or psychological determinants, of the experience of disability. This focus shifts the emphasis from a prevention, treatment, remediation paradigm to a social, cultural, political one.

We offer an interdisciplinary Master's Degree Program in Disability Studies. We also offer a graduate level Option in Disability Studies that is available to both Master's and Doctoral students.

Students in the Master's Program will have the opportunity to apply their undergraduate degrees and work experience to pursue advanced interdisciplinary research and scholarship. Students taking the Option in Disability Studies will complement their major program area of study with course work which analyses the social construction of disability.

### OPTION IN DISABILITY STUDIES

The Option in Disability Studies is offered to students in faculties and departments that currently have a graduate program. Upon completion of the requirements, a concentration in Disability Studies will be recorded on the student's transcript. For information concerning the option, interested students are directed to their student advisor or to the Director of Disability Studies.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Disability Studies M.Sc. Admission Requirements

Graduates of honours or equivalent programs at the University of Manitoba (or equivalent from other recognized universities) with a



minimum Grade Point Average (GPA) of 3.0 in the last 60 credit hours, are eligible for direct admission to a course of study leading to the Master of Science degree. Students who have completed a University of Manitoba Pre-Master's program with a minimum GPA of 3.0 are also eligible for admission. Pre-Master's programs taken at other universities may be accepted.

Students who wish to pursue the M.Sc. are required to have an undergraduate degree in Science.

Students with undergraduate degrees from a wide range of disciplines – such as Architecture, Arts, Education, Human Ecology, Engineering, Law, Management, Medical Rehabilitation, Medicine, Nursing, Physical Education and Recreation Studies, Science, Social Work and Women's Studies - will be considered eligible to apply if they meet the above requirements.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Disability Studies M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/disability\\_studies.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/disability_studies.html)) page.

## Degree Requirements

All students in the Disability Studies Program are required to complete 24 credit hours of coursework plus a thesis.

### All Students

Course	Title	Hours
DS 7010	Disability Studies	6
DS 7020	History of Disability	3
DS 7030	Evaluation and Application of Research Methods in Disability Studies	3
DS 7040	Selected Topics in Disability Studies	3
<b>Total Hours</b>		<b>15</b>

### M.Sc. Students

Course	Title	Hours
Select one external 3 credit hour research methods course		3
Select two 3 credit hour elective courses in a science based area, above the 4000 level		6

**Expected time to graduate:** 2 years

### Option in Disability Studies

The Option in Disability Studies requirements are DS 7010 and either DS 7020 or DS 7030.

## Progression Chart

Course	Title	Hours
<b>Core Courses</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
DS 7010	Disability Studies	6
DS 7020	History of Disability	3
DS 7030	Evaluation and Application of Research Methods in Disability Studies	3
DS 7040	Selected Topics in Disability Studies	3
<b>Electives</b>		

Select two elective courses in a science based area above the 4000 level 6

**External Research Methods Course**  
Select one 3 credit hour external research methods course in a science based area above the 4000 level 3

**Thesis**  
GRAD 7000 Master's Thesis <sup>1,2</sup> 0  
**Total Hours** 24

- 1 Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.
- 2 Each student is required to develop a written thesis proposal under the mentorship of his or her Advisor and Advisory Committee. The student's Advisor will give tentative approval of the proposal for presentation to the Advisory Committee. The student must present the proposal orally to the Committee in a closed meeting. At least two weeks prior to the date of the oral presentation, the student will ensure that all members of the Advisory Committee receive the proposal. The Advisory Committee must formally approve the thesis proposal before the student can proceed with the research. Revisions requested by the advisory committee must be completed in a timely manner and be approved by the advisory committee. Research involving human participants or animal subjects requires ethics approval prior to initiation of research.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Individual Interdisciplinary Studies, Master's

The Faculty of Graduate Studies provides the special opportunity to students, with a proven track record, of registering in an Individual Interdisciplinary Studies (IIS) program<sup>1</sup>. Such a program combines substantial aspects of the existing programs of at least two, but no more than four departments/units into a unique program, which lies outside of established department/unit boundaries. Since the Individual Interdisciplinary Studies program places additional demands and responsibilities upon the applicant to assemble an advisory committee, to formulate a research proposal in advance of admission and, to negotiate a program of study with their advisory committee, the eligibility requirements are more stringent than those for discipline based graduate programs.

The regulations presented below and all general regulations of the Faculty of Graduate Studies apply to Individual Interdisciplinary Studies programs. Each department/unit currently offering a discipline-based graduate level program is eligible to offer an Individual Interdisciplinary Studies program<sup>2</sup> in which the subject area of that department/unit is the major focus<sup>3</sup> of the Individual Interdisciplinary Studies program<sup>4</sup>. The department/unit is thus considered the "home" department/unit of the Individual Interdisciplinary Studies student<sup>5</sup>. (Note: the department/unit should be contacted ahead of time to ensure their participation in the Individual Interdisciplinary Studies program).

The "home" department/unit Head (or designate) will ensure that the student and the advisor receive information regarding scholarship, relevant Faculty procedures, and the like (i.e., information that would normally be distributed to department/unit Heads and/or Chairs of graduate programs).

It is anticipated that substantial grounding will be in the major focus area; if not, then justification must be given for consideration.

<sup>1</sup> Where the word department/unit appears, the word Faculty or Institute is to be assumed where appropriate.

<sup>2</sup> A department /unit's eligibility to offer an Individual Interdisciplinary Studies program is limited to the level of the degree currently being offered by the department/unit. For example, if only a Master's level program is offered by the department/unit, that department/unit is eligible to be the "home" department/unit for students in a Master's level Individual Interdisciplinary Studies program, only. Although this particular department/unit may participate as a supporting department/unit in a Ph.D. level Individual Interdisciplinary Studies program, it is not eligible to be the "home" department/unit of a Ph.D. Individual Interdisciplinary Studies program student. A Faculty member in a department/unit without a graduate program at the level he/she wishes to supervise an Individual Interdisciplinary Studies program student may do so providing that the Faculty member is a member of the Faculty of Graduate Studies and holds an appointment in the "home" department/unit. Note: the supervisor may need to be appointed as an adjunct to the "home" department/unit.

<sup>3</sup> "Major Focus" refers to the subject area/discipline of a department/unit in which the credit hours of instruction to be taken are more than or equal to those to be taken in any other participating department/unit. In a two-department/unit combination, assuming a 15 credit hour program, 9 credit hours of course work would be taken in the major focus area, with a minimum of 6 credit hours to be at the 7000 level.

<sup>4</sup> The intent of an Individual Interdisciplinary Studies program is to bring together existing discipline-based programs in such a way as to form a unique program tailored to an individual research project and/or study aim that cannot otherwise be accommodated by existing discipline-based programs. Master's programs are used to construct a Master's level Individual Interdisciplinary Studies program and the Ph.D. programs are the building blocks for a Ph.D. level Individual Interdisciplinary Studies program. While there is some flexibility in the actual programs used to construct an Individual Interdisciplinary Studies program, it is imperative that a Master's level Individual Interdisciplinary Studies program contain mostly existing Master's level programs, and Ph.D. programs must make up the majority if not all the component programs in a Ph.D. level Individual Interdisciplinary Studies program.

<sup>5</sup> The "home" department/unit counts this student as part of their complement for statistics purposes and would indicate them as "Individual Interdisciplinary Studies program" students.

## Degree Requirements

In addition to the minimum program requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 1329) of this Calendar, please consult the Faculty of Graduate Studies website (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for Individual Interdisciplinary Studies program supplementary regulations.

All Individual Interdisciplinary Studies Master's program students must complete 12 credit hours of coursework at the 7000 level and successfully complete a Master's thesis. There is no practicum route.

All students must complete the GRAD 7500. Students newly admitted to a graduate program must successfully complete this course within the first term of registration.

All students must complete the GRAD 7300. Students must successfully complete this course within the first year of study or prior to applying to any ethics boards which are appropriate to the student's research.

**Expected Time to Graduate:** 2 years.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Individual Interdisciplinary Studies, Ph.D.

The Faculty of Graduate Studies provides the special opportunity to students, with a proven track record, of registering in an Individual Interdisciplinary Studies (IIS) program<sup>1</sup>. Such a program combines substantial aspects of the existing programs of at least two, but no more than four departments/units into a unique program, which lies outside of established department/unit boundaries. Since the Individual Interdisciplinary Studies program places additional demands and responsibilities upon the applicant to assemble an advisory committee, to formulate a research proposal in advance of admission and, to negotiate a program of study with their advisory committee, the eligibility

requirements are more stringent than those for discipline based graduate programs.

The regulations presented below and all general regulations of the Faculty of Graduate Studies apply to Individual Interdisciplinary Studies programs. Each department/unit currently offering a discipline-based graduate level program is eligible to offer an Individual Interdisciplinary Studies program<sup>2</sup> in which the subject area of that department/unit is the major focus<sup>3</sup> of the Individual Interdisciplinary Studies program<sup>4</sup>. The department/unit is thus considered the "home" department/unit of the Individual Interdisciplinary Studies student<sup>5</sup>. (Note: the department/unit should be contacted ahead of time to ensure their participation in the Individual Interdisciplinary Studies program).

The "home" department/unit Head (or designate) will ensure that the student and the advisor receive information regarding scholarship, relevant Faculty procedures, and the like (i.e., information that would normally be distributed to department/unit Heads and/or Chairs of graduate programs).

It is anticipated that substantial grounding will be in the major focus area; if not, then justification must be given for consideration.

<sup>1</sup> Where the word department/unit appears, the word Faculty or Institute is to be assumed where appropriate.

<sup>2</sup> A department /unit's eligibility to offer an Individual Interdisciplinary Studies program is limited to the level of the degree currently being offered by the department/unit. For example, if only a Master's level program is offered by the department/unit, that department/unit is eligible to be the "home" department/unit for students in a Master's level Individual Interdisciplinary Studies program, only. Although this particular department/unit may participate as a supporting department/unit in a Ph.D. level Individual Interdisciplinary Studies program, it is not eligible to be the "home" department/unit of a Ph.D. Individual Interdisciplinary Studies program student. A Faculty member in a department/unit without a graduate program at the level he/she wishes to supervise an Individual Interdisciplinary Studies program student may do so providing that the Faculty member is a member of the Faculty of Graduate Studies and holds an appointment in the "home" department/unit. Note: the supervisor may need to be appointed as an adjunct to the "home" department/unit.

<sup>3</sup> "Major Focus" refers to the subject area/discipline of a department/unit in which the credit hours of instruction to be taken are more than or equal to those to be taken in any other participating department/unit. In a two-department/unit combination, assuming a 15 credit hour program, 9 credit hours of course work would be taken in the major focus area, with a minimum of 6 credit hours to be at the 7000 level.

- <sup>4</sup> The intent of an Individual Interdisciplinary Studies program is to bring together existing discipline-based programs in such a way as to form a unique program tailored to an individual research project and/or study aim that cannot otherwise be accommodated by existing discipline-based programs. Master's programs are used to construct a Master's level Individual Interdisciplinary Studies program and the Ph.D. programs are the building blocks for a Ph.D. level Individual Interdisciplinary Studies program. While there is some flexibility in the actual programs used to construct an Individual Interdisciplinary Studies program, it is imperative that a Master's level Individual Interdisciplinary Studies program contain mostly existing Master's level programs, and Ph.D. programs must make up the majority if not all the component programs in a Ph.D. level Individual Interdisciplinary Studies program.
- <sup>5</sup> The "home" department/unit counts this student as part of their complement for statistics purposes and would indicate them as "Individual Interdisciplinary Studies program" students.

## Degree Requirements

In addition to the minimum program requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 1329) of this Calendar, please consult the Faculty of Graduate Studies website (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for Individual Interdisciplinary Studies program supplementary regulations.

All Individual Interdisciplinary Studies program Doctoral students must complete 12 credit hours of coursework at the 7000 level and successfully complete the Ph.D. Candidacy Exam as well as a Doctoral Thesis.

All students must complete the GRAD 7500. Students newly admitted to a graduate program must successfully complete this course within the first term of registration, unless the course has been completed previously without more than one term span between degrees.

All students must complete the GRAD 7300. Students must successfully complete this course within the first year of study or prior to applying to any ethics boards which are appropriate to the student's research.

**Expected Time to Graduate:** 4 years.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Peace and Conflict Studies, M.A.

Peace and Conflict Studies

**Director:** Dr. Adam Muller

**Head: Joint MA Program** Chair: Dr. A. Muller

**Associate Head: Joint MA Program** Associate Chair: Dr. E. Sibanda  
**Program Director:** Adam Muller

**Campus Address/General Office:** 261 St. Paul's College

**Telephone:** 204-474-8894

**Email Address:** pacs@umanitoba.ca

**Website:** [umanitoba.ca/colleges/st\\_pauls/mauro\\_institute/](https://umanitoba.ca/colleges/st_pauls/mauro_institute/) ([https://www.umanitoba.ca/colleges/st\\_pauls/mauro\\_institute/](https://www.umanitoba.ca/colleges/st_pauls/mauro_institute/))

**Academic Staff:** Please refer to the Mauro Institute website ([https://umanitoba.ca/colleges/st\\_pauls/mauro\\_institute/about/staff\\_listing.html](https://umanitoba.ca/colleges/st_pauls/mauro_institute/about/staff_listing.html)) for current staff listing.

## Peace and Conflict Studies M.A. Program Information

The Joint Master of Arts Program in Peace and Conflict Studies (JMP-PACS) encompasses the analysis and resolution of social conflicts; peace research that examines the structural roots of social conflicts, divisions, and social inequalities; and strategies for building community and promoting social justice. The Program is intended to be rigorous as the significance of research and intervention for conflict resolution, peace-building, and creating a culture of human rights demands a high standard of commitment, scholarship, and professionalism.

### Joint Master's Program

The University of Manitoba and The University of Winnipeg together offer the Joint Master's program, with courses and thesis direction (if applicable) offered at both institutions. Students of a JMP are admitted by the Faculty of Graduate Studies at the University of Manitoba. Graduates of Joint Master's programs receive a joint-institution

parchment. Students in the JMP may elect to attend the convocation of either of the two participating universities. The programs are governed by the Joint Discipline Committee (JDC) at the department/unit level, consisting of faculty members of both institutions.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Peace and Conflict Studies M.A. Admission Requirements

Applicants require a four-year honours or four-year baccalaureate degree, either: (a) earned in peace and conflict studies, or conflict analysis and resolution; or (b) earned in another related discipline, such as education, law, social work, native studies, political studies, human ecology, human rights, women's studies, and sociology, among others. A high academic standing in previous university work with a minimum Grade Point Average (GPA) of 3.0 in the last 60 credit hours are eligible for admission to a course of study leading to the Master's degree. However, PACS is a highly selective graduate program and applicants should be advised that in order to be competitive for admission, possession of a GPA much higher than the minimum required is strongly recommended.

Appropriate research capability, typically demonstrated by authorship of a major research paper, for example, a senior undergraduate term paper, or thesis, or an article in a refereed publication. Applicants will also have a proficiency in the English language at levels required by the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Peace and Conflict Studies M.A. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/peace\\_conflict.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/peace_conflict.html)) page.

## Degree Requirements

The Joint M.A. Program in Peace and Conflict Studies has the following requirements:

**Thesis Option:** Twelve credit hours of core courses\*; three credit hours in research methods; three credit hours in a PACS elective or PACS practicum; a thesis proposal and defence, and a thesis examination. The research methods and PACS electives can be taken from a list of PACS approved courses at the 7000 level.

or

**Comprehensive Exam Option:** twelve credit hours of core courses\*; three credit hours in research methods; three credit hours in practicum; twelve credit hours of PACS electives; and a comprehensive examination. The research methods, and PACS electives can be taken from a list of approved courses at the 7000 level.

After the completion of 9 credit hours of coursework within the Program, the student must apply for consideration within either the Thesis route or the Comprehensive Exam route.

**Expected Time to Graduate:** 2 years

## Progression Chart

### Thesis Route

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PEAC 7010	Interpersonal Communication, Problem-Solving, and Trust-building	3
PEAC 7020	Theories of Conflict and Conflict Resolution	3
PEAC 7110	International Human Rights and Human Security	3
PEAC 7120	Peacebuilding and Social Justice	3
PEAC XXXX	PACS Elective Course	3
PEAC 7070	Special Topics in Peace and Conflict Studies 2 <sup>1</sup>	3
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis 2	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Either a PACS research methods course or a research methods course offered by another program (with approval of advisor).

- <sup>2</sup>
- Students are expected to produce a thesis proposal subject to a public oral defence.
  - If applicable, Students must obtain approval from the Research Ethics Board (REB), prior to obtaining research.
  - Students must successfully submit and defend their final version of the Thesis.

### Comprehensive Exam Route

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PEAC 7010	Interpersonal Communication, Problem-Solving, and Trust-building	3
PEAC 7020	Theories of Conflict and Conflict Resolution	3
PEAC 7110	International Human Rights and Human Security	3
PEAC 7120	Peacebuilding and Social Justice	3
PEAC XXXX	PACS Elective Courses	6
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
PEAC XXXX	PACS Elective Courses	6
PEAC 7500	Practicum	3
PEAC 7070	Special Topics in Peace and Conflict Studies 2 <sup>1</sup>	3
GRAD 7010	Comprehensive Examination 2	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>30</b>

- <sup>1</sup> Either a PACS research methods course or a research methods course offered by another program (with approval of advisor).
- <sup>2</sup> Students must successfully write and defend their Comprehensive Examination.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registering, all students (new and returning) must meet with their program advisor to select and receive approval for courses to be taken. Any course revisions (additions and/or withdrawals) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Peace and Conflict Studies, Ph.D.

Peace and Conflict Studies

**Director:** Dr. Adam Muller

**Head: PhD Program:** Dr. Adam Muller

**Associate Head: PhD Program:** N/A

**Program Director:** Adam Muller

**Campus Address/General Office:** 261 St. Paul's College

**Telephone:** 204-474-8894

**Email Address:** pacs@umanitoba.ca

**Website:** [umanitoba.ca/colleges/st\\_pauls/mauro\\_institute/](https://umanitoba.ca/colleges/st_pauls/mauro_institute/) ([https://www.umanitoba.ca/colleges/st\\_pauls/mauro\\_institute/](https://www.umanitoba.ca/colleges/st_pauls/mauro_institute/))

**Academic Staff:** Please refer to the Mauro Institute website ([https://umanitoba.ca/colleges/st\\_pauls/mauro\\_institute/about/staff\\_listing.html](https://umanitoba.ca/colleges/st_pauls/mauro_institute/about/staff_listing.html)) for current staff listing.

## Peace and Conflict Studies Ph.D. Program Information

The Ph.D. Program in Peace and Conflict Studies provides an interdisciplinary approach to analyze and resolve social conflicts through innovative peace research that examines the structural roots of social conflicts, divisions, and inequalities, and strategies for building community and promoting social justice and human rights.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

#### Peace and Conflict Studies Ph.D. Admission Requirements

Applicants require a Master's degree in Peace and Conflict Studies (or equivalent from other recognized universities) with a minimum Grade Point Average (GPA) of 3.0 in the last 60 credit hours. However, PACS is a highly selective graduate program and applicants should be advised that in order to be competitive for admission, possession of a GPA much higher than the minimum required is strongly recommended.

Graduates of a Master's degree in diverse disciplines at the University of Manitoba (or equivalent from other recognized universities) are also eligible for admission to the program pending successful completion of prerequisite courses to ground them in the field. Applicants will have a thesis-based master's degree, either earned in peace and conflict studies or a related discipline such as social work, education, or sociology, among others. In the event a Master's degree is not thesis-based, research capability may be demonstrated by a major research paper from a recognized institution, or an independently completed research article published in a refereed journal.

Applicants will also have a proficiency in the English language at levels required by the Faculty of Graduate Studies.

### Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Peace and Conflict Studies Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/peace\\_conflict.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/peace_conflict.html)) page.

### Degree Requirements

The Ph.D. Degree in Peace and Conflict Studies requirements are 24 credit hours; twelve credits of required course work at the 7000 level; six

credit hours in a cognate area and 6 credits in research methods, plus a candidacy examination, a thesis proposal, and a thesis. The six credit hours of cognate and research method courses can be taken from a list of approved courses at the 7000 level.

Students whose Master's degree is not in Peace and Conflict Studies will normally be required to take two prerequisite courses in the field as occasional courses. Note that there are additional tuition and fees for the two occasional courses.

**Expected Time to Graduate:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PEAC 7030	International Conflict Resolution and Peace-building	3
PEAC 7050	Intercultural Conflict Resolution and Peace-Building	3
PEAC 7060	Special Topics in Peace and Conflict Studies 1 (Topics will vary)	3
PEAC 7060	Special Topics in Peace and Conflict Studies 1	3
PEAC 7070	Special Topics in Peace and Conflict Studies 2 (Topics will vary) <sup>1</sup>	3
PEAC 7070	Special Topics in Peace and Conflict Studies 2	3
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
Select two Cognate Area Courses <sup>2</sup>		6
GRAD 8010	Doctoral Candidacy Examination <sup>3</sup>	0
<b>Hours</b>		<b>6</b>
<b>Year 3</b>		
GRAD 8000	Doctoral Thesis <sup>4</sup>	0
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
GRAD 8000	Doctoral Thesis <sup>5</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Either a PACS research methods course or a research methods course offered by another program (with approval of advisor)

<sup>2</sup> Courses to support the student's research, usually offered in another department (or in PACS with Director approval). Courses must have approval of advisor.

<sup>3</sup> Students must write and defend a PhD Candidacy Examination.

<sup>4</sup> Students are expected to produce a thesis proposal subject to a public oral defence. If applicable, Students must obtain approval from the Research Ethics Board (REB), prior to conducting research.

<sup>5</sup> Students must successfully submit and defend their final version of the Thesis.

**Note:** For students without a background in PACS, additional courses may be required.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registering, all students (new and returning) must meet with their program advisor to select and receive approval for courses to be taken. Any course revisions (additions and/or withdrawals) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Faculty of Kinesiology and Recreation Management

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Kinesiology and Recreation Management, M.A. / M.Sc. (p. 1495)	2	12	

## Kinesiology and Recreation Management, M.A. / M.Sc.

Kinesiology and Recreation Management

**Dean:** Dr. Douglas Brown

**Associate Dean(s):** Dr. Leisha Strachan (Research and Graduate Studies)

**Campus Address/General Office:** 203 Active Living Centre

**Telephone:** 204-474-7806

**Email Address:** fkrm (fkrmgrad@umanitoba.ca)g

(kinrecgrad@umanitoba.ca)rad@umanitoba.ca

(fkrmgrad@umanitoba.ca)

**Website:** [umanitoba.ca/kinesiology-recreation-management/](https://umanitoba.ca/kinesiology-recreation-management/) (https://umanitoba.ca/kinesiology-recreation-management/)

**Academic Staff:** Please see the Kinesiology and Recreation Management website (<https://umanitoba.ca/kinesiology-recreation-management/research/research-themes/#our-researchers>) for Faculty information.

## Kinesiology and Recreation Management Program Information

The Master of Science (Kinesiology and Recreation) or Master of Arts (Kinesiology and Recreation) provides advanced education and research training within sub-disciplines including kinesiology, physical education, health, human performance, recreation, leisure, and tourism studies.

Resources and supports for M.Sc. related research are jointly provided by the Faculty of Kinesiology and Recreation Management and the Health, Leisure and Human Performance Research Institute.

The Faculty of Kinesiology and Recreation Management and the College of Rehabilitation Sciences, offer a multi-unit Ph.D. in Applied Health Sciences (p. 1483).

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Kinesiology and Recreation Management Admission Requirements

Students require:

- The completion of a four-year Kinesiology (BKIN)/Physical Education (BPE) or Recreation Management and Community Development (BRMCD) degree, or equivalent,
- Or

- Completion of a four-year undergraduate degree other than a BKIN/ BPE or BRMCD, or equivalent, with a suitable academic background in the area of study,
- Or
- Completion of a Pre-Masters program at the University of Manitoba, or equivalent.

**Note:** The degree designation (M.Sc. or M.A.) will be determined by the Admissions Committee, in consultation with the Advisor, and will consider the coursework and research to be undertaken.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Kinesiology and Recreation Management M.A./M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/kinesiology-and-recreation-management-ma-msc/>) page.

## Degree Requirements

Students must:

- Complete a minimum of 12 credit hours of course work approved by the faculty advisor. Of these 12 credit hours, a minimum of nine credit hours must be at or above the 7000 level; a minimum of six credit hours must be selected from the 7000 level course offerings in Kinesiology and Recreation Management with KPER 7000 being compulsory; and
- Enter the program with, or complete as part of the approved program of study, a minimum of six credit hours in research methods and/or statistics. If the research methods and/or statistics requirement is completed as part of the approved program of study, it must be at or above the 3000 level. The required course, KPER 7000, may be accepted for credit towards this requirement.
- Within their program of study, students may complete a maximum of two KPER 7800 (different topics) for a total of six credit hours; however, only three credit hours will count towards the minimum 12 credit hour coursework requirement

In addition to coursework requirements, a student must engage in research and scholarship leading to the completion of a thesis, and attend a minimum of one professional development event per term enrolled as a graduate student in the program until the program is



completed (i.e. students must complete this requirement once per term for the **Fall** (September-December) **Winter** (January-April) and **Summer** (May-August term))

**Note:** After participating in a specific professional development training event, the student is required to document their participation (i.e., the student will create a report that provides specific information about the event as well as written reflection about how the knowledge gained through the event will enable them to improve and increase their capabilities). Progress is monitored by the Graduate Program Coordinator and is the requirement for graduation.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>0</b>
<b>Years 1-2</b>		
Select a minimum of 9 credit hours at or above the 7000 level <sup>1</sup>		9
KPER 7000	Research in Kinesiology and Recreation Studies	3
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> A minimum of six (6) credit hours must be taken from the 7000 level course offerings in Kinesiology and Recreation Management of which KPER 7000 is compulsory.

<sup>2</sup> In addition to coursework requirements, a student must engage in research and scholarship leading to the completion of a thesis. Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

### Program Approval Form

All new students must complete a Graduate Program Approval Form, in consultation with their advisor, and submitted to the Graduate Program Chair, prior to registering for courses. Only courses that are included on the Program Approval Form will be credited to the student's program of study. The Advisor and Graduate Program Chair must approve any changes made to the Program of Study.

### Directed Study

Students may complete a maximum of two directed study courses (different topics) for a total of six credit hours; however, only one directed study (three credits) will count towards the minimum 12 credit hour course degree requirements. Students, in conjunction with the advisor for the course, must complete a Directed/Individual Study form.

This form must include a description of the course work to be completed and an outline of how the final grade will be determined. This form must be approved by the Graduate Program Chair and filed with the Graduate Program Assistant who will register the student for the course.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Faculty of Law

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Human Rights, M.H.R. (p. 1497)	2	18	
Laws, LL.M. (p. 1498)	2	6-8	

## Human Rights, M.H.R.

Human Rights

**Program Director:** Dr. Kjell Anderson

**Campus Address/General Office:** 303 Robson Hall

**Telephone:** 204-480-1485

**Email Address:** mhradmissions@umanitoba.ca

**Website:** law.robsonhall.com/programs/mhr/ (<http://law.robsonhall.com/programs/mhr/>)

**Academic Staff:** Please refer to the Law website (<http://law.robsonhall.com/faculty-staff/>) for current staff listing.

## Human Rights Program Information

The department offers an interdisciplinary program leading to the Master of Human Rights degree.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.H.R. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.H.R. program of study (<https://umanitoba.ca/explore/programs-of-study/master-human-rights-mhr/>) page.

## Degree Requirements

Students must complete 18 course credits, and either a practicum and a major research project, or a thesis.

**Second Language Reading Requirement:** MHR students whose original language is English are required to demonstrate working knowledge of a second language by the time of graduation.

**Expected Time to Graduate:** 16-24 months

## Progression Chart

### Thesis Stream

Course	Title	Hours
<b>Year 1</b>		
HMRT 7100	Theory and Practice of Human Rights: Critical Perspectives	3

HMRT 7200	Selected Topics in Human Rights Research and Methods	3
HMRT 7300	Human Rights Law	3
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
Electives	Other approved credits	9
<b>Hours</b>		<b>18</b>

### Summer

GRAD 7000	Master's Thesis (or finish coursework)	0
<b>Hours</b>		<b>0</b>

### Year 2

#### Summer

GRAD 7000	Master's Thesis (Fall and possible Winter and Summer terms)	0
<b>Hours</b>		<b>0</b>

**Total Hours** 18

### Practicum Stream

Course	Title	Hours
<b>Year 1</b>		
HMRT 7100	Theory and Practice of Human Rights: Critical Perspectives	3
HMRT 7200	Selected Topics in Human Rights Research and Methods	3
HMRT 7300	Human Rights Law	3
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
Electives	Other approved credits	9
<b>Hours</b>		<b>18</b>

### Summer

GRAD 7030	Master's Practicum	0
<b>Hours</b>		<b>0</b>

### Year 2

#### Summer

GRAD 7030	Master's Practicum (Fall or Winter term)	0
<b>Hours</b>		<b>0</b>

**Total Hours** 18

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Laws, LL.M.

**Associate Dean (Acting):** Darcy MacPherson (Graduate Studies)

**Campus Address/General Office:** 452 Robson Hall

**Telephone:** 204-480-1485

**Email Address:** [lawgrad@umanitoba.ca](mailto:lawgrad@umanitoba.ca)

**Website:** <http://law.robsonhall.com/>

**Academic Staff:** Please refer to the Law website (<http://law.robsonhall.com/faculty-staff/>) for current staff listing.

## Law Program Information

The Faculty offers a structured and personal Master of Laws degree.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## LL.M. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

In addition, candidates must show that they are equipped intellectually to engage in advanced legal study and research. The Faculty of Law anticipates that the prospective LL.M. student will have earned the J.D., LL.B. or equivalent degree in law with a first or high upper second B+ standing. Applicants ordinarily hold a common law or Canadian civil law degree but applications from those whose legal education has been in another legal system will be given full consideration.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the LL.M. program of study (<https://umanitoba.ca/explore/programs-of-study/master-laws-llm/>) page.

## Degree Requirements

Students must complete two courses, one of which must be in the Faculty of Law, as well as the graduate Legal Research and Theory seminar LAW 7110. A minimum grade of B must be obtained in each course.

In addition to course work, the student must complete a thesis of 90 to 120 pages. Each student is assigned a faculty advisor with expertise in the chosen area of study who will direct thesis research and design and assist the student in course selection. Early and regular contact with the advisor is recommended.

**Expected Time to Graduate:** 1 - 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
LAW 7110	Graduate Legal Research and Theory	2
Select two additional courses from the following: <sup>1</sup>		4-6
LAW XXXX	LAW Course	
COURSE XXXX	LAW Course or a Course outside the Faculty of Law	
<b>Hours</b>		<b>6-8</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>6-8</b>

<sup>1</sup> Students must complete two additional courses relevant to their research area. One of these courses may be taken outside the Faculty of Law. Course selection must be approved by the student's supervisor.

<sup>2</sup> Thesis must be complete by July 1 to enable timely review before the Faculty of Graduate Studies' deadline at the end of August.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

If you have questions about registration, please email [lawgrad@umanitoba.ca](mailto:lawgrad@umanitoba.ca).

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

**Note:** Law requires a minimum grade point average of 3.0 with **no grade below B**. A C+ is the equivalent of a failing grade.

# Faculty of Science

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biological Sciences, M.Sc. (p. 1500)	2	6	
Biological Sciences, Ph.D. (p. 1501)	4	6-12	
Chemistry, M.Sc. (p. 1502)	2	9	
Chemistry, Ph.D. (p. 1503)	4	9-15	
Computer Science, M.Sc. (p. 1505)	2	15	
Computer Science, Ph.D. (p. 1506)	4	12	
Mathematics, M.Sc. (p. 1507)	2	15	
Mathematics, Ph.D. (p. 1509)	4		
Microbiology, M.Sc. (p. 1510)	2-3	6	
Microbiology, Ph.D. (p. 1511)	4-6	12	
Physics, M.Sc. (p. 1512)	2	12-36	
Physics, Ph.D. (p. 1514)	4	12-24	
Statistics, M.Sc. (p. 1515)	1-2	15-24	
Statistics, Ph.D. (p. 1517)	5	12	

## Biological Sciences, M.Sc.

Biological Sciences

**Head:** Dr. Gary Anderson

**Campus Address/General Office:** 212 Biological Sciences Building

**Telephone:** 204-474-9245

**Fax:** 204-474-7604

**Email Address:** [biograd@umanitoba.ca](mailto:biograd@umanitoba.ca)

**Website:** [sci.umanitoba.ca/biological-sciences/](https://sci.umanitoba.ca/biological-sciences/) (<https://sci.umanitoba.ca/biological-sciences/>)

## Biological Sciences Program Information

The department offers graduate training leading to Master of Science and Doctor of Philosophy degrees in a broad range of biological disciplines in both field and laboratory research.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Biological Sciences M.Sc. Admission Requirements

Applicants are required to have a 4-year undergraduate degree in Biology (or equivalent). If a student applies with a three-year general B.Sc. degree or equivalent, a pre-Master's program must be taken which will be individually prescribed.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biological Sciences M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/bio\\_sci.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/bio_sci.html)) page.

## Degree Requirements

The program requires completion of a research thesis and coursework consisting of a minimum of one core course and one additional BIOL 7000 course. Study and research will extend to a minimum of twelve months. All students must submit a research-based thesis and defend it orally.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOL 7100	Core Skills in Biological Sciences Research	3
BIOL 7XXX	Major subject at 7000 level	3
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
GRAD 7020	Master's Re-registration	0
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>6</b>

**Note:**

- Students are also required to submit a MSc proposal to their advisory committee within the first 6 months of their program. In addition, a progress report meeting must be held yearly to track progress in the program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Biological Sciences, Ph.D.

Biological Sciences

**Head:** Dr. Gary Anderson

**Campus Address/General Office:** 212 Biological Sciences Building

**Telephone:** 204-474-9245

**Fax:** 204-474-7604

**Email Address:** [biograd@umanitoba.ca](mailto:biograd@umanitoba.ca)

**Website:** [sci.umanitoba.ca/biological-sciences/](https://sci.umanitoba.ca/biological-sciences/) (<https://sci.umanitoba.ca/biological-sciences/>)

## Biological Sciences Program Information

The department offers graduate training leading to Master of Science and Doctor of Philosophy degrees in a broad range of biological disciplines in both field and laboratory research.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Biological Sciences Ph.D. Admission Requirements

Applicants are required to have a Master's degree in Biology (or equivalent). Candidates normally have completed a M.Sc. degree before entering the Ph.D. program; however under certain circumstances transfer from a M.Sc. to Ph.D. program and entry into the Ph.D. without a M.Sc. is possible. Individual qualifications other than these will be considered.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biological Sciences Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/bio\\_sci.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/bio_sci.html)) page.

## Degree Requirements

**Admission to the Ph.D. from a Master's Degree:** a minimum of six credit hours of graded course work at the 7000 level (including the core course BIOL 7220: Critical Thinking in Biological Sciences), and a thesis are required.

**Admission to the Ph.D. from an Honours Bachelor's Degree or equivalent:** a minimum of 12 credit hours of graded course work at the 7000 level (including two core courses, BIOL 7100: Core Skills in Biological Sciences Research and BIOL 7220: Critical Thinking in Biological Sciences), and a thesis are required.

Upon recommendation by the Advisory Committee, the student may be required to take additional coursework beyond the minimum requirement.

**Expected Time to Graduate:** 3 - 4 years

### Progression Chart

Where admission is directly from Master's<sup>1</sup>:

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOL 7220	Critical Thinking in Biological Sciences	3
BIOL 7XXX	Major subject at 7000 level	3
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
GRAD 8020	Doctoral Re-registration	0

GRAD 8000	Doctoral Thesis	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>6</b>

<sup>1</sup> Where admission to the Ph.D. is directly from a Master's Degree, a minimum of six (6) credit hours of graded course work at the 7000 level (including the core course BIOL 7220), and a thesis are required.

Where admission is directly from an Honours Bachelor's Degree or equivalent<sup>1</sup>:

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOL 7100	Core Skills in Biological Sciences Research	3
BIOL 7220	Critical Thinking in Biological Sciences	3
BIOL 7XXX	Major subject at 7000 level	6
	<b>Hours</b>	<b>12</b>
<b>Year 2</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
	<b>Hours</b>	<b>0</b>
<b>Year 3</b>		
GRAD 8020	Doctoral Re-registration	0
	<b>Hours</b>	<b>0</b>
<b>Year 4</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>12</b>

<sup>1</sup> Where admission to the Ph.D. is directly from an Honours Bachelor's Degree or equivalent, a minimum of 12 credit hours of graded course work at the 7000 level (including two core courses, BIOL 7100 and BIOL 7220), and a thesis are required.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Chemistry, M.Sc.

Chemistry

**Head:** Ute Kothe

**Campus Address/General Office:** 360 Parker Building

**Telephone:** 204-474-9321

**Fax:** 204-474-7608

**Email Address:** [Chemistry\\_Dept@umanitoba.ca](mailto:Chemistry_Dept@umanitoba.ca)

**Website:** [sci.umanitoba.ca/chemistry/](https://sci.umanitoba.ca/chemistry/) (<https://sci.umanitoba.ca/chemistry/>)

**Academic Staff:** Please refer to Chemistry website (<https://sci.umanitoba.ca/chemistry/faculty-and-staff/>) for Faculty information.

## Chemistry Program Information

A Master of Science or Doctor of Philosophy in the chemical sciences provides a gateway to an exciting, challenging and frequently high-paying career.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Chemistry M.Sc. Admission Requirements

Applicant must have a degree in Chemistry, Biochemistry or a related field.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Chemistry M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/647.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/647.html)) page.

## Degree Requirements

### Program Requirements

A minimum of 9 credit hours of course work at the 7000 level, including CHEM 7900, are required. These courses will normally be in Chemistry, but in special circumstances the advisory committee may conclude a course in a different field would be more appropriate. Students are expected to complete the M.Sc. program and pass the oral defence of their thesis within two years.

Attendance at departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

**Colloquium:** A weekly colloquium is given by members of staff or external invited lecturers. All graduate students are expected to attend the colloquia.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ACS Placement Test <sup>1</sup>		0
CHEM 7900	Seminar in Current Research Issues in Chemistry	3
COURSE 7XXX	Two courses at the 7000 level	6
GRAD 7000	Master's Thesis <sup>2</sup>	0
Department Seminars/Colloquia <sup>3</sup>		0
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>4</sup>	0
Department Seminars/Colloquia <sup>3</sup>		0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Administered by the department, this placement test written in your chosen sub-discipline (e.g., Analytical, Biochemistry, Inorganic...) will help orient your course selection.

<sup>2</sup> The thesis proposal should be submitted to the advisory committee before the end of the student's first year in the graduate program.

<sup>3</sup> Attendance at departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

<sup>4</sup> The oral thesis defense should take place near the end of the student's second year in the program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and new graduate students in the Department of Chemistry must complete a Graduate Program Approval form and consult with the Academic Programs Administrator. The selection of courses and changes in a student's program must be initiated by their graduate advisor in the case of Masters students or their advisory committee in the case of doctoral students. Students should consult the Academic Programs Administrator.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Chemistry, Ph.D.

Chemistry

**Head:** Ute Kothe

**Campus Address/General Office:** 360 Parker Building

**Telephone:** 204-474-9321

**Fax:** 204-474-7608

**Email Address:** Chemistry\_Dept@umanitoba.ca

**Website:** [sci.umanitoba.ca/chemistry/](http://sci.umanitoba.ca/chemistry/) (<https://sci.umanitoba.ca/chemistry/>)



**Academic Staff:** Please refer to Chemistry website (<https://sci.umanitoba.ca/chemistry/faculty-and-staff/>) for Faculty information.

## Chemistry Program Information

A Master of Science or Doctor of Philosophy in the chemical sciences provides a gateway to an exciting, challenging and frequently high-paying career.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Chemistry Ph.D. Admission Requirements

Normally, only students holding thesis-based M.Sc. degrees will be admitted directly into the Ph.D. program. Other students will be admitted as M.Sc. candidates, with the option to transfer into the Ph.D. program after one year of satisfactory studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Chemistry Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/647.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/647.html)) page.

## Degree Requirements

For students entering the Ph.D. program directly from a B.Sc., a minimum of 15 credit hours of course work at the 7000 level, including CHEM 7900, are required.

For students entering the Ph.D. program with a recognized M.Sc. degree, students must complete CHEM 7900 if they have not already done so at an earlier stage, and an additional 6 credit hours of course work at the 7000 level.

Additional courses (undergraduate or graduate level) may be recommended by the advisory committee to make up for specific deficiencies in preparation of a specific student for a specific research topic. These courses will be designated as "O" on the PhD Program of Study Form. Fees will be assessed but they will not count towards the total degree credit hours.

Attendance at departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

**Colloquium:** A weekly colloquium is given by members of staff or external invited lecturers. All graduate students and fourth-year Honours students are expected to attend the colloquia.

**Expected Time to Graduate:** 4-5 years (from 4 year B.Sc.); 3 years (from M.Sc.).

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

ACS Placement Test <sup>1</sup>		0
CHEM 7900	Seminar in Current Research Issues in Chemistry <sup>2</sup>	3
COURSE 7XXX	Two to four additional courses at the 7000 level <sup>3</sup>	6-12
GRAD 8000	Doctoral Thesis <sup>4</sup>	0
Department Seminars/Colloquia <sup>5</sup>		0
<b>Hours</b>		<b>9-15</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>6</sup>	0
Department Seminars/Colloquia <sup>5</sup>		0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
Colloquium (departmental) seminar <sup>7</sup>		0
Department Seminars/Colloquia <sup>5</sup>		0
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
GRAD 8000	Doctoral Thesis <sup>8</sup>	0
Department Seminars/Colloquia <sup>5</sup>		0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9-15</b>

<sup>1</sup> Administered by the department, this placement test written in the chosen sub-discipline (e.g., Analytical, Biochemistry, Inorganic...) will help orient the student's course selection.

<sup>2</sup> Does not need to be re-taken if completed in the MSc stream.

<sup>3</sup>

- **For direct entry or transfer from U of M Chemistry MSc stream holding a recognized MSc degree:** Two additional courses at the 7000 level
- **For direct entry or transfer without a recognized MSc degree:** Four additional courses at the 7000 level

<sup>4</sup> Submitted to the advisory committee before the end of the student's first year in the graduate program.

<sup>5</sup> Attendance at all departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

<sup>6</sup> The candidacy examination will normally be held near the end of the student's second year in the graduate program.

<sup>7</sup> Before the end of the third year, a candidate must present a 45 – 50 minute seminar to the Department on the background to and results of their own research. Scheduled by the Department Seminar Coordinator.

<sup>8</sup> The oral thesis defence should take place near the end of the student's fourth year in the program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and new graduate students in the Department of Chemistry must complete a Graduate Program Approval form and consult with the Academic Programs Administrator. The selection of courses and changes in a student's program must be initiated by their graduate advisor in the case of Masters students or their advisory committee in the case of doctoral students. Students should consult the Academic Programs Administrator.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Computer Science, M.Sc.

Computer Science

**Head:** Dr. David Gerhard

**Associate Head (Graduate) / Grad Chair:** Dr. Andrea Bunt

**Program Advisor:** Edwina Shwedyk

**Campus Address/General Office:** E2-445 EITC

**Telephone:** 204-474-8313

**Fax:** 204-474-7609

**Email Address:** [Edwina.Shwedyk@umanitoba.ca](mailto:Edwina.Shwedyk@umanitoba.ca)

**Website:** [sci.umanitoba.ca/cs/](https://sci.umanitoba.ca/cs/) (<https://sci.umanitoba.ca/cs/>)

**Academic Staff:** Please refer to Computer Science website (<https://sci.umanitoba.ca/cs/people/faculty-profile/>) for Faculty information.

## Computer Science Program Information

The department offers Master's and Doctoral programs at the graduate level, which cover many areas of computer science.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Computer Science M.Sc. Admission Requirements

Students may be admitted to the Master's program if they hold an Honours Bachelor's degree in Computer Science and if they present a suitable selection of courses. Admission is not guaranteed and each application will be individually considered by the department's Graduate Studies Committee.

Students can also be admitted to the Master's program upon successful completion of their pre-Master's program.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Computer Science M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/computer\\_science.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/computer_science.html)) page.

## Degree Requirements

Students must complete 15 credit hours of coursework and a thesis. All credit hours must be at the 7000 level and must include the 3 credit hour Research Methodologies course.

Students must consult with their departmental advisor prior to deciding on courses. Listed courses will not all be offered in any one particular year.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
COMP 7210	Research Methodologies	3
COMP 7XXX	Computer Science Courses <sup>1</sup>	9
COURSE XXXX	GRAD/Approved Course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>15</b>

- <sup>1</sup> Including courses in at least two of the three areas (Theory, Applications, and Systems).
- <sup>2</sup> Can be a graduate course in Computer Science or an approved course from a different department.
- <sup>3</sup> Every thesis M.Sc. student must, in consultation with his or her advisor, choose one of two options to get their thesis proposal approved within the first twelve months in the MSc. Program. They can either (i) write and submit a formal thesis proposal to their advisory committee members; or (ii) present their proposal to their advisory committee members in a formal, scheduled meeting.

**Note:**

- The advisory committee must be appointed within eight months of the start of the student's program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and email their registration request for approval to the graduate program advisor. Any changes, after the initial registration, must also be approved by the advisor.

A listing of available courses can be picked up at the departmental general office. Courses are subject to cancellation if there is insufficient enrolment.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Computer Science, Ph.D.

Computer Science

**Head:** Dr. David Gerhard

**Associate Head (Graduate) / Grad Chair:** Dr. Andrea Bunt

**Program Advisor:** Edwina Shwedyk

**Campus Address/General Office:** E2-445 EITC

**Telephone:** 204-474-8313

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**Email Address:** [Edwina.Shwedyk@umanitoba.ca](mailto:Edwina.Shwedyk@umanitoba.ca)

**Website:** [sci.umanitoba.ca/cs/](https://sci.umanitoba.ca/cs/) (<https://sci.umanitoba.ca/cs/>)

**Academic Staff:** Please refer to Computer Science website (<https://sci.umanitoba.ca/cs/people/faculty-profile/>) for Faculty information.

## Computer Science Program Information

The department offers Master's and Doctoral programs at the graduate level, which cover many areas of computer science.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Computer Science Ph.D. Admission Requirements

A candidate must normally complete an M.Sc. degree before entering the Ph.D. program. Individual qualifications other than this will be considered.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Computer Science M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/computer\\_science.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/computer_science.html)) page.

## Degree Requirements

Students must complete a minimum of 12 credit hours of coursework and a thesis. All credit hours must be at the 7000 level. Students must consult with their departmental advisor prior to deciding on courses. Courses listed will not all be offered in any one particular year.

**Expected Time to Graduate:** 4 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
COMP 7XXX	Computer Science Courses <sup>1</sup>	9
COURSE 7XXX	GRAD/Approved Course <sup>2</sup>	3
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> At least one course in each of the three areas (Theory, Applications, and Systems).

<sup>2</sup> Any graduate course in Computer Science or any graduate course from another department included on the list of approved graduate courses.

#### Note:

- The student is expected to complete the course requirements during the first 24 months of the PhD program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and email their registration request for approval to the graduate program advisor. Any changes, after the initial registration, must also be approved by the advisor.

A listing of available courses can be picked up at the departmental general office. Courses are subject to cancellation if there is insufficient enrolment.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Mathematics, M.Sc.

Mathematics

**Head:** Dr. Shaun Lui

**Campus Address/General Office:** 432 Machray Hall

**Telephone:** 204-474-8703

**Email Address:** [mathematics\\_dept@umanitoba.ca](mailto:mathematics_dept@umanitoba.ca)

**Website:** [sci.umanitoba.ca/mathematics/](https://sci.umanitoba.ca/mathematics/) (<https://sci.umanitoba.ca/mathematics/>)

**Academic Staff:** Please refer to the Mathematics website (<https://sci.umanitoba.ca/mathematics/people/>) for current staff listing.

## Mathematics Program Information

The department offers programs leading to Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Mathematics M.Sc. Admission Requirements

Students should generally have a strong background in Mathematics with courses leading to an Honours or four-year Major in Mathematics in a B.Sc., B.A., or equivalent degree. The department's Graduate Studies Committee will evaluate the student's background. Admission to the program will be based on this evaluation.

Students with other degrees or backgrounds may be eligible for admission to a pre-Master's program to the satisfaction of the department. Courses will be prescribed on an individual basis to help the student qualify for graduate work in Mathematics.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mathematics M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/mathematics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/mathematics.html)) page.

## Degree Requirements

**Thesis Route:** Students are required to complete at least 15 credit hours of course work, of which at least 9 credit hours must be from courses designated MATH 7000 or above and at least 6 credit hours in an area of mathematical sciences clearly different from the area of specialization of the thesis (as approved by the Department Head or designate). Each student in the thesis-based M.Sc. program must write a thesis.

**Coursework Route:** Students are required to complete at least 24 credit hours of course work at the 3000/7000/8000 level. At most 6 credit hours can be at the 3000 level. 4000 level courses do not count toward the degree requirement. Courses outside the Department of Mathematics (at most 9 credit hours) are also possible, subject to approval by the Department Head or designate. At least 6 credit hours must be in an area of mathematical sciences clearly different from the area of specialization of the report (see below). The minimum GPA of all courses must be at least 3.25.

Certain programs of study within mathematics may require courses outside the Department of Mathematics. A student may take at most two 3 credit hour reading courses from any one instructor for credit in this degree program.

Every M.Sc. student must make one 50-min presentation in any of the seminar series approved by the Department.

**Expected Time to Graduate:** 2 years

## Progression Chart

### THESIS PROGRAM

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MATH 7XXX	Courses designated MATH 7000 or above	9
Select two courses in an area of mathematical sciences		6
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>1,2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

<sup>2</sup> The M.Sc. thesis proposal must include a literature review, description of the proposed work, and a schedule for completion. The proposal should normally be completed within 10 months following the start of the program and must be approved by the student's advisor.

## Coursework Program

Course	Title	Hours
<b>Years 1-2</b>		
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
MATH XXXX	Courses designated MATH 3000/4000/7000 or above <sup>1</sup>	12
Select two courses in the area of mathematical sciences		6
MATH 8996 or MATH 8998	MSc project 1 (A project, or work done in industry, together with a report OR report on teaching an undergraduate course.) or MSc project 2	6
<b>Hours</b>		<b>24</b>
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> At most 6 credit hours can be at the 3000 level. 4000 level courses do not count toward the degree requirement. Courses outside the Department of Mathematics (at most 9 credit hours) are also possible, subject to approval.

### Notes:

- Certain programs of study within mathematics may require courses outside the Department of Mathematics.
- A student may take at most two 3 credit hour reading courses from any one instructor for credit in this degree program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to consult with a department advisor prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Mathematics, Ph.D.

Mathematics

**Head:** Dr. Shaun Lui

**Campus Address/General Office:** 432 Machray Hall

**Telephone:** 204-474-8703

**Email Address:** mathematics\_dept@umanitoba.ca

**Website:** [sci.umanitoba.ca/mathematics/](https://sci.umanitoba.ca/mathematics/) (<https://sci.umanitoba.ca/mathematics/>)

**Academic Staff:** Please refer to the Mathematics website (<https://sci.umanitoba.ca/mathematics/people/>) for current staff listing.

## Mathematics Program Information

The department offers programs leading to Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Mathematics Ph.D. Admission Requirements

Students entering the Ph.D. program must have either an Honours degree or a M.Sc. degree in Mathematics.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mathematics Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/mathematics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/mathematics.html)) page.

## Degree Requirements

All course work must be approved by the advisor and the Associate Head (Graduate Studies). A student may take at most two 3 credit hour reading courses from any one instructor for credit in this degree program. Particular programs of study within mathematics may require courses outside the Department of Mathematics.

In addition to the course work, the student is required to take a candidacy examination, which will consist of two comprehensive exams from the following areas: Algebra, Analysis, Combinatorics, Differential Equations, Computational Mathematics, Topology, at least one of which must be Algebra or Analysis. The candidate's supervisor must approve the choice of subjects.

To proceed to a Ph.D. degree a student must have a grade of "A" on each of the three parts.

All Ph.D. students are required to serve as instructors in at least two one-semester undergraduate courses (two 3 credit hour courses or one 6 credit hour course) after passing all comprehensive examinations. The Department Head may require a student to complete additional training before any teaching duties are assigned to them.

Every Ph.D. student must make two 50-min presentations in any of the seminar series approved by the Department.

**Expected Time to Graduate:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
Courses at the 7000 level or higher <sup>1</sup>		12
<b>Hours</b>		<b>12</b>
<b>Years 1-2</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> All course work must be approved by the advisor and the Associate Head (Graduate Studies). A student may take at most two 3 credit hour reading courses from any one instructor for credit in this degree program.

<sup>2</sup> Students in the Ph.D. program in Mathematics are normally expected to pass their candidacy examination within 13 months after their initial registration in the program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to consult with a department advisor prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Microbiology, M.Sc.

Microbiology

**Head:** D. Court

**Campus Address/General Office:** 213 Buller Building

**Telephone:** 204-474-9372

**Email Address:** [Rizza.Reyes@umanitoba.ca](mailto:Rizza.Reyes@umanitoba.ca)

**Website:** [sci.umanitoba.ca/micro/](https://sci.umanitoba.ca/micro/) (<https://sci.umanitoba.ca/micro/>)

**Academic Staff:** Please refer to the Microbiology website (<https://sci.umanitoba.ca/micro/faculty-and-staff/>) for academic staff information.

## Microbiology Program Information

The department offers Master of Science and Doctor of Philosophy programs of study.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## Microbiology M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Microbiology M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/microbiology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/microbiology.html)) page.

## Degree Requirements

A minimum of 6 credit hours of course work plus a thesis are required. These are minimal requirements; students may be directed to take additional courses by their Advisor or Advisory Committee.

**Expected Time to Graduate:** 2 - 3 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
MBIO 7010	Graduate Seminar in Microbiology 1 <sup>1</sup>	3
MBIO 7040	Graduate Microbiology <sup>1</sup>	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>6</b>

<sup>1</sup> MBIO courses can be taken in year 1 or year 2 of Master's program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the Department of Microbiology must have their programs approved by their advisor and the department head prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult

unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Microbiology, Ph.D.

Microbiology

**Head:** D. Court

**Campus Address/General Office:** 213 Buller Building

**Telephone:** 204-474-9372

**Email Address:** [Rizza.Reyes@umanitoba.ca](mailto:Rizza.Reyes@umanitoba.ca)

**Website:** [sci.umanitoba.ca/micro/](https://sci.umanitoba.ca/micro/) (<https://sci.umanitoba.ca/micro/>)

**Academic Staff:** Please refer to the Microbiology website (<https://sci.umanitoba.ca/micro/faculty-and-staff/>) for academic staff information.

## Microbiology Program Information

The department offers Master of Science and Doctor of Philosophy programs of study.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Microbiology Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Microbiology Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/microbiology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/microbiology.html)) page.

## Degree Requirements

A minimum of 6 credit hours of 7000 level course work is required beyond the M.Sc. degree, and must include one of MBIO 7010, MBIO 7020 or MBIO 7030 (Seminars in Microbiology I, II or III).

A minimum of 12 credit hours of 7000 level course work is required beyond the Honours Bachelor's degree when the M.Sc. degree is not required and 9 of these 12 credit hours should normally be from Microbiology courses (include one of MBIO 7010, MBIO 7020 or MBIO 7030). These are minimal requirements; students may be directed to take additional courses by their Advisor or Advisory Committee.

Students in the Ph.D. program are required to present one 50-minute seminar on their own research as part of the regular Department Seminar program.

**Expected Time to Graduate:** 4 - 6 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
MBIO 7010	Graduate Seminar in Microbiology 1 <sup>1</sup>	3
MBIO 7040	Graduate Microbiology <sup>1</sup>	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
MBIO 7020	Graduate Seminar in Microbiology 2 <sup>1</sup>	3
Select one of the following:		3
MBIO 7060	Microbial Interactions	
MBIO 7070	Bioprocessing	
MBIO 7100	Advanced Concepts in Molecular Biology	
MBIO 7160	Special Problems in Microbiology	
MBIO 7200	Macromolecular Structure Analysis	
Or other approved by advisory committee		
<b>Hours</b>		<b>6</b>
<b>Years 3-5</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis (register if defending that term)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Students who have transferred from the M.Sc. program and have successfully completed MBIO 7010 and MBIO 7040 may wish to take MBIO 7020 and/or the additional graduate course in Year 1.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have



questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the Department of Microbiology must have their programs approved by their advisor and the department head prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Physics, M.Sc.

Physics and Astronomy

**Head (Acting):** Dr. Stephen Pistorius

**Grad Chair:** Dr. Gerald Gwinner

**Campus Address/General Office:** 301 Allen Building

**Telephone:** 204-474-9817

**Fax:** 204-474-7622

**Email Address:** [info@physics.umanitoba.ca](mailto:info@physics.umanitoba.ca)

**Website:** [sci.umanitoba.ca/physics-astronomy/](https://sci.umanitoba.ca/physics-astronomy/) (<https://sci.umanitoba.ca/physics-astronomy/>)

**Academic Staff:** Please refer to the Physics and Astronomy website (<https://sci.umanitoba.ca/physics-astronomy/people/>) for Faculty information.

## Physics and Astronomy Program Information

The department offers opportunities for graduate study in several experimental and theoretical fields of contemporary interest, leading to the Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Physics and Astronomy M.Sc. Admission Requirements

To enter the Master's program directly, a student must have an Honours B.Sc. degree in Physics and Astronomy, Mathematics and Physics, or Engineering Physics from the University of Manitoba or the equivalent. Students without the degree entrance requirements will have their undergraduate program evaluated and may be required to complete a pre-Master's program of selected University of Manitoba undergraduate courses.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Physics M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/physics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/physics.html)) page.

## Degree Requirements

A Master's degree in physics normally consists of both coursework and a thesis. For students in the Comprehensive Medical Physics M.Sc. program, the course load is increased and the thesis requirement is replaced by research project.

The Master's program with thesis consists of two or three courses from the 7000 series offered by the department or from another department offering courses suitable for the candidate's program. In special cases, courses may be drawn from the 4000 series as listed. The program of study extends through a minimum period of twelve months. Frequently two summers of research work plus one winter of research and coursework are required to complete the program. In addition to coursework, these students must submit a thesis and defend it orally.

The Comprehensive M.Sc. program in medical physics is a two-year (18-month, course work, 6-month research project) program which requires 36 credits. A clinical research project in an approved laboratory and the submission of a research report is also required. On completion of the coursework and research project, the student will be required to pass a comprehensive oral examination.

**Expected Time to Graduate:** 2 years

## Progression Charts

### Thesis Program

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

Courses at the 7000 level	6
Courses at the 3000 level or above <sup>1</sup>	6
<b>Hours</b>	<b>12</b>
<b>Year 2</b>	
GRAD 7000	0
<b>Hours</b>	<b>0</b>
<b>Total Hours</b>	<b>12</b>

<sup>1</sup> All undergraduate courses chosen from outside the department must be relevant to the thesis work.

### Comprehensive Program in Medical Physics

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
<b>Hours</b>		<b>0</b>
<b>Term 1</b>		
PHYS 7390	Radiation Protection	3
PHYS 7360	Medical Radiation Physics	3
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>6</b>
<b>Term 2</b>		
PHYS 7370	Radiation Therapy Physics	3
PHYS 7470	Methods in Medical and Health Physics 2 - (Radiotherapy and Radiation Biology) <sup>1</sup>	3
BME 7012	Foundation of Physiology <sup>2</sup>	
ANAT 7014	Functional Human Anatomy <sup>2</sup>	
<b>Hours</b>		<b>6</b>
<b>Years 1-2</b>		
Select up to 12 credit hours of additional elective courses <sup>3</sup>		6
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
<b>Term 1</b>		
PHYS 7380	Radiation Biology	3
PHYS 7400	Linear Systems for Imaging	3
PHYS 7422	Physics of X-ray Imaging	3
<b>Hours</b>		<b>9</b>
<b>Term 2</b>		
PHYS 7410	Diagnostic Methods	3
PHYS 7430	Physics of Nuclear Medicine	3
PHYS 7460	Methods in Medical and Health Physics 1 - (Medical Imaging and Radiation Protection) <sup>1</sup>	3
PHYS 7700	Research Project in Medical Health Physics	0
GRAD 7010	Comprehensive Examination	0
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Research-based M.Sc. or Ph.D. Students should NOT take PHYS 7460 and PHYS 7470.

<sup>2</sup> Students who have not taken Anatomy or Physiology at an undergraduate level (BIOL 1410, BIOL 1012 or BIOL 2410 or equivalent) are required to take ANAT 7014 Functional Human Anatomy (2) and/or BME 7012 Foundation of Physiology (2) in addition to the courses listed above.

<sup>3</sup> Up to 12 credit hours of additional electives may be taken to achieve a minimum of 36 credit hours of coursework and to meet program needs. At least 6 credit hours must be courses at the 7000 level, while 6 credit hours may be 4000 or higher level courses. Approved 4000 level courses include PHYS 4386, PHYS 4250, PHYS 4516, PHYS 4646.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Physics, Ph.D.

Physics and Astronomy

**Head (Acting):** Dr. Stephen Pistorius

**Grad Chair:** Dr. Gerald Gwinner

**Campus Address/General Office:** 301 Allen Building

**Telephone:** 204-474-9817

**Fax:** 204-474-7622

**Email Address:** info@physics.umanitoba.ca

**Website:** sci.umanitoba.ca/physics-astronomy/ (<https://sci.umanitoba.ca/physics-astronomy/>)

**Academic Staff:** Please refer to the Physics and Astronomy website (<https://sci.umanitoba.ca/physics-astronomy/people/>) for Faculty information.

## Physics and Astronomy Program Information

The department offers opportunities for graduate study in several experimental and theoretical fields of contemporary interest, leading to the Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Physics and Astronomy Ph.D. Admission Requirements

The normal procedure to be a candidate for a Ph.D. degree is to complete an M.Sc. degree first. However, students with an honours degree from the University of Manitoba or equivalent may be accepted directly into the PhD program.

International students entering the Ph.D. program are strongly encouraged to write and obtain a minimum grade of 650 on the GRE physics subject examination prior to applying for the Ph.D. program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Physics Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/physics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/physics.html)) page.

### Degree Requirements

The main program of studies is selected from one of the major fields of research, and is supplemented by an ancillary program which takes into account the student's interests and breadth of experience. Ancillary subjects must be chosen from a field of physics distinct from the major area of study or from other departments (e.g., Mathematics) offering suitable courses.

Students must pass a candidacy exam and submit a thesis which describes their research work and which will be examined according to the general regulations.

Where admission to the Ph.D. is directly from an Honours Bachelor degree or equivalent, a minimum of 24 credit hours plus a thesis is required. The coursework must include a minimum of 18 credit hours at

the 7000-level or higher with the balance of the coursework at the 3000-level or higher. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.

The Ph.D. Program in Medical and Health Physics is designed to prepare students for a Clinical and Academic career in Medical Physics or Health Physics. The program requires a minimum of 24 credits of didactic course work beyond an Honours. B.Sc. and a minimum of 12 credits beyond a M.Sc., as well as the standard departmental Ph.D. research project in a Medical and Health Physics field.

**Expected Time to Graduate:** 4 years

## Progression Charts

### Thesis Program

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Courses at the 7000 level <sup>1</sup>		12
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> A maximum of 24 credit hours of coursework is allowed toward the Ph.D. program.

<sup>2</sup> The student must successfully complete the formal candidacy examination within the first year after the completion of the Ph.D. program coursework, but in no case later than one year prior to expected graduation.

### COMPREHENSIVE PROGRAM IN MEDICAL PHYSICS

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
<b>Hours</b>		<b>0</b>
<b>Term 1</b>		
PHYS 7390	Radiation Protection	3
PHYS 7360	Medical Radiation Physics	3
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>6</b>
<b>Term 2</b>		
PHYS 7370	Radiation Therapy Physics	3
PHYS 7470	Methods in Medical and Health Physics 2 - (Radiotherapy and Radiation Biology) <sup>1</sup>	3
BME 7012	Foundation of Physiology <sup>2</sup>	
ANAT 7014	Functional Human Anatomy <sup>2</sup>	
<b>Hours</b>		<b>6</b>

**Years 1-2****Term 2**Select up to 12 credit hours of additional elective courses <sup>3</sup>

<b>Hours</b>	<b>0</b>
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**Year 2****Term 1**

PHYS 7380	Radiation Biology	3
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PHYS 7400	Linear Systems for Imaging	3
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PHYS 7422	Physics of X-ray Imaging	3
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<b>Hours</b>	<b>9</b>
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**Term 2**

PHYS 7410	Diagnostic Methods	3
-----------	--------------------	---

PHYS 7430	Physics of Nuclear Medicine	3
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PHYS 7460	Methods in Medical and Health Physics 1 - (Medical Imaging and Radiation Protection) <sup>1</sup>	3
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GRAD 8000	Doctoral Thesis	0
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GRAD 8010	Doctoral Candidacy Examination	0
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<b>Hours</b>	<b>9</b>
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<b>Total Hours</b>	<b>30</b>
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<sup>1</sup> Research-based M.Sc. or Ph.D. Students should NOT take PHYS 7460 and PHYS 7470.

<sup>2</sup> Students who have not taken Anatomy or Physiology at an undergraduate level (BIOL 1410, BIOL 1012 or BIOL 2410 or equivalent) are required to take ANAT 7014 Functional Human Anatomy (2) and/or BME 7012 Foundation of Physiology (2) in addition to the courses listed above.

<sup>3</sup> Up to 12 credit hours of additional electives may be taken to achieve a minimum of 36 credit hours of coursework and to meet program needs. At least 6 credit hours must be courses at the 7000 level, while 6 credit hours may be 4000 or higher level courses. Approved 4000 level courses include PHYS 4386, PHYS 4250, PHYS 4516, PHYS 4646.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Statistics, M.Sc.

Statistics

**Head:** Dr. Saman Muthukumarana (Acting)

**Grad Chair:** Dr. Po Yang

**Campus Address/General Office:** 318 Machray Hall

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**Fax:** 204-474-7621

**Email Address:** [grad-program@stats.umanitoba.ca](mailto:grad-program@stats.umanitoba.ca)

**Website:** [sci.umanitoba.ca/statistics/](https://sci.umanitoba.ca/statistics/) (<https://sci.umanitoba.ca/statistics/>)

**Academic Staff:** Please refer to the Statistics website (<https://sci.umanitoba.ca/statistics/directory/academic-staff/>) for academic staff information.

## Statistics Program Information

The University of Manitoba offers graduate programs in statistics leading to the Master of Science and Doctor of Philosophy degrees. Applications are encouraged from students with strong interest in statistics, mathematics or related fields.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## Statistics M.Sc. Admission Requirements

Completion of a B.Sc. degree in Statistics is usually required for admission to the Master's program.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Statistics M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/statistics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/statistics.html)) page.

## Degree Requirements

The Master's degree may be earned in one of three ways:

### Submission of a Thesis

Course	Title	Hours
STAT 7080	Advanced Statistical Inference	3
STAT 7140	Linear Models	3
STAT 7XXX	Course at the 7000 level in statistics	3
Select 6 credit hours of approved coursework at the 4000 or 7000 level		6
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Total Hours</b>		<b>15</b>

### Submission of a Practicum

Course	Title	Hours
STAT 7080	Advanced Statistical Inference	3
STAT 7140	Linear Models	3
STAT 7290	Statistical Consulting	3
Select 6 credit hours of approved coursework at the 4000 or 7000 level		6
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Total Hours</b>		<b>15</b>

### Course Work Option

Course	Title	Hours
STAT 7080	Advanced Statistical Inference	3
STAT 7140	Linear Models	3
STAT 7320	Research Project in Statistics	3
Select 9 credit hours of approved coursework at the 7000 level in statistics		9
Select 6 credit hours of approved coursework at the 4000 or 7000 level		6
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
<b>Total Hours</b>		<b>24</b>

Students are also expected to take part in laboratory instruction and department seminars.

**Expected Time to Graduate:** 1-2 years, depending on the option selected.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the Department of Statistics must consult with the grad chair and the graduate program assistant prior to attempting to register.

All students must consult with their advisor prior to registration and present a completed registration form to 318 Machray Hall. Any changes, after the initial registration, must also be approved by the advisor.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Statistics, Ph.D.

Statistics

**Head:** Dr. Saman Muthukumarana (Acting)

**Grad Chair:** Dr. Po Yang

**Campus Address/General Office:** 318 Machray Hall

**Telephone:** 204-474-9826

**Fax:** 204-474-7621

**Email Address:** grad-program@stats.umanitoba.ca

**Website:** sci.umanitoba.ca/statistics/ (<https://sci.umanitoba.ca/statistics/>)

**Academic Staff:** Please refer to the Statistics website (<https://sci.umanitoba.ca/statistics/directory/academic-staff/>) for academic staff information.

## Statistics Program Information

The University of Manitoba offers graduate programs in statistics leading to the Master of Science and Doctor of Philosophy degrees. Applications are encouraged from students with strong interest in statistics, mathematics or related fields.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Statistics Ph.D. Admission Requirements

Completion of a Master's degree in Statistics is usually required for admission to the Ph.D. program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Statistics Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/statistics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/statistics.html)) page.

## Degree Requirements

Students must satisfy the following requirements:

- Within the first two years of the Ph.D. program, a minimum of 6 credit hours of courses must be taken in the areas of Advanced Theory of Probability, Advanced Theory of Inference, Advanced Applied Statistics, and Advanced Stochastic Processes.
- Candidates are required to attempt and successfully complete at least twelve credit hours at the 7000 level. These courses will normally be taken from the Department of Statistics. Courses will normally be recommended by the candidate's supervisor.
- Each Ph.D. student is required to present at least one public seminar in the area of their Ph.D. research.
- Candidates are required to pass a candidacy examination. The candidacy examination should normally be completed within one year after the formation of the student's Advisory Committee, but no later than one year prior to expected graduation. The candidacy

examination will be set and administered by the candidate's Ph.D. advisory committee. The format may vary.

- A thesis is required.

**Expected Time to Graduate:** 5 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>0</b>
<b>Years 1-2</b>		
STAT 7XXX	Statistics courses <sup>1</sup>	12
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> A minimum of 6 credit hours of courses must be taken in the areas of Advanced Theory of Probability, Advanced Theory of Inference, Advanced Applied Statistics, and Advanced Stochastic Processes.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the Department of Statistics must consult with the grad chair and the graduate program assistant prior to attempting to register.

All students must consult with their advisor prior to registration and present a completed registration form to 318 Machray Hall. Any changes, after the initial registration, must also be approved by the advisor.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## **Bona Fide Academic Requirements (BFAR)**

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## **General Regulations**

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Faculty of Social Work

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Social Work, M.S.W. (p. 1521)	2-4	24-27	
Social Work, Ph.D. (p. 1523)	5-6	24	
Social Work Indigenous Knowledges, 2 M.S.W. (p. 1519)		27-30	

## Social Work Indigenous Knowledges, M.S.W.

Social Work

**Dean:** Dr. Michael Yellow Bird

**Associate Dean(s):** Dr. Maria Cheung- Undergraduate Programs; Judith Hughes- Graduate Studies & Research

**Director:** Dr. Mary Kate Dennis

**Campus Address/General Office:** William Norrie Centre, 485 Selkirk Avenue

**Telephone:** 204-474-6663

**Fax:** 204-663-8857

**Email Address:** mswik@umanitoba.ca

**Website:** [umanitoba.ca/social-work/](https://umanitoba.ca/social-work/) (<https://umanitoba.ca/social-work/>)

**Academic Staff:** Please refer to the Social Work website (<https://umanitoba.ca/social-work/faculty-and-staff/>) for Faculty information.

## Master of Social Work based in Indigenous Knowledges Program Information

The Master of Social Work degree based in Indigenous Knowledges (M.S.W.- I.K.) is an advanced degree built on an Indigenous foundation, and the B.S.W. degree. While the program focuses on preparing graduates to work in Indigenous organizations and/or with Indigenous peoples, and to confront the structural barriers Indigenous peoples face, it will also prepare graduates with skills transferable to a wider range of organizations and peoples. A range of positions within the human services are open to graduates, such as family therapists, case managers, group workers, community developers, policy analysts, and administrators. In addition, graduates may be active as scholars, politicians, senior civil servants, private consultants, and international development.

The objectives of the program are to support students to:

1. work from Indigenous perspectives;
2. understand the colonial history of events which have led to present circumstances;
3. understand social justice, anti-oppressive practices, anti-colonialism, and Indigenism;
4. explore Indigenous forms of helping and support(s) applicable to social work;
5. recover and support Indigenous values, practices, and structures;
6. empower Indigenous identities;

7. maintain a close connection with Indigenous communities and agencies, and
8. develop as advanced social work practitioners.

The foundational material of this program gives particular attention to knowledges, perspectives, values, and practices of Indigenous peoples that will support graduates to work from both Indigenous and critical social work theory perspectives. This material is relevant to Indigenous and non-Indigenous persons in their personal and professional development as social workers with advanced training. The degree is designated as Master of Social Work degree.

Considerable attention is given to issues of educational equity. Like the M.S.W. program, these matters are included within the M.S.W. based in Indigenous Knowledges program's curriculum, and every effort is made to ensure that people from marginalized groups have access to the M.S.W. based in Indigenous Knowledges program. The purpose of this initiative is to achieve equity in professional education so that no person shall be denied educational opportunities to benefits for reasons unrelated to ability. In fulfillment of this goal the aim is to correct the conditions of disadvantage in professional education experienced by First Nations, Inuit, and Metis peoples in Canada, persons with disabilities, immigrants and refugees to Canada, LBTTQ and persons who are members of a visible minority in Canada. Educational equity does not mean treating people in the same way. It requires overt measures and the accommodation of difference while maintaining a particular focus on the experiences and perspectives of Indigenous peoples.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.S.W.-I.K. Admission Requirements

Applicants must meet the following requirements:

- Possession of a B.S.W. degree (by June 30th of the application year) from an accredited university or a four-year degree other than a B.S.W. degree from an accredited program which is recognized by the University of Manitoba.
- Participation in an admissions interview process
- Participation in a program orientation
- A well developed statement of intent
- Three letters of reference from academic, employment, and Indigenous community sources



- A minimum grade point average of 3.0 (B) is required in the last sixty credit hours of university study
- If courses have been taken subsequent to the degree as a Special Student and/or Occasional Student and/or in a subsequent degree or a Pre-Masters program, they will be calculated into the grade point average as part of the last 60 credit hours
- Applicants who self-identify as members of one or more of the Educational Equity priority groups, and who possess a grade point average between 2.5 and 2.99 will be reviewed for special consideration. Applicants with a grade point average below 2.5 will not be considered.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.S.W.-I.K. program of study (<https://umanitoba.ca/explore/programs-of-study/social-work-indigenous-knowledges-msw/>) page.

## Degree Requirements

The total credit hours required for the program are 27 credits in the project based option plus the zero credit courses. The thesis option is 24 credit hours plus the zero credit courses. Students must successfully complete all courses in the program in order to graduate.

Students choose either the project-based option, which includes the completion of SWRK 7760 and SWRK 7790, and SWRK 7820, or the thesis option, which includes completion of SWRK 7760, and SWRK 7790. Students choosing the thesis option must register for GRAD 7000.

The program requires at least 12 months of full time study. Students who choose the thesis option are likely to require more time depending on the nature of their research. Students may take the M.S.W. based in Indigenous Knowledges program on a full time or part time basis.

Students have a limit of four years to complete the full time program and a limit of six years to complete the part time program.

Note: The M.S.W.-I.K. program is not offered through distance delivery. The MSW-IK program will incorporate Blended Learning that includes one-week intensive courses, face-to-face interactions, and the use of Educational Technology.

**Expected Time to Graduate:** 2 years

## Course Requirements

Course	Title	Hours
SWRK 7700	Grounding Our Foundation in Indigenous Knowledges and Social Work	0
SWRK 7710	Remembering Our Histories	3
SWRK 7720	Critical Theory and Indigenous Peoples	3
SWRK 7730	Indigenous Research Methodologies and Knowledge Development	3
SWRK 7740	Indigenous Peoples, Identity, and Social Work	3
SWRK 7750	Indigeneity, Power, Privilege, and Social Work	3
SWRK 7760	Project/Thesis Seminar 1	0
SWRK 7770	Social Challenges and Indigenous Helping Practices	3
SWRK 7780	Social Work, Social Challenges, and Indigenous Peoples	3
SWRK 7790	Project/Thesis Seminar 2	0

SWRK 7800	Indigenism	3
SWRK 7810	Anti-Colonial Social Work	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following options:		0-3
Project Based Route:		
SWRK 7820	Project Seminar 3	
Thesis Based Route:		
GRAD 7000	Master's Thesis	
<b>Total Hours</b>		<b>27-30</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their faculty advisor to select and approve the courses before registering.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Social Work, M.S.W.

Social Work

**Dean:** Dr. Michael Yellow Bird

**Associate Dean(s):** Dr. Maria Cheung-Undergraduate Programs; Dr. Judith Hughes-Graduate Programs & Research

**Campus Address/General Office:** 521 Tier Building

**Telephone:** 204-474-7050

**Fax:** 204-474-7594

**Email Address:** social\_work@umanitoba.ca

**Website:** [umanitoba.ca/social-work/](https://umanitoba.ca/social-work/) (<https://umanitoba.ca/social-work/>)

**Academic Staff:** Please refer to the Social Work website (<https://umanitoba.ca/social-work/faculty-and-staff/>) for Faculty information.

## Master of Social Work Program Information

The Master of Social Work program structure ensures that students have the knowledge and skills required to meet accreditation standards while continuing to allow for specialization. The program offers students flexibility in designing a program that meets their learning objectives.

The M.S.W. is an advanced specialized degree built upon the more generalist B.S.W. degree. Considerable attention is given to issues of educational equity. In addition to treating these matters as course content, every effort is made to ensure that people from marginalized groups have access to the M.S.W. program.

The purpose of this initiative is to achieve equity in professional education so that no person shall be denied educational opportunities or benefit for reasons unrelated to ability. In fulfilment of this goal, the aim is to correct the conditions of disadvantage in professional education experienced by First Nations, Inuit, and Metis peoples in Canada, persons with disabilities, immigrants and refugees to Canada, LGBTTQ and persons who are members of a visible minority in Canada. Educational equity does not mean treating people in the same way. It also requires overt measures and the accommodation of difference while maintaining a particular focus on the experiences and perspectives of Indigenous peoples.

**Note:** The M.S.W. program is **not** offered through Distance Delivery.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.S.W. Admission Requirements

Students must meet the following requirements:

- Possession of a B.S.W. degree (convocated) or a minimum of a four-year undergraduate degree other than a B.S.W. (convocated) by June 30 of the application year, from an accredited program or its equivalent, which is recognized by the University of Manitoba.
- A minimum Grade Point Average of 3.0 (B) is required in the last 60 credit hours of university study.
- If courses have been taken subsequent to the degree as a Special Student and/or Occasional Student and/or in a subsequent degree

or a Pre-Master program, they will be calculated into the Grade Point Average as part of the last 60 credit hours.

- Applicants who self-identify as members of one or more of the Educational Equity priority groups, and who possess a Grade Point Average between 2.5 and 2.99, will be reviewed for special consideration. Applicants with Grade Point Averages below 2.5 will not be considered.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.S.W. program of study (<https://umanitoba.ca/explore/programs-of-study/social-work-msw/>) page.

## Degree Requirements

The credit hour requirement is 27 credit hours in the course-based option and 24 credit hours in the thesis option. Students may take the M.S.W. program on a full-time or part-time basis.

The program requires at least 12-18 months of full-time study (students who choose the thesis option may require more time depending on the nature of their research).

**Expected Time to Graduate:** 2-4 years

## Course Requirements

All students must:

- complete four core courses (12 credit hours)
- complete additional specialized social work courses (9 credit hours)
- complete 3 credit hours of electives (which may be taken with Social Work or other departments)

Students choose either the course-based option, which includes the completion of SWRK 7180 and SWRK 7190, or the thesis option. Students completing a thesis must complete at least one course from the research cluster.

Course	Title	Hours
Select four Core Courses		12
Select three Specialized Social Work Courses		9
Select 3 credit hours of Electives (which may be taken with Social Work or other departments)		3
Select one of the following options:		0-3
Course-Based / Advanced Field Route		
SWRK 7180	Advanced Field Practice	
SWRK 7190	Integrating Theory and Research in Advanced Field Practice	
Thesis-Based Route		
GRAD 7000	Master's Thesis	
<b>Total Hours</b>		<b>24-27</b>

### Core Courses

Course	Title	Hours
SWRK 6010	Data Analysis for Social Work Research	3
SWRK 6070	Qualitative Research in Social Work	3
SWRK 7600	Critical Perspectives and Social Work	3
SWRK 7620	Paradigms, Methodologies, and Methods for Social Work Research	3

GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Specialized Courses		
SWRK 7630	Advanced Social Work Practice with Individuals and Families	3
SWRK 7640	Application and Critique of Theory and Research in Social Work Practice with Individuals and Families	3
SWRK 7300	Clinical Evaluation of Social Work Interventions	3
SWRK 7650	Advanced Social Work Practice with Groups	3
SWRK 7660	Social Work Perspectives on Practice with Networks, Neighbourhoods and Communities	3
SWRK 7670	Community Mobilization: Application of Concepts in Social Work Practice with Groups, Networks and Co	3
SWRK 7430	Evaluation Research in Social Work Practice	3
SWRK 7440	Policy Analysis in Social Work Practice	3
SWRK 7690	Leadership, Strategic Program Planning and Financial Management in Social Service Organizations	3

### Progression Chart Course Requirements

All students must:

- complete four core courses (12 credit hours)
- complete additional specialized social work courses (9 credit hours)
- complete 3 credit hours of electives (which may be taken with Social Work or other departments)

Students choose either the course-based option, which includes the completion of SWRK 7180 and SWRK 7190, or the thesis option.

Course	Title	Hours
<b>Year 1</b>		
SWRK 6010	Data Analysis for Social Work Research	3
SWRK 6070	Qualitative Research in Social Work	3
SWRK 7600	Critical Perspectives and Social Work	3
SWRK 7620	Paradigms, Methodologies, and Methods for Social Work Research	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select 9 credit hours of specialized courses and 3 credit hours of elective courses		12
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
Select one of the following:		
Course-Based / Advanced Field Route:		0-3
SWRK 7180	Advanced Field Practice	
SWRK 7190	Integrating Theory and Research in Advanced Field Practice	
Thesis-Based Route:		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0-3</b>
<b>Total Hours</b>		<b>24-27</b>

### Specialized Courses

Course	Title	Hours
SWRK 7630	Advanced Social Work Practice with Individuals and Families	3
SWRK 7640	Application and Critique of Theory and Research in Social Work Practice with Individuals and Families	3
SWRK 7300	Clinical Evaluation of Social Work Interventions	3
SWRK 7650	Advanced Social Work Practice with Groups	3
SWRK 7660	Social Work Perspectives on Practice with Networks, Neighbourhoods and Communities	3
SWRK 7670	Community Mobilization: Application of Concepts in Social Work Practice with Groups, Networks and Co	3
SWRK 7430	Evaluation Research in Social Work Practice	3
SWRK 7440	Policy Analysis in Social Work Practice	3
SWRK 7690	Leadership, Strategic Program Planning and Financial Management in Social Service Organizations	3

**Note:** Not all courses may be offered annually.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their faculty advisor to select and approve the courses before registering.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Social Work, Ph.D.

Social Work

**Dean:** Dr. Michael Yellow Bird

**Associate Dean(s):** Dr. Maria Cheung-Undergraduate Programs; Dr. Judith Hughes-Graduate Programs & Research

**Campus Address/General Office:** 521 Tier Building

**Telephone:** 204-474-7050

**Fax:** 204-474-7594

**Email Address:** social\_work@umanitoba.ca

**Website:** [umanitoba.ca/social-work/](https://umanitoba.ca/social-work/) (<https://umanitoba.ca/social-work/>)

**Academic Staff:** Please refer to the Social Work website (<https://umanitoba.ca/social-work/faculty-and-staff/>) for Faculty information.

## Ph.D. in Social Work Program Information

The Doctor of Philosophy program is an advanced degree, focusing on developing skills for research and teaching.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Social Work Ph.D. Admission Requirements

Admission requirements to the doctoral program in Social Work include:

Master of Social Work degree, or equivalent, from an accredited degree-granting university, with a minimum grade point average of 3.0 (B) (as defined by the University of Manitoba).

Minimum research competency in both qualitative and quantitative methods equivalent to the level required for the Masters of Social Work degree from the University of Manitoba, with a minimum grade of 3.0 (B) within the last 10 years. A student not meeting this entrance requirement may be recommended for conditional admission with the stipulation that the student take the necessary course or courses. The course or courses will be an additional requirement beyond the 24 credit hours required for the program.

Evidence of educational and professional experience that will indicate a capacity to undertake research-oriented post-graduate work. Applicants will be asked to submit a curriculum vitae.

The candidate is required to submit a two-page summary of their proposal for the PhD program, which includes:

1. Rationale for the proposed research
2. Research questions
3. A concise literature review of the topic
4. Proposed methodology for the research
5. Outline a plan to complete the research

The proposal should be clear enough that a potential faculty advisor can be identified and, in addition, the applicant must present a letter (email confirmation is acceptable) of an agreement with a proposed advisor who agrees to serve as the advisor.

Selection of students for admission is based on the recommendations of a Selection Committee of a minimum of three persons appointed by the Ph.D. Program Committee (for composition of this committee, please refer to the Faculty of Social Work) to evaluate each applicant's qualifications and report on his/her suitability for Ph.D. studies. Acceptance is subject to approval by the Ph.D. Program Committee and the Graduate Programs Committee; however, the Graduate Programs Committee may delegate this responsibility to the Ph.D. Program Committee. Selection decisions made by the Faculty of Social Work are presented as recommendations that must be approved by the Faculty of Graduate Studies.

### Advising

Each student must contract with an advisor upon admission. An advisory committee that includes the advisor and two additional members will be appointed to assist the student in developing a study plan and to supervise the student's research. All members of the advisory committee must be members of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Social Work Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/social-work-phd/>) page.

## Degree Requirements

The program consists of:

- 24 credit hours of approved 7000-level course work beyond the M.S.W. degree,
- a candidacy examination,
- a thesis proposal, and
- a Ph.D. thesis.

A minimum of two years of study (the Fall and Winter terms of the first and second year following admission) is required.

### Candidacy

A candidacy examination committee will also be appointed when the student begins to prepare for the candidacy examination. This three-person committee, which includes the advisor, is responsible for administering the candidacy examination. The candidacy examination should be taken within a year of completion of coursework. The candidacy examination consists of a major paper on a topic within the student's general area of study and an oral examination of the topic covered in the paper.

### Dissertation Research

The student's Ph.D. advisory committee, chaired by a thesis advisor, provides advice and guidance in the development of the proposal for the

dissertation, and during the ongoing research phase. Normally, advisory committee members become members of the examining committee for the dissertation during the final examination for the Ph.D. degree.

**Expected Time to Graduate:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SWRK 8010	Perspectives on Knowledge for Social Work	3
SWRK 8100	Social Work Past and Present: Trends, Institutions and Practices	3
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
Select 9 credit hours in Research Courses <sup>1</sup>		9
Select 9 credit hours in Specialization-Focused Courses <sup>2</sup>		9
Candidacy <sup>3</sup>		
<b>Hours</b>		<b>18</b>
<b>Year 3</b>		
GRAD 8010	Doctoral Candidacy Examination (Successful completion of Candidacy Paper)	0
GRAD 8000	Doctoral Thesis (Thesis Proposal Approved by Committee)	0
Finalize Ethics Approval Application		
Ethics Approval Obtained		
<b>Hours</b>		<b>0</b>
<b>Year 4</b>		
GRAD 8000	Doctoral Thesis (Start Data Collection)	0
<b>Hours</b>		<b>0</b>
<b>Years 5-6</b>		
GRAD 8000	Doctoral Thesis	0
Successfully Defend the Doctoral Dissertation		
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Courses selected by the student in consultation with her or his advisory committee to further her or his specialized program of study. The main criterion for selection is the appropriateness of the methodologies covered in selected courses for the area of specialization being pursued. It is strongly recommended that courses focusing on both quantitative and qualitative methodologies be included. Course selection must be approved by the Ph.D. Program Committee.

<sup>2</sup> Courses selected by the student in consultation with her or his advisory committee to establish expertise in a particular area of specialization defined as a field of policy, theory, practice or practice method. The course selection must be approved by the Ph.D. Program Committee.

<sup>3</sup> Selection of Candidacy Committee. Proposal for Candidacy paper approved.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their faculty advisor to select and approve the courses before registering.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Marcel A. Desautels Faculty of Music

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Music, M.A. (p. 1525)	2	21	
Music, M.Mus. (p. 1526)	2	24	

## Music, M.A.

Music

**Dean:** Dr. Edward Jurkowski

**Associate Dean(s):** Dr. James Maiello (Graduate Programs and Research);  
Dr. Laura Loewen (Undergraduate Programs)

**Campus Address/General Office:** T319 Taché Hall, 150 Dafoe Road

**Telephone:** 204-474-9310

**Fax:** 204-474-7546

**Email Address:** music@umanitoba.ca

**Website:** [umanitoba.ca/music/](https://umanitoba.ca/music/) (<https://umanitoba.ca/music/>)

**Academic Staff:** Please refer to the Music website (<https://umanitoba.ca/music/faculty-instructors-staff/>) for academic staff information.

## Music Program Information

The Marcel A. Desautels Faculty of Music offers a Master of Arts in Music Research that focuses on graduate-level research in music, broadly in the areas of Musicology and Music Theory.

### M.A. Admission Requirements

Persons who have completed a Bachelor of Music, a Bachelor of Arts with a major in Music, or a related degree may apply for admission to the M.A. program.

### Diagnostic Examination

Students admitted to the M.A. in Music Research program must demonstrate knowledge of music theory and music history comparable to that of B.Mus. graduates of the Desautels Faculty of Music. This will normally be assessed by diagnostic examinations administered in the week preceding the first week of classes in the Fall semester.

Appropriate review materials will be made available to students in advance of the diagnostic examinations. Examinations will be evaluated by members of the music theory and musicology faculty, respectively.

Incoming graduate students who do not achieve satisfactory results on any portion of these diagnostic examinations may be required to undertake remediation. Such remediation will normally take the form of successful completion of undergraduate coursework, normally not to exceed 9 CRH, in the Desautels Faculty of Music, which will not count for credit toward the M.A. in Music Research. The associate dean responsible for graduate programs will assign remedial coursework on the advice of the musicology and music theory faculty.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Music M.A. program of study (<https://umanitoba.ca/explore/music-research-ma/>) page.

## Degree Requirements

The M.A. in Music Research requires 21 credit hours plus a Thesis or Practicum.

All students must take the following core courses:

Course	Title	Hours
GRAD 7000	Master's Thesis	0
	or GRAD 7030 Master's Practicum	
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MUSC 7050	Bibliography and Research Methods	3

- Students will also complete one 7000-level Musicology course (3 CH), and one 7000-level Music Theory course (3 CH). The remaining program requirements include four courses (12 CH) from a list of offerings that include:
  - MUSC 7100 Proseminar in Musicology (3 CH)
  - MUSC 7120 Seminar in Musicology (3 CH)
  - MUSC 7130 Seminar in Ethnomusicology (3 CH)
  - MUSC 7200 Proseminar in Music Theory (3 CH)
  - MUSC 7210 Seminar in Music Theory/Analysis ((3 CH)
  - MUSC 7240 Music Theory Pedagogy (3 CH)
- At least 9 credit hours must consist of 7000-level Musicology and/or Music Theory courses. Additional elective(s) would be assigned by advisement.
- Students must maintain a minimum degree grade point average of 3.0 with no grade below C+.

### Second Language Reading Requirement

Students must demonstrate a reading proficiency in one language other than English. The language required will normally be French, German or Italian. Other languages will be accepted if more appropriate to the student's program. The specific requirement will be determined in consultation with the student's committee. This requirement may be met through one of the following:

- Evidence of the completion of an undergraduate language course at the 1000 level or above in the five years preceding acceptance into the program.
- The translation, using a dictionary, of a passage in the major area of study.
- Completion of a course at the 1000 or higher level after registration in the Master's degree program.
- Determination by the student's committee that the requirement has been met through previous education and/or experience.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MUSC 7050	Bibliography and Research Methods	3
7000-level Musicology course		3
MUSC 7100	Proseminar in Musicology	
MUSC 7120	Seminar in Musicology <sup>1</sup>	
MUSC 7130	Seminar in Ethnomusicology	
7000-level Music Theory course		3
MUSC 7200	Proseminar in Music Theory	
MUSC 7210	Seminar in Music Theory/Analysis <sup>1</sup>	
MUSC 7240	Music Theory Pedagogy	
7000-level Musicology or Music Theory courses		6
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
GRAD 7000 or GRAD 7030	Master's Thesis or Master's Practicum	0
7000-level Musicology or Music Theory courses		6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>21</b>

<sup>1</sup> The content for MUSC 7120, 7130 and MUSC 7210 will change each time these courses are offered, allowing students to repeat these courses for credit when the subtitle differs.

### Notes:

- A formal written proposal for the thesis topic must be submitted to and approved by the Advisory Committee by the end of the first year in the program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All graduate students must meet with the Faculty's Registrar to obtain and complete a course approval form; this form will list the student's proposed course schedule. Students must receive written approval from both their advisor and the Chair of the Grad Studies program before registering. Registration revisions are to be approved in a like manner.

Not all courses are offered each year: please check with the Faculty's Registrar for current and upcoming offerings.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Music, M.Mus.

Music

**Dean:** Dr. Edward Jurkowski

**Associate Dean(s):** Dr. James Maiello (Graduate Programs and Research); Dr. Laura Loewen (Undergraduate Programs)

**Campus Address/General Office:** T319 Tache Hall, 150 Dafoe Road

**Telephone:** 204-474-9310

**Fax:** 204-474-7546

**Email Address:** [music@umanitoba.ca](mailto:music@umanitoba.ca)

**Website:** [umanitoba.ca/music/](https://umanitoba.ca/music/) (<https://umanitoba.ca/music/>)

**Academic Staff:** Please refer to the Music website (<https://umanitoba.ca/music/faculty-instructors-staff/>) for academic staff information.

## Music Program Information

The Marcel A. Desautels Faculty of Music offers a Master of Music (M.Mus.) in three major areas: performance, composition and conducting. Students in the string component of the program are eligible for adjunct training by a special agreement with the Winnipeg Symphony Orchestra. Students in the voice component are eligible to be considered for training and solo professional activities with Winnipeg operatic companies, choral organizations and chamber groups. Students in the collaborative piano component are eligible to be considered for training with Winnipeg operatic companies and choral organizations or with professional chamber ensembles.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## M.Mus. Admission Requirements

Applicants must normally hold an undergraduate degree with a major in music from an institution recognized by the Faculty of Graduate Studies (e.g. Bachelor of Music, Bachelor of Arts with a major in Music, etc.). The Faculty may recommend for admission applicants holding other qualifications (e.g. conservatory diplomas) on the basis of exceptional professional experience and accomplishment. Applicants admitted on the basis of a video audition will be granted provisional status in the M.Mus. program pending a successful live audition after the student's arrival on campus.

## Diagnostic Examinations

Students admitted to the M.Mus. program must demonstrate knowledge of music theory and music history comparable to that of B.Mus. graduates of the Faculty. This will normally be assessed by diagnostic examinations administered by the Faculty prior to the first day of fall-semester classes. Appropriate review materials will be made available to students in advance of the diagnostic examinations.

Incoming graduate students who do not achieve satisfactory results on any component of these diagnostic examinations may be required to undertake remediation. Such remediation will normally take the form of successful completion of undergraduate coursework in the Faculty, which will not count for credit toward the M.Mus.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Mus. program of study (<https://umanitoba.ca/explore/programs-of-study/music-mmus/>) page.

## Degree Requirements

The Faculty offers three program areas leading to the M.Mus.: **Performance, Conducting, and Composition.**

All Master of Music students take the following core courses:

Course	Title	Hours
MUSC 7000 or MUSC 7100 or similar 7000-level Musicology course	Music History Seminar Proseminar in Musicology	3
MUSC 7050	Bibliography and Research Methods	3
MUSC 7110	Music Theory Seminar <sup>1</sup>	3
MUSC 7400	Major Practical Study 1	3
MUSC 7410	Major Practical Study 2	3
GRAD 7030	Master's Practicum (P/F)	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

<sup>1</sup> MUSC 7110: Music Theory Seminar (3 CRH) Students who achieve satisfactory evaluations on all components of the music theory diagnostic exam may substitute another 7000-level music theory/analysis course with the permission of the instructor.

- Master of Music students will also take discipline-specific electives for a degree total of 24 credit hours.

- Students must maintain a minimum degree grade point average of 3.0 with no grade below C+, and
- Maintain a minimum grade of B+ in MUSC 7400 and MUSC 7410

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MUSC 7000	Music History Seminar	3
MUSC 7050	Bibliography and Research Methods	3
MUSC 7180	Ensemble (not required for composition)	CO
MUSC 7400	Major Practical Study 1	3
MUSC XXXX	Stream Specific Requirements <sup>1</sup>	9
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 7030	Master's Practicum	0
The following is continued enrolment from Year 1:		
MUSC 7180	Ensemble	
MUSC 7410	Major Practical Study 2	3
MUSC 7110	Music Theory Seminar <sup>2</sup>	3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Different performance disciplines have specific requirements. Please consult the supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for full course listings.

<sup>2</sup> MUSC 7110: Music Theory Seminar (3 CRH) Students who achieve satisfactory evaluations on all components of the music theory diagnostic exam may substitute another 7000-level music theory/analysis course with the permission of the instructor.

## Additional Specifications by Concentration

- **Performance:** A formal, written proposal for the research paper must be submitted to and approved by the Advisory Committee by the end of the first year in the program for students electing to complete one recital and a research paper. A formal, written proposal for the recital program must be submitted to and approved by the Advisory Committee at least 60 calendar days prior to the proposed recital date.
- **Composition:** A formal, written proposal for the thesis/practicum must be submitted to and approved by the Advisory Committee by the end of the first year in the program. The repertoire for the recital will be developed in consultation with the Advisory Committee. A formal, written proposal for the recital program must be submitted to and approved by the Advisory Committee 60 calendar days prior to the proposed recital date. The Advisory Committee will consider the extent of the required performing forces, the proposed duration, and the technical requirements of the body of work in adjudicating appropriateness.
- **Conducting:** A formal, written proposal for the recital program must be submitted to and approved by the Advisory Committee at least 30 calendar days prior to the proposed recital date. The Pre-Recital Hearing for conducting students will normally consist of an



evaluation by the Advisory Committee of a rehearsal prior to the scheduled recital.

The thesis/practicum for M.Mus. students will consist of the following components:

- **Performance:** Two recitals *OR* One recital and a research paper
- **Composition:** An original musical composition or collection of compositions accompanied by a significant analytical study of the piece(s) *AND* a series of recitals/performances.
- **Conducting:** A curated video portfolio of the student's work will be submitted to the Advisory Committee at the end of their first year of Major Practical Study *AND* students will conduct repertoire totalling 45-60 minutes in DFOM large ensemble performances and/or a final graduate recital.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All graduate students must meet with the Faculty's Registrar to obtain and complete a course approval form; this form will list the student's proposed course schedule. Students must receive written approval from both their advisor and the Chair of the Grad Studies program before registering. Registration revisions are to be approved in a like manner.

Not all courses are offered each year: please check with the Faculty's Registrar for current and upcoming offerings.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Price Faculty of Engineering Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biomedical Engineering, M.Sc. (p. 1529)	2	12	
Biomedical Engineering, Ph.D. (p. 1531)	4	12, 18, or 24	
Civil Engineering, M.Eng. (p. 1533)	2	30	
Civil Engineering, M.Sc. (p. 1535)	2	18	
Civil Engineering, Ph.D. (p. 1536)	4	12	
Electrical and Computer Engineering, 2 M.Eng. (p. 1537)		24	
Electrical and Computer Engineering, 2 M.Sc. (p. 1539)		12	
Electrical and Computer Engineering, 4 Ph.D. (p. 1540)		12-30	
Mechanical Engineering, M.Eng. (p. 1542)	2	24	
Mechanical Engineering, M.Sc. (p. 1543)	2	12	
Mechanical Engineering, Ph.D. (p. 1544)	4	12	

## Biomedical Engineering, M.Sc.

Biomedical Engineering

**Head:** Dr. Sherif Sherifi

**Campus Address/General Office:** SP-422 EITC

**Telephone:** Please use email

**Email Address:** info\_biomedical@umanitoba.ca

**Website:** [umanitoba.ca/engineering/biomedical-engineering/](https://umanitoba.ca/engineering/biomedical-engineering/) (<https://umanitoba.ca/engineering/biomedical-engineering/>)

**Academic Staff:** Please refer to the Biomedical Engineering website (<https://umanitoba.ca/engineering/faculty-staff/biomedical-engineering/>) for Faculty information.

## Biomedical Engineering Program Information

Biomedical Engineering (BME) at the University of Manitoba is a graduate program toward Master of Science, Doctor of Philosophy, and/or MD-PhD degrees. It is an interdisciplinary program between the three faculties of Engineering, Medicine and Science, and the associated hospitals and medical industries.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## Biomedical Engineering M.Sc. Admission Requirements

A student must hold a four year B.Sc. degree in any of the following faculties from a recognized University: Engineering, Natural Sciences, or Medicine/Health Sciences.

In addition, the following **pre-requisite** courses are required prior to an offer of admissions:

Course	Title	Hours
MATH 1210	Techniques of Classical and Linear Algebra	3
MATH 1510	Applied Calculus 1	3
PHYS 1050	Physics 1: Mechanics	3

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biomedical Engineering M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/biomedical-engineering-msc/>) page.

## Degree Requirements

A minimum of 12 credit hours plus a thesis are required in the BME program. The minimum must include 6 credit hours from the following 6 core courses:

Course	Title	Hours
BME 7012	Foundation of Physiology	2
ANAT 7014	Functional Human Anatomy	2
BME 7022	Biomedical Instrumentation	2
BME 7024	Basics of Electromagnetic	2

BME 7026	Basics of Biological Signal Analysis	2
BME 7028	Basics of Biomechanics	2

plus the 0 credit hour Ethics course (BME 7040) and the 0 credit hour BME Seminar course (BME 7000). Students from Engineering backgrounds normally have to take anatomy and physiology. Students from Science backgrounds should not enroll in anatomy and physiology.

In addition, 6 credit hours of the minimum requirement must be taken at the 7000 level relevant to the student's thesis from any departments of the faculties of Engineering, Science and Health Sciences or Department of Physiology and Pathophysiology based on the suggestions of the student's Advisory Committee.

The student's program of study must be recommended by the student's advisory committee and approved by the Chair of the Curriculum Committee or delegate. Students who lack the necessary background knowledge may be required, by their Advisory Committee, to take additional courses up to the maximum allowed by FGS regulations.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BME 7000	Biomedical Engineering Seminar <sup>1,2</sup>	0
BME M.Sc. Thesis Proposal		0
XXX 7000	Research courses at the 7000-level or 8000-level <sup>3</sup>	6
<b>Hours</b>		<b>6</b>
<b>Years 1-2</b>		
BME 7040	Biomedical Ethics	0
Select 2 BME Core Courses <sup>4,5,6</sup>		6
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
Complete BME Core Course Requirements <sup>5</sup>		
Complete Research Course Requirements		
GRAD 7000	Master's Thesis	0
Final Thesis Presentation <sup>7</sup>		
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> BME Graduate Students are required to enroll and attend the Biomedical Engineering Seminar each term until graduation.

<sup>2</sup> BME M.Sc. student must present at least once at the BME Seminar before graduation.

<sup>3</sup> **Research Courses** as determined by the Academic Advisor. Courses at the 7000-level or 8000-level relevant to the student's research from any departments in the Faculties of Engineering, Science and Health Sciences or from the Physiology and Pathophysiology Program based on the recommendations of the student's Advisor and/or Advisory Committee.

<sup>4</sup> Any combination of courses from BME 7012, ANAT 7014, BME 7022, BME 7024, BME 7026, BME 7028.

<sup>5</sup> Where a student has already completed similar courses to the BME core courses, the student may, with the recommendation of their Advisory Committee and with the approval of the Chair of the Curriculum Committee or delegate, be exempted from taking the equivalent core courses and allowed to fulfill the six (6) ch of core courses with six (6) ch of other courses taken at the 7000-8000 level from any department in the Faculties of Engineering, Science and Health Sciences or from the Physiology and Pathophysiology Program.

<sup>6</sup> BME M.Sc. Program Requirements:  
[http://umanitoba.ca/biomedical\\_engineering/current\\_students/msc.html#CourseReq](http://umanitoba.ca/biomedical_engineering/current_students/msc.html#CourseReq) (Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

<sup>7</sup> [http://umanitoba.ca/biomedical\\_engineering/current\\_students/msc.html#FinalThesisPresentation](http://umanitoba.ca/biomedical_engineering/current_students/msc.html#FinalThesisPresentation)

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Biomedical Engineering, Ph.D.

Biomedical Engineering

**Head:** Dr. Sherif Sherif

**Campus Address/General Office:** SP-422 EITC

**Telephone:** Please use email

**Email Address:** info\_biomedical@umanitoba.ca

**Website:** [umanitoba.ca/engineering/biomedical-engineering](https://umanitoba.ca/engineering/biomedical-engineering) (<https://umanitoba.ca/engineering/biomedical-engineering/>)

**Academic Staff:** Please refer to the Biomedical Engineering website (<https://umanitoba.ca/engineering/faculty-staff/biomedical-engineering/>) for Faculty information.

## Biomedical Engineering Program Information

Biomedical Engineering (BME) at the University of Manitoba is a graduate program toward Master of Science, Doctor of Philosophy, and/or MD-PhD degrees. It is an interdisciplinary program between the three faculties of Engineering, Medicine and Science, and the associated hospitals and medical industries.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Biomedical Engineering Ph.D. Admission Requirements

Students admitted to this program will normally have a M.Sc. degree from a Faculty of Engineering, Health Sciences, or Science or with a Doctor of Medicine (MD) Degree from a recognized university.

In addition, the following **pre-requisite** courses are required prior to an offer of admissions:

Course	Title	Hours
MATH 1210	Techniques of Classical and Linear Algebra	3
MATH 1510	Applied Calculus 1	3
PHYS 1050	Physics 1: Mechanics	3

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biomedical Engineering Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/biomedical-engineering-phd/>) page.

## Degree Requirements

A minimum of 12 credit hours plus a thesis are required in the BME program. The minimum must include 6 credit hours from the following core courses:

Course	Title	Hours
BME 7012	Foundation of Physiology	2
ANAT 7014	Functional Human Anatomy	2
BME 7022	Biomedical Instrumentation	2
BME 7024	Basics of Electromagnetic	2
BME 7026	Basics of Biological Signal Analysis	2
BME 7028	Basics of Biomechanics	2

plus the 0 credit hour Ethics course (BME 7040) and the 0 credit hour BME Seminar course (BME 7000).

Students from Engineering backgrounds normally have to take anatomy and physiology. Students from Science backgrounds should not enroll in anatomy and physiology.

The remaining 6 credit hours of the minimum course requirement must be taken at the 7000-level relevant to the student's thesis from any departments of the faculties of Engineering, Science and Health Sciences or Department of Physiology and Pathophysiology based on the suggestions of the student's Advisory Committee. The student's program of study must be recommended by the student's advisory committee and approved by the Chair of the Curriculum Committee or delegate. Students who lack the necessary background knowledge may be required, by their Advisory Committee, to take additional courses up to the maximum allowed by FGS regulations.

**Expected Time to Graduate:** 4 years

## Progression Chart

### 12-Credit Hour Program

- Students with a Master of Science program in Engineering, Science, and/or Medical
- 6 credit hours of Core courses
- At least 6 credit hours at the 7000 level or higher

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BME 7000	Biomedical Engineering Seminar <sup>1,2</sup>	0
BME 7040	Biomedical Ethics	0
BME Thesis Proposal Presentation		0
		<b>Hours</b>
		<b>0</b>

### Years 1-2

Select 6 credit hours in BME Core Courses of the following: <sup>3</sup>		
BME 7012	Foundation of Physiology	
ANAT 7014	Functional Human Anatomy	
BME 7022	Biomedical Instrumentation	
BME 7024	Basics of Electromagnetic	
BME 7026	Basics of Biological Signal Analysis	
BME 7028	Basics of Biomechanics	

Select at least 6 credit hours in Research courses at the 7000 level or higher <sup>4</sup>	6
<b>Hours</b>	<b>12</b>
<b>Year 2</b>	
GRAD 8010 Doctoral Candidacy Examination	0
<b>Hours</b>	<b>0</b>
<b>Years 2-4</b>	
GRAD 8000 Doctoral Thesis <sup>5</sup>	0
<b>Hours</b>	<b>0</b>
<b>Total Hours</b>	<b>12</b>

<sup>1</sup> BME Graduate Students are required to enroll and attend the Biomedical Engineering Seminar each term until graduation.

<sup>2</sup> BME M.Sc. student must present at least once at the BME Seminar before graduation.

<sup>3</sup> Where a student has already completed similar courses to the BME core courses, the student may, with the recommendation of their Academic Advisor and with the approval of the Chair of the Curriculum Committee or delegate, be exempted from taking the equivalent core courses and allowed to fulfill the six (6) ch of core courses with six (6) ch of other courses taken at the 7000-8000 level from any department in the Faculties of Engineering, Science, and Health Sciences or from the Physiology and Pathophysiology Program.

<sup>4</sup> As determined by the Academic Advisor [http://umanitoba.ca/biomedical\\_engineering/current\\_student/phd.html#PhD\\_ProgramType](http://umanitoba.ca/biomedical_engineering/current_student/phd.html#PhD_ProgramType)

<sup>5</sup> Notes regarding thesis completion: [http://umanitoba.ca/biomedical\\_engineering/current\\_students/phd.html](http://umanitoba.ca/biomedical_engineering/current_students/phd.html)

#### Notes:

BME M.Sc. Program Requirements: [https://umanitoba.ca/biomedical\\_engineering/current\\_students/phd.html#CourseReq](https://umanitoba.ca/biomedical_engineering/current_students/phd.html#CourseReq) (Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

(Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

#### 18-Credit Hour Program (Minimum)

- Admitted directly from a Doctor of Medicine Degree (MD)
- 6 credit hours of Core courses
- At least 12 credit hours at the 7000 or higher
- Additional undergraduate courses might be required pending review by the Advisory Committee

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BME 7000	Biomedical Engineering Seminar <sup>1,2</sup>	0
BME 7040	Biomedical Ethics	0
BME Thesis Proposal Presentation		0
<b>Hours</b>		<b>0</b>
<b>Years 1-2</b>		
Select 6 credit hours in BME Core Courses of the following: <sup>3</sup>		6
BME 7012	Foundation of Physiology	

ANAT 7014	Functional Human Anatomy	
BME 7022	Biomedical Instrumentation	
BME 7024	Basics of Electromagnetic	
BME 7026	Basics of Biological Signal Analysis	
BME 7028	Basics of Biomechanics	
Select at least 12 credit hours in Research courses at the 7000 level or higher <sup>4</sup>		12
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Years 2-4</b>		
GRAD 8000	Doctoral Thesis <sup>5</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> BME Graduate Students are required to enroll and attend the Biomedical Engineering Seminar each term until graduation.

<sup>2</sup> BME M.Sc. student must present at least once at the BME Seminar before graduation.

<sup>3</sup> Where a student has already completed similar courses to the BME core courses, the student may, with the recommendation of their Academic Advisor and with the approval of the Chair of the Curriculum Committee or delegate, be exempted from taking the equivalent core courses and allowed to fulfill the six (6) ch of core courses with six (6) ch of other courses taken at the 7000-8000 level from any department in the Faculties of Engineering, Science, and Health Sciences or from the Physiology and Pathophysiology Program.

<sup>4</sup> As determined by the Academic Advisor [http://umanitoba.ca/biomedical\\_engineering/current\\_student/phd.html#PhD\\_ProgramType](http://umanitoba.ca/biomedical_engineering/current_student/phd.html#PhD_ProgramType)

<sup>5</sup> Notes regarding thesis completion: [http://umanitoba.ca/biomedical\\_engineering/current\\_students/phd.html](http://umanitoba.ca/biomedical_engineering/current_students/phd.html)

#### Notes:

BME M.Sc. Program Requirements: [https://umanitoba.ca/biomedical\\_engineering/current\\_students/phd.html#CourseReq](https://umanitoba.ca/biomedical_engineering/current_students/phd.html#CourseReq) (Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

(Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

#### 24-Credit Hour Program

- BME MSc Students who do not hold an MSc **and** who have been recommended for transfer to the BME Ph.D. program
- 6 credit hours of Core courses
- 12 credit hours of Research courses, recommended and approved by the Academic Advisor (6 credit hours may be at the 4000 level or higher)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BME 7000	Biomedical Engineering Seminar <sup>1,2</sup>	0

BME 7040	Biomedical Ethics	0
BME Thesis Proposal Presentation		
<b>Hours</b>		<b>0</b>
<b>Years 1-2</b>		
Select 6 credit hours of BME Core Courses from the following: <sup>3</sup>		6
BME 7012	Foundation of Physiology	
ANAT 7014	Functional Human Anatomy	
BME 7022	Biomedical Instrumentation	
BME 7024	Basics of Electromagnetic	
BME 7026	Basics of Biological Signal Analysis	
BME 7028	Basics of Biomechanics	
Select 12 credit hours of Research Courses <sup>4,5</sup>		12
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Years 2-4</b>		
GRAD 8000	Doctoral Thesis <sup>6</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

- <sup>1</sup> BME Graduate Students are required to enroll and attend the Biomedical Engineering Seminar each term until graduation.
- <sup>2</sup> BME M.Sc. student must present at least once at the BME Seminar before graduation.
- <sup>3</sup> Where a student has already completed similar courses to the BME core courses, the student may, with the recommendation of their Academic Advisor and with the approval of the Chair of the Curriculum Committee or delegate, be exempted from taking the equivalent core courses and allowed to fulfill the six (6) ch of core courses with six (6) ch of other courses taken at the 7000-8000 level from any department in the Faculties of Engineering, Science, and Health Sciences or from the Physiology and Pathophysiology Program.
- <sup>4</sup> As determined by the Academic Advisor [http://umanitoba.ca/biomedical\\_engineering/current\\_student/phd.html#PhD\\_ProgramType](http://umanitoba.ca/biomedical_engineering/current_student/phd.html#PhD_ProgramType)
- <sup>5</sup> Recommended and approved by the Academic Advisor (6 credit hours may be at the 4000 level or higher).
- <sup>6</sup> Notes regarding thesis completion: [http://umanitoba.ca/biomedical\\_engineering/current\\_students/phd.html](http://umanitoba.ca/biomedical_engineering/current_students/phd.html)

**Notes:**

BME M.Sc. Program Requirements: [https://umanitoba.ca/biomedical\\_engineering/current\\_students/phd.html#CourseReq](https://umanitoba.ca/biomedical_engineering/current_students/phd.html#CourseReq) (Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

(Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Civil Engineering, M.Eng.

Civil Engineering

**Head:** Dr. Shawn Clark, P.Eng.

**Associate Head:** Dr. Mohamed Bassuoni, P.Eng. (Graduate Programs); Dr. Jonathan Regehr, P.Eng. (Undergraduate Programs)

**Campus Address/General Office:** E1 - 368 Engineering

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**Academic Staff:** Please refer to the Civil Engineering (<https://umanitoba.ca/engineering/faculty-staff/civil-engineering/>) website for Faculty information.

## Civil Engineering Program Information

The Department of Civil Engineering offers programs of coursework and research leading to the Master of Science, Master of Engineering and Doctor of Philosophy in: environmental engineering; geotechnical engineering; structural engineering; transportation engineering and water resources engineering.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Civil Engineering M.Eng. Admission Requirements

Applicants must have a minimum of a B.Sc. degree in Engineering from a recognized university. In exceptional cases, based on the candidate's professional experience, this requirement may be waived upon the recommendation from the department. For full-time study, it is desirable that the applicant has one or more years of engineering experience.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Civil Engineering M.Eng. program of study (<https://umanitoba.ca/explore/programs-of-study/civil-engineering-msc-meng/>) page.

## Degree Requirements

The minimum requirement for the M.Eng. degree is 30 credit hours, consisting of 24 credit hours of coursework (at least 18 of which should be at the 7000 level); plus an additional 6 credit hours for the course GRAD 7050, M.Eng. Project and Report. All of the coursework and the research project proposal must be approved by the student's advisor.

It is the department's policy that graduate students shall take at least 6 credit hours in their core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

**Expected Time to Graduate:** 2 years

### Progression Chart

All students must register in GRAD 7020 each term (Fall, Winter & Summer) as long as they are in the program.

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be completed in first term)	0
COURSE 7XXX	Various Coursework <sup>1</sup>	24
<b>Hours</b>		<b>24</b>

### Year 2

GRAD 7050	M.Eng. Project and Report <sup>2</sup>	6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> The minimum requirement for the M.Eng. degree is 24 credit hours of coursework including at least 18 credit hours at the 7000 level. All of the coursework and the research project proposal must be approved by the student's advisor. It is the Department's policy that graduate students shall take at least 6 credit hours in his/her core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

<sup>2</sup> A 15-20 minute presentation, to the examining committee, must be made by the student on the practicum work to complete his/her M.Eng. program. The oral presentation will be followed by questions from the examining committee. The Chair may exercise discretion in inviting questions from guests. The duration of the oral examination shall not exceed one hour.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Civil Engineering, M.Sc.

Civil Engineering

**Head:** Dr. Shawn Clark, P.Eng.

**Associate Head:** Dr. Mohamed Bassuoni, P.Eng. (Graduate Programs); Dr. Jonathan Regehr, P.Eng. (Undergraduate Programs)

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**Academic Staff:** Please refer to the Civil Engineering (<https://umanitoba.ca/engineering/faculty-staff/civil-engineering/>) website for Faculty information.

## Civil Engineering Program Information

The Department of Civil Engineering offers programs of coursework and research leading to the Master of Science, Master of Engineering and Doctor of Philosophy in: environmental engineering; geotechnical engineering; structural engineering; transportation engineering and water resources engineering.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Civil Engineering M.Sc. Admission Requirements

Applicants are required to hold a Bachelor's degree in Civil Engineering from a recognized university. Applicants with other engineering degrees or with Honours degrees in related areas may also be accepted and recommended at the discretion of the Department.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Civil Engineering M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/civil-engineering-msc-meng/>) page.

## Degree Requirements

The M.Sc. is a research degree consisting of coursework and thesis. A minimum of 18 credit hours of coursework shall be required with at least 12 credit hours at the 7000 level as approved by the student's advisory committee.

It is the Department's policy that graduate students shall take at least 6 credit hours in their core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor. The candidate is required to make an oral presentation on the completed M.Sc. thesis to the Examining Committee, and to pass an oral examination.

**Expected Time to Graduate:** 2 years

## Progression Chart

All students must register in GRAD 7020 each term (Fall, Winter & Summer) as long as they are in the program.

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be completed in first term)	0
COURSE 7XXX	Various Coursework <sup>1</sup>	18
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> The M.Sc. is a research degree consisting of coursework and thesis. A minimum of 18 credit hours of coursework shall be required with at least 12 credit hours at the 7000 level as approved by the student's advisory committee. It is the Department's policy that graduate students shall take at least 6 credit hours in his/her core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

<sup>2</sup> The oral examination will consist of an oral presentation by the student (20 minutes maximum) on the thesis research, followed by a questions period, by the examining committee. The duration of the question period shall not exceed 90 minutes. The Chair may exercise discretion in inviting questions from guests.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult



unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Civil Engineering, Ph.D.

Civil Engineering

**Head:** Dr. Shawn Clark, P.Eng.

**Associate Head:** Dr. Mohamed Bassuoni, P.Eng. (Graduate Programs); Dr. Jonathan Regehr, P.Eng. (Undergraduate Programs)

**Campus Address/General Office:** E1 - 368 Engineering

**Telephone:** 204-474-8596

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**Email Address:** [ce\\_graduate@umanitoba.ca](mailto:ce_graduate@umanitoba.ca)

**Website:** [umanitoba.ca/engineering/civil/](https://umanitoba.ca/engineering/civil/) (<https://umanitoba.ca/engineering/civil/>)

**Academic Staff:** Please refer to the Civil Engineering (<https://umanitoba.ca/engineering/faculty-staff/civil-engineering/>) website for Faculty information.

## Civil Engineering Program Information

The Department of Civil Engineering offers programs of coursework and research leading to the Master of Science, Master of Engineering and Doctor of Philosophy in: environmental engineering; geotechnical engineering; structural engineering; transportation engineering and water resources engineering.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

## Civil Engineering Ph.D. Admission Requirements

Admission to the Ph.D. program is normally from the Master's degree level, i.e., M.Eng. or M.Sc. Students in a Master's program who have achieved an average GPA of 4.0 in their last 60 credit hours of undergraduate studies may be allowed to transfer to the PhD program without being required to write a Master's thesis provided they meet the following conditions:

1. Completion of 6 graduate courses (18 credits) with a grade of A or better in each;
2. Satisfactory progress in the research program;
3. Written recommendation from the supervisor, the thesis advisory committee and a selection committee (appointed by the head);
4. Approval by the department and Faculty of Graduate Studies.

The transfer must take place within 20 months of initial registration in the Master's program. Following transfer, all the requirements of the doctoral program apply, including the completion of an additional 12 credit hours at the 7000 level.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Civil Engineering Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/civil-engineering-phd/>) page.

## Degree Requirements

The Ph.D. program consists of coursework, original research and thesis. A minimum of 12 credit hours of coursework (all at the 7000 level) is required beyond the Master's degree or its equivalent. The program of study must be approved by the student's advisor, the advisory committee and the Department Head.

It is the department's policy that graduate students shall take at least 6 credit hours in their core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

**Expected Time to Graduate:** 4 years

## Progression Chart

All students must register in GRAD 8020 each term (Fall, Winter & Summer) as long as they are in the program.

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be completed first term)	0
COURSE 7XXX	Courses designated 7000 level or above <sup>1</sup>	12
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 8000	Doctoral Thesis <sup>3</sup>	0
<b>Hours</b>		<b>0</b>

**Years 3-4**

GRAD 8000	Doctoral Thesis <sup>4</sup>	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>12</b>

<sup>1</sup> The Ph.D. program consists of coursework, original research and a thesis. A minimum of 12 credit hours of coursework (all at the 7000 level) is required beyond the Master's degree. The program of study must be approved by the student's advisor, the advisory committee and the Department Head. For students who have transferred directly from the Master's program, all the requirements of the doctoral program apply, including the completion of an additional 12 credit hours at the 7000 level. It is the Department's policy that graduate students shall take at least 6 credit hours in his/her core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

<sup>2</sup> The examination process starts upon completion of most of the required coursework but must be completed **within the first 12 months** after the student's initial registration in the Ph.D. program. The student must complete a Ph.D. Proposed Program of Study Form and have it approved by the advisor and the department before starting the candidacy exam process.

<sup>3</sup> **No later than 16 months** after the students initial registration in the Ph.D. program, the Ph.D. candidate will be required to submit a detailed research proposal to the Ph.D. Advisory Committee. The proposal must document the research objectives, relevant background literature, required experimental, analytical or computational approaches, and projected timetable for completion of the steps necessary in the research. The proposal is normally about 10,000 words (40 pages), not including the bibliography. The candidate will be required to make an oral presentation of the proposal (approximately 20 minutes), followed by questions directly related to the proposal. Maximum duration of the question period will be 2 hours.

<sup>4</sup> The final examination for the Ph.D. degree proceeds in two (2) stages:

- Examination of the candidate's thesis by an internal and external examiner;
- Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult

unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Electrical and Computer Engineering, M.Eng.

Electrical & Computer Engineering

**Head:** Dr. Derek Oliver

**Associate Head:** Dr. E. Hossain (Graduate programs); Dr. D. McNeill (Computer); Dr. C. Ho (Electrical)

**Campus Address/General Office:** E2-390 Engineering

**Telephone:** 204-474 9603

**Email Address:** [umece@umanitoba.ca](mailto:umece@umanitoba.ca)

**Website:** [umanitoba.ca/engineering/electrical-and-computer-engineering/](https://umanitoba.ca/engineering/electrical-and-computer-engineering/) (<https://umanitoba.ca/engineering/electrical-and-computer-engineering/>)

**Academic Staff:** Please refer to the Electrical and Computer Engineering (<https://umanitoba.ca/engineering/faculty-staff/electrical-and-computer-engineering/>) website for Faculty information.

## Electrical & Computer Engineering (ECE) Program Information

The department offers programs leading to the Master of Engineering, Master of Science, and Doctor of Philosophy. Students may select either a specialized research-oriented activity, an interdisciplinary program, or collaboration with industry or research centres in Canada.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### ECE M.Eng. Admission Requirements

A student must normally be employed as an engineer in Manitoba, and hold a Bachelor of Science Degree in Electrical or Computer Engineering (or its equivalent) from a recognized university. The department minimum GPA requirement for entrance is 3.5.

Students must also receive tentative approval from a professor in the Department of Electrical & Computer Engineering prior to applying to the graduate program.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Students applying to a Pre-Master's program in the Department of Electrical & Computer Engineering are evaluated on a case-by-case basis with the permission of the Prospective Academic Advisor (professor) and Department. Students who do not meet the minimum GPA requirement of 3.0 / Department's requirement of 3.5; do not pass an English language exam; and do not hold a B.Sc. in a subject approved by the department will not be accepted.

**Note:** The Pre-Master's or Qualifying Student program is not meant for those students with GPAs below the University's or Department's minimum requirement or who have not passed an English Language Examination.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the ECE M.Eng. program of study (<https://umanitoba.ca/explore/programs-of-study/electrical-and-computer-engineering-msc-meng/>) page.

## Degree Requirements

This program is meant to satisfy the particular needs of students and practicing engineers wishing to extend their studies on a broad basis of coursework and an engineering project.

The M.Eng. program in Electrical and Computer Engineering requires a minimum of 24 credit hours of advisor-approved coursework as follows:

- **Minimum:** 9 credit hours at or above the 7000 level from the ECE department
- **Maximum:** 9 credit hours of elective courses from the ECE department at or above the 4000 level and a maximum of 12 credit hours from other departments at or above the 3000 level

- **Project:** The student is required to complete an advisor-approved engineering project and proposal. The effort involved in this project should be at least the equivalent of 6 credit hours of coursework.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECE 7XXX	ECE Courses designated 7000 level or higher <sup>1-4</sup>	9
Select courses from the following: <sup>1-4</sup>		9
ECE 7XXX	ECE Courses designated 7000 level or higher	
Related Studies 7XXX	Related Studies Courses designated 7000 level or higher	
Select courses from the following: <sup>1-4</sup>		6
ECE 4XXX	ECE Courses designated 4000 level or higher	
XXX 3000	Courses designated 3000 level or higher outside of ECE	
<b>Hours</b>		<b>24</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>24</b>

- <sup>1</sup> TBD (Course must be in the student's research field) – Must be approved by Academic Advisor. With permission from the Academic Advisor and Department students may take courses outside of ECE.
- <sup>2</sup> A **minimum of at least 9 credit hours** at or above the 7000-level is required from the **Department of Electrical and Computer Engineering**.
- <sup>3</sup> A **minimum of 18 credit hours** at the 7000-level or higher is required. Of these 18-Credit Hours :
  - **9 credit hours** must be from the ECE Graduate Program
  - **9 credit hours** may come from other Departments relevant to the student course of study
  - It is permissible for the **entire 24 credit hours, at the 7000-level or higher, from the Department of Electrical & Computer Engineering**
- <sup>4</sup> Up to 6 credit hours may come from the undergraduate program:
  - **ECE Department:** At or above the 400/4000 level may make up the remainder of the required credit-hours
  - **Other Department:** (within the student's study area): at or above the 300/3000 level may make up the remainder of the required credit-hours

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly

admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Electrical and Computer Engineering, M.Sc.

Electrical & Computer Engineering

**Head:** Dr. Derek Oliver

**Associate Head:** Dr. E. Hossain (Graduate programs); Dr. D. McNeill (Computer); Dr. C. Ho (Electrical)

**Campus Address/General Office:** E2-390 Engineering

**Telephone:** 204-474 9603

**Email Address:** umece@umanitoba.ca

**Website:** [umanitoba.ca/engineering/electrical-and-computer-engineering/](https://umanitoba.ca/engineering/electrical-and-computer-engineering/) (<https://umanitoba.ca/engineering/electrical-and-computer-engineering/>)

**Academic Staff:** Please refer to the Electrical and Computer Engineering (<https://umanitoba.ca/engineering/faculty-staff/electrical-and-computer-engineering/>) website for Faculty information.

## Electrical & Computer Engineering (ECE) Program Information

The department offers programs leading to the Master of Engineering, Master of Science, and Doctor of Philosophy. Students may select either a specialized research-oriented activity, an interdisciplinary program, or collaboration with industry or research centres in Canada.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### ECE M.Sc. Admission Requirements

A student must normally hold a B.Sc. in Electrical or Computer Engineering (or its equivalent), and receive tentative approval from a professor in the Department of Electrical & Computer Engineering prior to applying to the graduate program. The Department minimum GPA requirement for entrance is 3.5.

### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Students applying to a Pre-Master's program in the Department of Electrical & Computer Engineering are evaluated on a case-by-case basis with the permission of the Prospective Academic Advisor (professor) and Department. Students who do not meet the minimum GPA requirement of 3.0 / Department's requirement of 3.5; do not pass an English language exam; and do not hold a B.Sc. in a subject approved by the department will not be accepted.

**Note:** The Pre-Master's or Qualifying Student program is not meant for those students with GPAs below the University's or Department's minimum requirement or who have not passed an English Language Examination.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the ECE M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/electrical-and-computer-engineering-msc-meng/>) page.

## Degree Requirements

The M.Sc. program in Electrical and Computer Engineering requires a minimum of 12 credit hours of advisor-approved coursework (12 credit hours, 7000 level or higher) as follows:

- 6 credit hours must be at or above the 7000 level and from the ECE Department
- 6 credit hours must be at or above the 7000 level and may be from other Departments

An M.Sc. thesis, based on research work normally carried out at this university, is required.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECE 7XXX	ECE Courses designated 7000 level or higher <sup>1</sup>	6
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
ECE 7XXX	ECE Courses designated 7000 level or higher <sup>1</sup>	6
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> TBD (Course must be in the student's research field) – Must be approved by Academic Advisor. With permission from the Academic Advisor and Department students may take courses outside of ECE.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Electrical and Computer Engineering, Ph.D.

Electrical & Computer Engineering

**Head:** Dr. Derek Oliver

**Associate Head:** Dr. E. Hossain (Graduate programs); Dr. D. McNeill (Computer); Dr. C. Ho (Electrical)

**Campus Address/General Office:** E2-390 Engineering

**Telephone:** 204-474 9603

**Email Address:** [umece@umanitoba.ca](mailto:umece@umanitoba.ca)

**Website:** [umanitoba.ca/engineering/electrical-and-computer-engineering/](https://umanitoba.ca/engineering/electrical-and-computer-engineering/) (<https://umanitoba.ca/engineering/electrical-and-computer-engineering/>)

**Academic Staff:** Please refer to the Electrical and Computer Engineering (<https://umanitoba.ca/engineering/faculty-staff/electrical-and-computer-engineering/>) website for Faculty information.

## Electrical & Computer Engineering (ECE) Program Information

The department offers programs leading to the Master of Engineering, Master of Science, and Doctor of Philosophy. Students may select either a specialized research-oriented activity, an interdisciplinary program, or collaboration with industry or research centres in Canada.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### ECE Ph.D. Admission Requirements

The student must normally hold a Master of Science degree in Electrical or Computer Engineering; have received tentative approval from a professor in the Department of Electrical & Computer Engineering; and, have a minimum GPA of 3.5; in order to apply to the graduate program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the ECE Ph.D.

program of study (<https://umanitoba.ca/explore/programs-of-study/electrical-and-computer-engineering-phd/>) page.

## Degree Requirements

The Ph.D. program in Electrical and Computer Engineering depends on student classification as follows:

- **M.Sc.** degree in Electrical or Computer engineering and who have been admitted directly into the Ph.D. program
  - minimum of 12 credit hours of Advisory Committee-approved coursework is required
  - courses must be at the 7000 level or higher
  - at least 6 of the 12 credit hours must be from the ECE department
- **B.Sc.** degree in Electrical or Computer Engineering and who are
  - recommended for transfer into the Ph.D. program from the ECE M.Sc. program at this university
  - minimum of 24 credit hours of Advisory Committee-approved coursework is required
    - 9 credit hours **MUST** be at or above the 7000 level
    - 6 credit hours may be
      - Other department: at or above the 3000 level **or**
      - ECE department: 4000 level elective courses
    - at least 12 of the 24 credit hours **must** be from the ECE department
    - In the case of a transfer from an M.Sc. program to the ECE Ph.D. program credit may be given for approved coursework completed at the M.Sc. level
- **Transferred from the M.Sc program**
  - Please see info at [http://umanitoba.ca/faculties/engineering/departments/ece/curr\\_students/graduate/transfer-to-phd.html](http://umanitoba.ca/faculties/engineering/departments/ece/curr_students/graduate/transfer-to-phd.html)
- **For all other categories of students**
  - a minimum of 24 credit hours of advisory committee-approved coursework is required if the student does not hold a M.Sc., otherwise 12 credit hours is required
    - of which 9 credit hours must be at or above the 7000 level
    - the balance of 6 credit hours must be at or above the 3000 level from other departments or 4000 level elective courses from the ECE department
    - at least 12 of the 24 credit hours must be from the Dept. of Electrical and Computer Engineering department
- A Ph.D. thesis, which is based on research work normally carried out at this university, is required.

**Expected Time to Graduate:** 3.5 years

### Progression Chart

#### Ph.D. Students Holding a Master's Degree

Course	Title	Hours
<b>Years 1-2</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 8010	Doctoral Candidacy Examination	0
ECE 7XXX	ECE Courses designated 7000 level or higher <sup>1</sup>	12
<b>Hours</b>		<b>12</b>

#### Year 2

Ph.D. Thesis Proposal Presentation	0
<b>Hours</b>	<b>0</b>

#### Years 3-6

GRAD 8000	Doctoral Thesis	0
<b>Hours</b>	<b>0</b>	

**Total Hours** 12

<sup>1</sup> TBD (Course must be in the student's field of research) – Must be approved by Academic Advisor. With permission from the Academic Advisor and Department students may take courses outside of ECE.

#### Ph.D. Students Without a Master's Degree

Course	Title	Hours
<b>Years 1-2</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>	<b>0</b>	

#### Years 1-2.5

ECE 7XXX	ECE Courses designated 7000 level or higher <sup>1,2</sup>	12-24
ECE 4XXX	ECE Courses designated 4000 level or higher outside ECE, 3000 or higher <sup>1,3</sup>	6
<b>Hours</b>	<b>18-30</b>	

#### Year 2

Ph.D. Thesis Proposal Presentation	0
<b>Hours</b>	<b>0</b>

#### Years 3-6

GRAD 8000	Doctoral Thesis	0
<b>Hours</b>	<b>0</b>	
<b>Total Hours</b>	<b>18-30</b>	

<sup>1</sup> TBD (Course must be in the student's field of research) – Must be approved by Academic Advisor.

<sup>2</sup> At least 12 of the 24 credit hours **must** be from the ECE Department.

<sup>3</sup> **Up to 6-credit hours** may be taken from another department.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Mechanical Engineering, M.Eng.

Mechanical Engineering

**Head:** Dr. Olanrewaju Ojo

**Grad Chair:** Dr. Yunhua Luo

**Campus Address/General Office:** E2-327 Engineering Bldg

**Telephone:** 204-474-6540

**Fax:** 204-275-7507

**Email Address:** [me\\_inquiries@umanitoba.ca](mailto:me_inquiries@umanitoba.ca)

**Website:** [umanitoba.ca/engineering/mechanical](https://umanitoba.ca/engineering/mechanical) (<https://umanitoba.ca/engineering/mechanical/>)

**Academic Staff:** Please refer to the Mechanical Engineering website (<https://umanitoba.ca/engineering/faculty-staff/mechanical-engineering/>) for current staff listing.

## Mechanical Engineering Program Information

The graduate program in the Department of Mechanical Engineering offers a world-class graduate experience leading to degrees in Doctor of Philosophy, Master of Science and Master of Engineering.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Mechanical Engineering M.Eng. Admission Requirements

The Master of Engineering program mainly provides working engineers and internationally trained engineers an opportunity to continue their studies and specialize in an area of interest. Applicants must have a minimum of a B.Sc. degree in Engineering. In exceptional cases, based on the candidate's professional experience, this requirement may be waived by the department.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mechanical Engineering M.Eng. program of study (<https://umanitoba.ca/explore/programs-of-study/mechanical-engineering-msc-meng/>) page.

## Degree Requirements

The minimum requirement for the award of the M.Eng. degree is 24 credit hours of coursework with at least 9 credit hours at the 7000 level. Of the 24 credit hours, 6 credit hours will be assigned to an approved project and report (GRAD 7050).

All coursework and the project proposal must be approved by the student's advisor. It is the Department's policy that graduate students shall take no more than 6 credit hours of graduate level courses from one professor.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>0</b>
<b>Years 1-2</b>		
Courses at the 7000 level or higher		9
Courses at the 3000 or 4000 level or higher		9
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 7050	M.Eng. Project and Report	6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>24</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet [additional BFAR](#) that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Mechanical Engineering, M.Sc.

Mechanical Engineering

**Head:** Dr. Olanrewaju Ojo

**Grad Chair:** Dr. Yunhua Luo

**Campus Address/General Office:** E2-327 Engineering Bldg

**Telephone:** 204-474-6540

**Fax:** 204-275-7507

**Email Address:** [me\\_inquiries@umanitoba.ca](mailto:me_inquiries@umanitoba.ca)

**Website:** [umanitoba.ca/engineering/mechanical](https://umanitoba.ca/engineering/mechanical) (<https://umanitoba.ca/engineering/mechanical/>)

**Academic Staff:** Please refer to the Mechanical Engineering website (<https://umanitoba.ca/engineering/faculty-staff/mechanical-engineering/>) for current staff listing.

## Mechanical Engineering Program Information

The graduate program in the Department of Mechanical Engineering offers a world-class graduate experience leading to degrees in Doctor of Philosophy, Master of Science and Master of Engineering.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

#### Mechanical Engineering M.Sc. Admission Requirements

Applicants are normally required to hold a Bachelor's degree in Mechanical Engineering or related field from a recognized university. Applicants with other engineering degrees or with honours degrees in related areas may also be accepted at the discretion of the department. In certain cases (e.g., non-engineering graduates), acceptance may be subject to satisfying certain requirements. Contact the department for more information.

### Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mechanical Engineering M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/mechanical-engineering-msc-meng/>) page.

### Degree Requirements

A minimum of 12 credit hours of coursework will be required with at least nine credit hours at the 700/7000 level as approved by the student's advisor. The minimum time is one calendar year of full-time study and research and must be spent on campus. All candidates for the M.Sc. degree are required to register in MCEG 7890. The M.Sc. degree will not be awarded without a passing grade in MCEG 7890.

**Expected Time to Graduate:** 2 years

#### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>0</b>
<b>Years 1-2</b>		
Courses at the 7000 level		9
Courses at the 3000 or 4000 level		3
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
MCEG 7890	M.Sc. Graduate Research Seminar <sup>1</sup>	1
<b>Hours</b>		<b>1</b>
<b>Total Hours</b>		<b>13</b>



<sup>1</sup> The M.Sc. degree will not be awarded without a passing grade in MEGG 7890, which involves a seminar presentation on research being conducted by the student.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Mechanical Engineering, Ph.D.

Mechanical Engineering  
**Head:** Dr. Olanrewaju Ojo

**Grad Chair:** Dr. Yunhua Luo

**Campus Address/General Office:** E2-327 Engineering Bldg

**Telephone:** 204-474-6540

**Fax:** 204-275-7507

**Email Address:** [me\\_inquiries@umanitoba.ca](mailto:me_inquiries@umanitoba.ca)

**Website:** [umanitoba.ca/engineering/mechanical](https://umanitoba.ca/engineering/mechanical/) (<https://umanitoba.ca/engineering/mechanical/>)

**Academic Staff:** Please refer to the Mechanical Engineering website (<https://umanitoba.ca/engineering/faculty-staff/mechanical-engineering/>) for current staff listing.

## Mechanical Engineering Program Information

The graduate program in the Department of Mechanical Engineering offers a world-class graduate experience leading to degrees in Doctor of Philosophy, Master of Science and Master of Engineering.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Mechanical Engineering Ph.D. Admission Requirements

Admission to the Ph.D. program is normally from the Master's degree level. Master's students making exceptional progress while enrolled in their program may be transferred to the Ph.D. program upon the consent of the department head based on recommendations from the student's advisor and an appointed selection committee who investigate the student's qualifications and suitability for Ph.D. study.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mechanical Engineering Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/mechanical-engineering-phd/>) page.

## Degree Requirements

The Ph.D. program consists of coursework, original research and a thesis. A minimum of 12 credit hours of 7000-level coursework is required beyond the Master's degree. The program of study must be approved by the student's advisor, the advisory committee and the Department Head.

All candidates of the Ph.D. are required to register in MEGG 7900. The Ph.D. will not be awarded without a passing grade in MEGG 7900, which involves a seminar presentation on research being conducted by the student.

**Expected Time to Graduate:** 4 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	<b>Hours</b>	<b>0</b>

**Years 1-4**

Courses at the 7000 level or higher	12	
<b>Hours</b>	<b>12</b>	
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination	0
MECG 7900	Ph.D. Graduate Research Seminar <sup>1</sup>	1
<b>Hours</b>	<b>1</b>	
<b>Years 2-4</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>	<b>0</b>	
<b>Total Hours</b>	<b>13</b>	

<sup>1</sup> The Ph.D. degree will not be awarded without a passing grade in MECG 7900, which involves a seminar presentation on research being conducted by the student.

**General Regulations**

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

**Registration Information**

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year – contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

**Regulations**

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

**Supplementary Regulations**

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

**Bona Fide Academic Requirements (BFAR)**

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

# Rady Faculty of Health Sciences

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biochemistry and Medical Genetics, M.Sc. (p. 1571)	2	11	
Biochemistry and Medical Genetics, Ph.D. (p. 1573)	4	11	
Community Health Sciences, M.P.H. (p. 1574)	2	30	
Community Health Sciences, M.Sc. (p. 1576)	2-4	21	
Community Health Sciences, Ph.D. (p. 1577)	4-6	18-24	
Dental Diagnostic and Surgical Sciences, M.Dent., (Oral and Maxillofacial Surgery) (p. 1561)	4	48	
Dental Diagnostic and Surgical Sciences, M.Dent., (Periodontics) (p. 1562)	3	58	
Genetic Counselling, M.Sc. (p. 1579)	2	30	
Human Anatomy and Cell Science, M.Sc. (p. 1581)	2-3	9	
Human Anatomy and Cell Science, Ph.D. (p. 1582)	4-5	6	
Immunology, M.Sc. (p. 1584)	2-3	9	
Immunology, Ph.D. (p. 1585)	4-5	9,15,18	
Medical Microbiology & Infectious Diseases, M.Sc. (p. 1587)	2-3	12	
Medical Microbiology and Infectious Diseases, Ph.D. (p. 1588)	5-6	6-12	
Nursing, M.N. (p. 1547)	2	21-45	
Nursing, Ph.D. (p. 1549)	4	12	
Occupational Therapy, M.O.T. (p. 1555)	2	107	
Oral Biology, M.Sc. (p. 1564)	2	12	
Oral Biology, Ph.D. (p. 1565)	4	12	
Pathology, M.Sc. (p. 1589)	2-4	9-33.5	
Pharmacology and Therapeutics, M.Sc. (p. 1591)	2-3	9-12	
Pharmacology and Therapeutics, Ph.D. (p. 1592)	3-5	6-12	
Pharmacy, M.Sc. (p. 1552)	2	12	
Pharmacy, Ph.D. (p. 1553)	5	12	
Physical Therapy, M.P.T. (p. 1557)	2	103	
Physician Assistant Studies, M.P.A.S. (p. 1593)	2-3	86	
Physiology & Pathophysiology, M.Sc. (p. 1595)	2	9	
Physiology & Pathophysiology, Ph.D. (p. 1596)	4	9	
Preventive Dental Science (Orthodontics), M.Sc. (p. 1566)	3	40	

Preventive Dental Science (Pediatric Dentistry), M.Dent. (p. 1567)	3	64
Prosthodontics, M.Sc. (p. 1568)	3	99
Rehabilitation Sciences, M.Sc. (p. 1559)	2	12
Surgery, M.Sc. (p. 1597)	2	12

## College of Nursing Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Nursing, M.N. (p. 1547)	2	21-45	
Nursing, Ph.D. (p. 1549)	4	12	

### Nursing, M.N.

Nursing

**Associate Dean Graduate Programs:** Donna Martin; RN, PhD

**Campus Address/General Office:** 277 Helen Glass Centre for Nursing

**Telephone:** 204-474-7452

**Fax:** 204-474-7682

**Email Address:** nursing@umanitoba.ca

**Website:** [umanitoba.ca/nursing/](http://umanitoba.ca/nursing/) (<https://umanitoba.ca/nursing/>)

**Academic Staff:** Please refer to the Nursing website (<https://umanitoba.ca/nursing/faculty-staff/>) for Academic staff information.

- Completion of a Research Methods course and an Introductory Statistics course with a minimum grade of C+ in each course. The content of specific courses may be reviewed to determine whether these criteria are met.
- Proof of active practicing nurse registration as either a Registered Nurse or Registered Psychiatric Nurse is required by the application deadline. Applicants from other Canadian provinces/territories must have active practicing registration with their provincial or territorial regulatory body. Applicants from other countries may apply provided they have active practicing nurse status in their home country.

### Nursing Program Information

The College of Nursing currently offers programs leading to the Master of Nursing degree and a Doctor of Philosophy in Nursing. The MN program streams are Education, Administration, Clinical, and Nurse Practitioner. The MN program provides students the opportunity to develop expertise that enables them to respond in an ever-changing, dynamic, and fluid practice setting, as well as prepares students for possible doctoral studies.

The PhD in Nursing promotes the development of outstanding scholars who will engage in programs of research that will positively influence the health and health care of populations.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

#### Nursing M.N. Admission Requirements

Applicants must possess:

- A baccalaureate degree in nursing, mental health nursing or psychiatric nursing or its equivalent from an approved or accredited university. In exceptional circumstances, applicants with a degree in another discipline may be considered on a case by case basis providing the applicant is a Registered Nurse (RN) or Registered Psychiatric Nurse (RPN). RPN applicants are not eligible for the Nurse Practitioner stream.

**Nurse Practitioner Stream** - Only Registered Nurses are eligible for application to the Nurse Practitioner Stream. Applicants from outside of Manitoba applying to the Nurse Practitioner stream must provide proof of active practicing RN registration in Canada no later than the application deadline. Successful applicants must provide proof of active practicing registration with the College of Registered Nurses of Manitoba (CRNM) and maintain this registration for the duration of the program.

Applicants with Indigenous ancestry in Canada who meet all entry requirements will be given priority for up to 20% of the enrolment quota; proof of Indigenous ancestry is required.

Students admitted to the Master of Nursing program must meet the non-academic requirements of: Immunization, criminal record search including vulnerable sector search, child abuse registry check, adult abuse registry check, CPR certification, WRHA Personal Health Information Act (PHIA) training, and respirator mask-fit testing as prescribed by the College of Nursing, and submit to the College of Nursing by the date established by the College of Nursing. Proof of an annual influenza vaccination is required of all students by the published deadline in the fall. Visit the College of Nursing website for full details on the non-academic requirements.

As per the Faculty of Graduate Studies requirements, a successfully completed English Language Proficiency Test is required of all applicants unless they have received a high school diploma or university degree from Canada or one of the countries listed on the English Language Proficiency Test Exemption List. If applicable, this score is required as a basis for admission and applicants will NOT be accepted subject to receipt of an acceptable score. Documented proof of either the above must be submitted with the application for admission. Please note: scores more than two years old are not acceptable.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Nursing M.N. (<https://umanitoba.ca/explore/programs-of-study/nursing-mn/>) or Nurse Practitioner M.N. (<https://umanitoba.ca/explore/programs-of-study/nursing-nurse-practitioner-mn/>) program of study pages.

## Degree Requirements

The Master's Program in Nursing includes 21 credit hours for students completing a thesis, and 27 credit hours for students completing the course-based capstone project option.

The Nurse Practitioner stream consists of 45 credit hours plus the Clinical Consolidation course.

**Expected Time to Graduate:** 2-4 years

### Progression Chart

#### Thesis Route

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
NURS 7210	Qualitative Research Methods in Nursing	3
NURS 7220	Quantitative Research Methods in Nursing	3
NURS 7320	Philosophy of Nursing Science	3
NURS 7340	Evidence Informed Practice	3
NURS 7352	Leadership in Advanced Practice Nursing	3
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
NURS 7360	Integrative Focus	6
<b>Hours</b>		<b>6</b>
<b>Year 3</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>21</b>

<sup>1</sup> Thesis students who have finished their coursework and are working on their thesis (research data collection, writing etc.) are required to register for GRAD 7000, as well as GRAD 7020 for each term until they graduate.

This course progression reflects full-time student status. Students may elect to study full-time or part-time. All courses use blended delivery with biweekly in-class seminars alternated with online course delivery. Other additional optional graduate level coursework, as approved by the advisor, is also possible.

#### Capstone Project Route

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
NURS 7210	Qualitative Research Methods in Nursing	3
NURS 7220	Quantitative Research Methods in Nursing	3
NURS 7320	Philosophy of Nursing Science	3
NURS 7340	Evidence Informed Practice	3

NURS 7352	Leadership in Advanced Practice Nursing	3
<b>Hours</b>		<b>15</b>
<b>Year 2</b>		
Select one of the following options:		12
<b>Option A:</b>		
NURS 7360	Integrative Focus (6 credit hours)	
Select 6 additional credit hours of elective coursework		
<b>Option B:</b>		
Select 12 credit hours of elective coursework		
<b>Hours</b>		<b>12</b>
<b>Year 3</b>		
NURS 7120	Capstone Project	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>27</b>

<sup>1</sup> A student must complete all of the required coursework in their program before registering for the Capstone Project. Capstone project students who have finished their course work are required to register for NURS 7120, as well as GRAD 7020 for each term until they graduate.

#### Notes:

- This course progression reflects full-time student status. Students may elect to study full-time or part-time. All courses use blended delivery.
- A maximum of 6 credit hours at the 3000 or 4000 level may be taken to meet program requirements, unless special permission has been obtained from the Associate Dean, Graduate Programs, College of Nursing.

#### Nurse Practitioner Stream

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
NURS 7340	Evidence Informed Practice <sup>1</sup>	3
NURS 7352	Leadership in Advanced Practice Nursing <sup>1</sup>	3
NURS 7402	Advanced Pathophysiology and Therapeutics in Nurse Practitioner Practice	2
NURS 7412	Advanced Health Assessment	3
NURS 7430	Nurse Practitioner 1	6
NURS 7442	Clinical Practice 1	3
NURS 7450	Nurse Practitioner 2	5
NURS 7462	Advanced Practice Nursing in Primary Care Settings	2
<b>Hours</b>		<b>27</b>

<b>Year 2</b>		
NURS 7470	Nurse Practitioner 3	5
NURS 7482	Clinical Practice 2	4
NURS 7490	Nurse Practitioner 4	5
NURS 7502	Clinical Practice 3	4

NURS 7330	Clinical Consolidation (10 weeks of 400 clinical hours) <sup>2</sup>	0
	<b>Hours</b>	<b>18</b>
	<b>Total Hours</b>	<b>45</b>

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Nursing, Ph.D.

Nursing

**Associate Dean Graduate Programs:** Donna Martin; RN, PhD

**Campus Address/General Office:** 277 Helen Glass Centre for Nursing

**Telephone:** 204-474-7452

**Fax:** 204-474-7682

**Email Address:** nursing@umanitoba.ca

**Website:** [umanitoba.ca/nursing/](https://umanitoba.ca/nursing/) (<https://umanitoba.ca/nursing/>)

**Academic Staff:** Please refer to the Nursing website (<https://umanitoba.ca/nursing/faculty-staff/>) for Academic staff information.

## Nursing Program Information

The PhD in Nursing promotes the development of outstanding scholars who will engage in programs of research that will positively influence the health and health care of populations.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Nursing Ph.D. Admission Requirements

Applicants must possess a Master's degree, preferably in Nursing. Prerequisites for entry into the PhD Program include the equivalence of the following Master of Nursing (MN) courses: NURS 7320; NURS 7210; and NURS 7220. If pre-requisite education has been evaluated as insufficient, additional course work will be required prior to entry into the College of Nursing doctoral program. Other qualifications will be considered on a case by case basis. Exceptional MN students from the University of Manitoba who wish to apply to the PhD program before completing the MN program may be considered pending completion of NURS 7210, NURS 7220, NURS 7320, and NURS 7340 for a total of 12 credit hours.

Students admitted to the PhD in Nursing Program must meet the non-academic requirements of: Immunization, criminal record search including vulnerable sector search, child abuse registry check, adult abuse registry check, CPR certification, WRHA Personal Health Information Act (PHIA) training, and respirator mask-fit testing as prescribed by the College of Nursing, and submit to the College of Nursing by the date published by the College of Nursing. Proof of an annual influenza vaccination is required of all students by the published deadline in the fall.

Students engaging in research projects in Manitoba that entail specific nurse practice competencies as outlined by the College of Registered Nurses of Manitoba (CRNM) require active registration with the CRNM prior to commencing the project. Students engaging in research projects in other Canadian provinces/territories which entail specific nursing practice competencies as outlined by their provincial/territorial regulatory bodies require proof of active practicing registration in their province/territory. Applicants or students with RN registration outside of Manitoba and who will require RN registration in Manitoba for the purpose of their

<sup>1</sup> Students who completed a Master of Nursing program and have advanced standing in NURS 7340 and or NURS 7352 or equivalent are required to substitute an elective course. This course progression reflects full-time student status. Students may elect to study full-time or part-time. All courses use blended delivery. Courses in the Nurse Practitioner Stream are scheduled in the Fall, Winter, and Summer Terms.

<sup>2</sup> At the end of coursework, there is a clinical consolidations course (400 hours), which facilitates the integration and development of NP clinical skills. Arrangements for clinical practice for each student are organized by the NP Placement Coordinator, in collaboration with the clinical practice course leader and NP Director.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and

thesis research are advised to contact the CRNM at [www.crnmb.ca](http://www.crnmb.ca) (<http://www.crnmb.ca/>) prior to application to the PhD in Nursing program.

Applicants with Indigenous ancestry in Canada who meet all entry requirements will be given priority for up to 20% of the enrolment quota; proof of Indigenous ancestry is required.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Nursing Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/nursing-phd/>) page.

## Degree Requirements

The coursework requirement will consist of a minimum of 12 credit hours of 8000-level coursework:

Course	Title	Hours
NURS 8002	Advanced Philosophy of Nursing Science	3
NURS 8010	Advanced Qualitative Research for Nursing	3
NURS 8020	Advanced Knowledge Translation & Health Care Policy	3
NURS 8030	Doctoral Student Seminars I	0
NURS 8040	Doctoral Student Seminars II	0
NURS 8220	Advanced Quantitative Research Design & Methods in Nursing and Health Care (or Equivalent Course)	3
Note: NURS 8220 has a pre- or co- requisite course: CHSC 7810 Biostatistics for Health and Human Sciences or equivalent.		
<b>Total Hours</b>		<b>12</b>

Students are expected to take a formal candidacy exam and complete a thesis.

**Expected Time to Graduate:** 4-6 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
NURS 8002	Advanced Philosophy of Nursing Science	3
NURS 8010	Advanced Qualitative Research for Nursing	3
NURS 8030	Doctoral Student Seminars I	0
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>1</sup>	0
NURS 8040	Doctoral Student Seminars II	0
NURS 8020	Advanced Knowledge Translation & Health Care Policy	3
NURS 8220	Advanced Quantitative Research Design & Methods in Nursing and Health Care	3
Note: NURS 8220 has a pre- or co- requisite course: CHSC 7810 Biostatistics for Health and Human Sciences or equivalent.		
<b>Hours</b>		<b>6</b>

### Years 3-4

GRAD 8000	Doctoral Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Students are expected to take a formal candidacy exam, normally within 6 months of completing coursework or before the end of the second year. Students should register in GRAD 8010 in the term that they expect to complete the candidacy examination. If the exam is not completed in that term, re-registration is required.

<sup>2</sup> Students who have finished their course work and Doctoral Candidacy Examination are required to register for GRAD 8000 along with GRAD 8020 for every remaining term (Fall, Winter and Summer) that they are in the PhD in Nursing program, until they graduate.

### Notes:

- This course progression reflects full-time student status. Students may elect to study full-time or part-time. All courses use blended delivery.
- Students may augment their learning, as negotiated with their advisors, with other elective courses to enhance theoretical, clinical, methodological, statistical, and/or policy knowledge.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).



# College of Pharmacy

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Pharmacy, M.Sc. (p. 1552)	2	12	
Pharmacy, Ph.D. (p. 1553)	5	12	

## Pharmacy, M.Sc.

Pharmacy

**Dean:** Dr. Lalitha Raman-Wilms

**Associate Dean(s):** Dr. Lavern Vercaigne (Academic) Dr. Hope Anderson (Research)

**Grad Chair:** Dr. Joseph Delaney

**Campus Address/General Office:** Apotex Centre, 750 Mc Dermot Avenue

**Telephone:** 204-474-9306

**Fax:** 204-789-3744

**Email Address:** pharmacy@umanitoba.ca

**Website:** [umanitoba.ca/pharmacy/](https://umanitoba.ca/pharmacy/) (<https://umanitoba.ca/pharmacy/>)

**Academic Staff:** Please see the Pharmacy website (<https://umanitoba.ca/pharmacy/faculty-staff/>) for Academic staff information.

- Students must complete PHRM 7160 in the first year of their program. Students may subsequently take PHRM 7170 as an elective to meet their credit hour requirements.
- Students registered full time in the M.Sc. program, are required to attend an participate in the Pharmacy Graduate Seminar Series, where they must present at least one research seminar annually.
- Students are expected to enroll on a 12-month basis and conduct research during the summer months.
- The College of Pharmacy offers a concentration in Pharmacoepidemiology. The course requirements include 15 credit hours in the M.Sc. program (9 CH of core and 6 CH of electives).

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7020	Master's Re-registration	0
PHRM 7160	Pharmacy Seminar 1 MSc	3
<b>Hours</b>		<b>3</b>
<b>Years 1-2</b>		
Select 9 credit hours in other courses at 7000 level (not restricted to PHRM courses)		9
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

## Pharmacy Program Information

The College offers both Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Pharmacy M.Sc. Admission Requirements

- The applicant must negotiate with faculty researchers for a traineeship position.
- The applicant must hold a four-year Bachelor of Science degree in Pharmacy or a science degree with a cumulative GPA of a least 3.0 (4.5 scale), based on the last 60 credit hours (or two full years or equivalent) of university study.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pharmacy M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/pharmacy-msc/>) page.

## Degree Requirements

All programs are established on an individual basis; the following general principles apply:

- A minimum of 12 credit hours of coursework plus a thesis or practicum. The minimum must include at least 6 credit hours at the 7000 level with the balance of the coursework at the 3000 level or above. A maximum of 24 credit hours of coursework is allowed toward the thesis/practicum based Master's program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must determine their program courses with their advisor/advisory committee.

Not all courses are offered each year.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Pharmacy, Ph.D.

Pharmacy

**Dean:** Dr. Lalitha Raman-Wilms

**Associate Dean(s):** Dr. Lavern Vercaigne (Academic) Dr. Hope Anderson (Research)

**Grad Chair:** Dr. Joseph Delaney

**Campus Address/General Office:** Apotex Centre, 750 Mc Dermot Avenue

**Telephone:** 204-474-9306

**Fax:** 204-789-3744

**Email Address:** [pharmacy@umanitoba.ca](mailto:pharmacy@umanitoba.ca)

**Website:** [umanitoba.ca/pharmacy/](https://umanitoba.ca/pharmacy/) (<https://umanitoba.ca/pharmacy/>)

**Academic Staff:** Please see the Pharmacy website (<https://umanitoba.ca/pharmacy/faculty-staff/>) for Academic staff information.

## Pharmacy Program Information

The College offers both Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

## Pharmacy Ph.D. Admission Requirements

- The applicant must negotiate with faculty researchers for a traineeship position.
- Applicants must hold a Master of Science degree in Pharmacy or related field from a recognized university with a cumulative GPA of at least 3.0 (4.5 scale), based on the last 60 credit hours (or two full years or equivalent) of university study.

## Application Information

- Students should complete and submit their online application with supporting documentation by the date indicated on the Pharmacy Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/pharmacy-phd/>) page.

## Degree Requirements

All programs are established on an individual basis; the following general principles apply:

- Where admission to the Ph.D. is directly from a Master's Degree, a minimum of 12 credit hours at the 7000 level or higher plus a thesis is required. For those students who hold a Master's degree, a maximum of 24 credit hours of course work is allowed toward the Ph.D. program.
- Students must complete PHRM 7260 in the first year of their program. Students may subsequently take PHRM 7270 as an elective to meet their credit hour requirements.
- Students registered full time in the Ph.D. program are required to attend and participate in the Pharmacy Graduate Seminar Series, where they must present at least one research seminar annually.
- Students who transfer from the M.Sc. to the Ph.D. program in Pharmacy, having completed PHRM 7160, may take PHRM 7270 as an elective to meet their credit hour requirements. Normally, students will not be permitted to take PHRM 7260 unless their research project is notably different from that presented in PHRM 7160. In that case, the student must obtain approval from their advisor and Chair of the PGSC to take PHRM 7260.
- Students are expected to enroll on a 12-month basis and conduct research during the summer months.
- Students registered in the M.Sc. program who have made excellent progress over the first 12 months in their program may be considered for transfer to the Ph.D. program. The transfer must be completed within 16 months (4 terms) of the student's commencement in the Master's program.
- The College of Pharmacy offers a concentration in Pharmacoepidemiology. The course requirements for students entering the Ph. D. program already holding a Master degree, include 12 credit hours in the Ph.D. (6 CH of core and 6 CH of elective). Students transferring from the Master's to the Ph.D. will require a total of 24 CH to complete their program.

**Expected Time to Graduate:** 4 years

## Progression Chart

\* Where admission to the Ph.D. is directly from a Master's degree

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 8020	Doctoral Re-registration	0
PHRM 7260	Pharmacy Seminar 1 PhD	3
<b>Hours</b>		<b>3</b>
<b>Years 1-5</b>		
Select courses designated 7000 or above to be completed during the program (not restricted to PHRM courses)		9
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Year 3</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
<b>Hours</b>		<b>0</b>
<b>Years 4-5</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

**Notes:**

- Please note students transitioning from the MSc to PhD program will vary from the progression charts listed above.
- Students must continue their enrollment in GRAD 7020 and GRAD 8020 if their program length varies from the above charts.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must determine their program courses with their advisor/advisory committee.

Courses must be listed on the Program of Study Form.

Not all courses are offered each year.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# College of Rehabilitation Sciences

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Occupational Therapy, M.O.T. (p. 1555)	2	107	
Physical Therapy, M.P.T. (p. 1557)	2	103	
Rehabilitation Sciences, M.Sc. (p. 1559)	2	12	

## Occupational Therapy, M.O.T.

Occupational Therapy

**Dean:** Dr. Reg Urbanowski

**Head:** Dr. Leanne Leclair

**Campus Address/General Office:** R106-771 McDermot Avenue

**Telephone:** 204-789-3897

**Fax:** 204-789-3927

**Email Address:** CORS.MOTprogram@umanitoba.ca

**Website:** [umanitoba.ca/rehabilitation-sciences/occupational-therapy/](https://umanitoba.ca/rehabilitation-sciences/occupational-therapy/)  
(<https://umanitoba.ca/rehabilitation-sciences/occupational-therapy/>)

**Academic Staff:** Please refer to the Occupational Therapy website (<https://umanitoba.ca/rehabilitation-sciences/faculty-staff/#department-of-occupational-therapy>) for Academic staff information.

## Occupational Therapy Program Information

The Master of Occupational Therapy is a professional practice degree that can be obtained through participation in either a Regular program or an Accelerated program option. The Regular program is for individuals who do not have a previous degree in occupational therapy. The Accelerated program is for occupational therapists who have a B.M.R. (O.T.) degree or equivalent.

The Occupational Therapy program maintains accreditation through the Canadian Association of Occupational Therapists.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.O.T. Admission Requirements

#### REGULAR PROGRAM

Completion of a previous undergraduate degree with a minimum B average in the last 60 credit hours of study, and completion of all program prerequisite courses or approved alternates with no grade in prerequisites below a B. Prerequisite courses include all of the courses listed below or equivalents<sup>1</sup> approved by the Admissions Committee:

- Anatomy of the Human Body
- Physiology of the Human Body

- Minimum 3 credit hours in Psychology
- Minimum 3 credit hours in Social Sciences

<sup>1</sup> Equivalent academic courses completed at the University of Manitoba or recognized universities elsewhere ([http://umanitoba.ca/rehabsciences/ot/ot\\_eligibility.html](http://umanitoba.ca/rehabsciences/ot/ot_eligibility.html)) will be considered.

Completion of the CASPer assessment administered by ALTUS assessments.

A combination of GPA (last 60 credit hours) and CASPer score will be used to determine who will be invited for an interview.

This program includes a Canadian Indigenous Peoples priority category. Please see the M.O.T. program (<https://umanitoba.ca/rehabilitation-sciences/occupational-therapy/>) webpage for additional information specific to this category and other requirements.

#### ACCELERATED PROGRAM

Completion of a B.M.R.(O.T.) degree or equivalent, with a minimum B average in the last 60 credit hours of study, completion of an additional 42 credit hours of non-O.T. degree credits, and evidence of having passed the Canadian Association of Occupational Therapists (CAOT) certification examination and/or eligibility for registration in Manitoba by the College of Occupational Therapists of Manitoba (COTM). Applicants to the Accelerated program are advised to contact the Head of the Occupational Therapy Department prior to applying as admission to the program is dependent on the resources available in any given year.

Please consult the M.O.T. program of study (<https://www.umanitoba.ca/explore/programs-of-study/occupational-therapy-mot/#admission-requirements>) page for further information.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.O.T. program of study (<https://www.umanitoba.ca/explore/programs-of-study/occupational-therapy-mot/#admission-requirements>) page.

## Degree Requirements

Students in the M.O.T. **Regular program** must complete 107 credit hours of coursework. All academic and fieldwork courses and a professional portfolio must be successfully completed in order to graduate.

Students in the M.O.T. **Accelerated program** will be required to take 12 credit hours of academic coursework from the M.O.T. program or equivalent. Six of these credit hours are to be OT 7752 Critical Inquiry Research Project or equivalent.

Fieldwork education is an integral part of the M.O.T. Regular program. Field placement experiences are integrated throughout the program and include 1 four-week, 2 eight-week and 1 six-week experience. Field placements mostly occur in Manitoba and Saskatchewan. All students should be prepared to travel out of Winnipeg for a **minimum** of one placement during the course of the program.

Occupational Therapy students are required to provide a health history and immunization record. A student will not be permitted to attend fieldwork placements until all health, immunization, CPR, mask fit and records check requirements are met.

## Health Requirements

Standard Health Record Form Packages are sent to new occupational therapy students upon acceptance into the program. New students in Occupational Therapy are required to return forms to their department by dates published yearly in the Health Record Form Packages. Second year students are required annually to review and update immunizations as necessary. Additional information about the certification and records checks requirements outlined below is sent to new applicants upon acceptance into the program.

## Cardiopulmonary Resuscitation Certification

All students in the M.O.T. program are required to obtain certification in cardiopulmonary resuscitation. Certification must be through a Heart and Stroke Foundation certified course at the level of Basic Life Support - BLS Provider or higher (Advanced Cardiac Life Support - ACLS). New students in the program must provide proof of certification within the first 2 weeks of classes of the academic year in which they commence classes. This certification must have an issue date on or after July 1 of the year the student commences classes in the program. Second year students must provide proof of re-certification by October 1 of their second year in the program. This certification must have an issue date during or after the last week of August of the current year. Certification must remain current for all fieldwork experiences.

## Mask Fit Certification

Clinical/fieldwork education sites require students to maintain mask fit certification. Information on acquiring this certification is provided to new students upon admission. All students are required to maintain mask fit certification throughout the program.

## Criminal Record Check, Adult Abuse Registry Check and Child Abuse Registry Check

Clinical/fieldwork education sites require that students produce a completed Criminal Record Check (including a vulnerable sector screen), Adult Abuse Registry Check and a Child Abuse Registry Check. New students in the M.O.T. program must provide results for a Criminal Record Check (including a vulnerable sector screen) within the first 2 weeks of classes of the academic year in which they commence classes. First year students should ensure that the Criminal Records Check has an issue date of July 1 or later in the year in which they commence the program.

Within the first two weeks of the program, incoming students will apply for an Adult Abuse Registry Check and a Child Abuse Registry Check through the M.O.T. program. Further information is provided to incoming students upon their acceptance to the program. Second year students must provide updated results of their Criminal Records Check by October 1 of their second year in the program. The Criminal Records Check (with vulnerable sector screen) must have an issue date during or after the last week of August of the current year. Within the first month of classes in second year, returning students will apply for an Adult Abuse Registry

Check and a Child Abuse Registry Check through the M.O.T. program. Some fieldwork education sites require that checks are no more than 6 months old; students may need to reorder these checks more than once a year.

## Professional Designation and Registration

Graduates from the M.O.T. program have the degree designation M.O.T. It is important to note that occupational therapy is a regulated health profession, by law. To be eligible for employment in Manitoba, graduates must register with the College of Occupational Therapists of Manitoba (COTM) and must successfully complete the Canadian Association of Occupational Therapists (CAOT) National Certification Examination. Regulations are similar in most other Canadian provinces, in that occupational therapists must be registered with the regulatory body in that jurisdiction and must pass the CAOT National Certification Exam. Writing of the national exam is scheduled twice a year. The University's Occupational Therapy Department provides a list of potential M.O.T. graduates to CAOT to verify their eligibility to write the National Certification Exam. Newly-educated occupational therapists are eligible for registration with COTM (or other provincial regulatory body) and for employment prior to convocation and/or writing the national exam, provided they have successfully completed all academic and fieldwork requirements for the M.O.T. program, and have provided the appropriate personnel at the regulatory body with a letter of verification from the Head of the Department of Occupational Therapy (students must request these letters). For information on the registration process in Manitoba, you can visit the COTM website at [www.cotm.ca](http://www.cotm.ca) (<http://www.cotm.ca/>) or contact them by calling (204) 957-1214. Other provinces have similar provisions to allow some form of registration and thus employment prior to convocation. A listing of provincial regulatory organizations is available from COTM.

**Expected Time to Graduate:** Regular program - 2 years; Accelerated program - 1 year

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
OT 6100	Human Determinants of Occupational Performance (C & WL)	6
OT 6110	Fundamentals of Occupational Therapy Theory	3
OT 6122	Foundations of Health and Well-being	3
OT 6130	Occupational Therapy Practice Skills 1 (C & WL)	3
OT 6142	Professionalism and Enabling Occupation	7
OT 6190	Fieldwork Preparation	1
OT 6200	Basic Fieldwork	4
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
OT 6300	Analysis of Occupation (C & WL)	4
OT 6310	The Environment and Occupational Performance	4
OT 6320	Health Conditions and Occupational Performance	4
OT 6330	Occupational Therapy Practice Skills 2 (C & WL)	4
OT 6352	Foundations of Evidence-informed Occupational Therapy	4

OT 6400	Intermediate Fieldwork 1	8
GRAD 7020	Master's Re-registration	0
<b>Hours</b>		<b>55</b>
<b>Year 2</b>		
OT 7542	Professionalism and Leadership in Enabling Occupation 1	4
OT 7560	Occupational Therapy Process 1	6
OT 7572	Occupational Therapy Practice Skills 3 (C & WL)	6
OT 7600	Intermediate Fieldwork 2	8
OT 7742	Professionalism and Leadership in Enabling Occupation 2	4
OT 7752	Critical Inquiry Research Project	6
OT 7760	Occupational Therapy Process 2	6
OT 7772	Occupational Therapy Practice Skills 4 (C & WL)	6
OT 7800	Advanced Fieldwork	6
GRAD 7020	Master's Re-registration	0
<b>Hours</b>		<b>52</b>
<b>Total Hours</b>		<b>107</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All course withdrawals (registration revisions) must be approved by the Department Head.

Course registration information for the incoming first year students will be forwarded to them by the Department/Program Assistant. Returning students will have course registration information sent to their U of M email account.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Physical Therapy, M.P.T.

Physical Therapy

**Dean:** Dr. Reg Urbanowski

**Head:** Dr. Mark Garrett

**Campus Address/General Office:** R106-771 McDermot Avenue, Bannatyne Campus

**Telephone:** 204-480-1379

**Fax:** 204-789-3927

**Email Address:** [CORS.PTprogram@umanitoba.ca](mailto:CORS.PTprogram@umanitoba.ca)

**Website:** [umanitoba.ca/rehabsciences/pt/](https://umanitoba.ca/rehabsciences/pt/) (<https://umanitoba.ca/rehabsciences/pt/>)

**Academic Staff:** Please refer to the Physical Therapy website (<https://umanitoba.ca/rehabilitation-sciences/faculty-staff/#department-of-physical-therapy>) for Academic staff information.

## Physical Therapy Program Information

The Master of Physical Therapy is an entry-to-practice education credential that is for individuals who do not have a previous degree in physical therapy and/or for those individuals who are not eligible to practice in Canada with their current academic preparation.

The Master of Physical Therapy Program at the University of Manitoba has been accredited by Physiotherapy Education Accreditation Canada (PEAC). The status of Accreditation – Fully Compliant was granted to the program for the period until April 30, 2026.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.P.T. Admission Requirements

Requirements include: completion of a previous undergraduate degree, in any area of study; minimum grade point average of 3.25 in the last 60 credit hours of study; successful completion of at least 24 credit hours in one regular fall/winter session (from September to April); equivalent IB and/or AP courses will be accepted in lieu of prerequisite courses;

successful completion of the Multiple Mini-Interview; a minimum grade of a 3.0 or a "B" in the following prerequisite courses:<sup>1</sup>

- Human Anatomy (3 credit hours)
- Human Physiology (3 credit hours)
- Introductory Biology with genetics content (3 credit hours)
- Introductory Psychology (6 credit hours)
- Childhood Development (3 credit hours)
- Aging (3 credit hours)
- Introductory Statistics (3 credit hours)
- English Literature (6 credit hours)

<sup>1</sup> All prerequisite courses need to be completed by the Fall term in the year prior to entry. Equivalent academic courses completed at the University of Manitoba or recognized universities elsewhere will be considered.

English Language Proficiency: For those not educated in English, the Department of Physical Therapy complies with the English language requirements established by the University of Manitoba Faculty of Graduate Studies, the Canadian Alliance of Physiotherapy Regulators (<http://www.alliancept.org/>) and the College of Physiotherapists of Manitoba (<http://www.manitobaphysio.com/for-ieps/registration-2/language-requirements/>). These minimum scores are required to be admitted into the Faculty of Graduate Studies; to be licensed as a student physical therapist in Manitoba; and to be considered eligible to sit the national Physiotherapy Competency Examination upon graduation. For more details on acceptable English Language Proficiency tests, see the M.O.T. program of study (<https://www.umanitoba.ca/explore/programs-of-study/physical-therapy-mpt/#how-to-apply>) page.

## Application Information

Students should complete and submit their online application with supporting documentation (if applicable) by the date indicated on the M.P.T. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/physical\\_therapy.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/physical_therapy.html)) page.

## Degree Requirements

Students in the M.P.T. program must complete 103 credit hours of coursework. All academic and clinical education courses and a professional portfolio must be successfully completed in order to graduate.

## Clinical Education Requirements

Clinical education is integrated throughout the M.P.T. program and typically follows major academic components to consolidate knowledge and skills learned in class. It consists of 4x 6 week and 1x 5 week clinical placements at a variety of sites. All students should be prepared to complete a clinical placement at a site outside of Winnipeg during the course of the program. Students must fulfil the health-related certifications, background checks and licensing requirements outlined below in order to participate in clinical placements. Additional information regarding these requirements is sent to new applicants following their acceptance into the program.

## Health Requirements

Following their acceptance into the program, all new M.P.T. students will receive instructions regarding completion of the *Immunization Package* from the Rady Faculty of Health Sciences Immunization Program. Students are required to return their completed packages, including

immunization records, by the date published in the packages. New and returning students must meet immunizations requirements as identified by the Rady Faculty of Health Sciences Immunization Program in order to participate in clinical placements.

## Mask Fit Certification

Current *mask fit certification* is required for M.P.T. students to participate in clinical placements at many sites. There are a variety of masks in use at these clinical placement sites, so the program will make arrangements for mask fit testing of students after they have commenced the program and their clinical placement sites are known. Students are not to arrange their own mask fit testing prior to commencing the program as they may be tested on a mask that is not in use at their clinical placement sites.

## Cardiopulmonary Resuscitation (CPR) Certification

M.P.T. students are required to obtain CPR certification annually. Certification must be through a Heart & Stroke Foundation certified course at the level of *Basic Life Support: BLS Provider* or higher (e.g. *Advanced Cardiac Life Support: ACLS*). Students must provide proof of certification by September 1 of every year while in the program, and the certification must have an issue date no earlier than August 1 of that year.

## Criminal Record Check, Adult Abuse Registry Check and Child Abuse Registry Check

M.P.T. students are required to obtain and submit a *Criminal Record Check with vulnerable sector search* annually in order to participate in clinical placements. Students must submit the check by September 1 of every year while in the program, and the check must have an issue date no earlier than August 1 of that year. M.P.T. students are also required to obtain an *Adult Abuse Registry Check* and a *Child Abuse Registry Check* annually in order to participate in clinical placements. The program will apply for these two checks on behalf of students after they have commenced classes. (N.B.: Some clinical sites require the above three documents to be less than 6 months old at the start of the placement, so students may need to reorder the checks in the same academic year if they attend one of these sites.)

## College of Physiotherapists of Manitoba (CPM) Registration

M.P.T. students must obtain student registration with CPM by September 15 of every year while in the program in order to participate in clinical placements. Students must submit their original Criminal Record Check with their application form and fee when registering with CPM.

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
PT 6100	Foundations of Physical Therapy (C & WL)	5
PT 6110	Foundations to Evidenced-Based Practice 1	1
PT 6124	Physical Therapy and Hospital Based Care (C & WL)	4
PT 6130	Applied Sciences for Physical Therapy 1 (C & WL)	4
PT 6140	Neuromusculoskeletal Anatomy for Physical Therapy (C & WL)	3

PT 6221	Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 1 (C & WL)	6
PT 6224	Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 2 (C & WL)	6
PT 6230	Applied Sciences for Physical Therapy 2 (C & WL)	6
PT 6250	Integrated Practice for Neuromusculoskeletal Conditions	3
PT 6260	Physical Therapy Practice and Professional Issues 1	3
PT 6291	Neuromusculoskeletal Clinical Education 1	6
PT 6292	Neuromusculoskeletal Clinical Education 2	6
PT 6310	Foundations to Evidenced-Based Practice 2	2
<b>Hours</b>		<b>55</b>
<b>Year 2</b>		
PT 7121	Clinical Skills for Physical Therapy Neurological Conditions (C & WL)	5
PT 7124	Clinical Skills for Physical Therapy in Cardiorespiratory Conditions	5
PT 7150	Integrated Practice for Cardiorespiratory and Neurological Conditions	3
PT 7160	Physical Therapy Practice and Professional Issues 2	3
PT 7230	Applied Sciences for Physical Therapy 3 (C & WL)	3
PT 7330	Applied Sciences for Physical Therapy 4 (C & WL)	3
PT 7294	Cardiovascular and Pulmonary Clinical Education	5
PT 7292	Neurosciences Clinical Education	6
PT 7390	Elective Clinical Education	6
PT 7410	Exercise Prescription and Manual Therapy for Physical Therapists	3
PT 7500	Physical Therapy Evaluation/Research Project	6
<b>Hours</b>		<b>48</b>
<b>Total Hours</b>		<b>103</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Course registration information for the incoming first year students will be forwarded to them by the Department/Program Assistant. Returning students will have course registration information sent to their U of M email account.

Not all courses will be offered each year. Please check the Aurora catalog to find out when a course is offered.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Rehabilitation Sciences, M.Sc.

Rehabilitation Sciences

**Chair:** Dean Kriellaars

**Campus Address/General Office:** R106-771 McDermot Avenue

**Telephone:** 204-789-3897

**Fax:** 204-789-3927

**Email Address:** CORS.MSCRehab@umanitoba.ca

**Website:** [umanitoba.ca/rehabilitation-sciences/](https://umanitoba.ca/rehabilitation-sciences/) (<https://umanitoba.ca/rehabilitation-sciences/>)

**Academic Staff:** Please refer to the Rehabilitation Sciences website (<https://umanitoba.ca/rehabilitation-sciences/research-and-scholarly-activity/#our-researchers>) for current staff listing.

## Rehabilitation Sciences Program Information

The College of Rehabilitation Sciences currently offers a Master of Science (Rehabilitation Sciences) degree program. The purpose of this



program is to provide research training to individuals in the field of rehabilitation.

The College of Rehabilitation Sciences, along with the Faculty of Kinesiology and Recreation Management, offers a multi-faculty Ph.D. in Applied Health Sciences. (p. 1483)

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Rehabilitation Sciences M.Sc. Admission Requirements

Admission requirements include a 4 year Baccalaureate degree or equivalent in Physical Therapy, Occupational Therapy, Respiratory Therapy, or a related discipline (e.g., kinesiology, biomedical engineering, exercise science).

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Rehabilitation Sciences M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/medical\\_rehabilitation.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/medical_rehabilitation.html)) page.

## Degree Requirements

All students must include REHB 7280 Rehabilitation Theory and Research Design (3 credit hours) as part of the required 12 credit hours of coursework. The remaining 9 credit hours are to be chosen by the student through consultation with the advisor.

A reduction from the minimum of 12 credit hours to 6 credit hours (REHB 7280 plus 3 additional credit hours) may be permitted for students entering the program with an entry-to-practice degree at the Master's level. In such cases, a specific program of study must be proposed by the primary advisor and approved by the Program Chair.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
REHB 7280	Rehabilitation Theory and Research Design	3
Courses chosen in consultation with the advisor		9
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Not all courses will be offered each year. Please check the Aurora catalog to find out when a course is offered.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Dr. Gerald Niznick College of Dentistry

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Dental Diagnostic and Surgical Sciences, M.Dent., (Oral and Maxillofacial Surgery) (p. 1561)	4	48	
Dental Diagnostic and Surgical Sciences, M.Dent., (Periodontics) (p. 1562)	3	58	
Oral Biology, M.Sc. (p. 1564)	2	12	
Oral Biology, Ph.D. (p. 1565)	4	12	
Preventive Dental Science (Orthodontics), M.Sc. (p. 1566)	3	40	
Preventive Dental Science (Pediatric Dentistry), M.Dent. (p. 1567)	3	64	
Prosthodontics, M.Sc. (p. 1568)	3	99	

## Dental Diagnostic and Surgical Sciences, M.Dent., (Oral and Maxillofacial Surgery)

Dental Diagnostic & Surgical Sciences

**Head/Program Director:** A. Shah

**Campus Address/General Office:** D343-780 Bannatyne

**Telephone:** 204-789-3684

**Fax:** 204-272-3077

**Email Address:** oral.surgery@umanitoba.ca (oral\_surgery@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/dentistry/ddss/](https://umanitoba.ca/faculties/health_sciences/dentistry/ddss/)  
(<https://umanitoba.ca/explore/programs-of-study/oral-and-maxillofacial-surgery-mdent/>)

## Oral and Maxillofacial Surgery Program Information

The Master of Dentistry (Oral and Maxillofacial Surgery) includes a four-year hospital residency for which a Post-Graduate Training Certificate is awarded. The program is certified and fully accredited by the Commission on Dental Accreditation of Canada and, as such, is also recognized by the American Dental Association. The primary objective of the program is to train dentists to become competent, ethical Oral and Maxillofacial surgeons for practice in Canada.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## Oral and Maxillofacial Surgery M.Dent. Admission Requirements

Applicants must be Canadian citizens or permanent residents of Canada and be in possession of a National Dental Examining Board of Canada Certificate. They must comply with provincial requirements for licensing of interns and residents. Some additional post-graduate experience is desirable.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Oral and Maxillofacial Surgery M.Dent. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/oms.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/oms.html)) page.

## Degree Requirements

Students must complete:

- All clinical rotations and assignments as set out in the four years of hospital residency training;
- All courses listed under the "Progression Chart".
- An essay/research project DDSS 7220 in a specified area selected in consultation with the department is required.

**Expected Time to Graduate:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 6000	Summer Research	0
GRAD 7020	Master's Re-registration	0
DDSS 7030	Advanced Oral Radiology (Bi-yearly course - may be taken in Year 2)	1
DDSS 7220	Essay/Research Project (Spanned course taken in Year 1, Year 2, Year 3 & Year 4)	0

DDSS 7230	Advanced Oral Pathology (Bi-yearly course – may be taken in Year 2)	6
DDSS 7240	Advanced Oral and Maxillofacial Surgery Seminar 1	3
DDSS 7250	Clinical Advanced Oral and Maxillofacial Surgery 1	6
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy (Bi-yearly course – may be taken in Year 2)	6
CHSC 6810	Biostatistics for Clinicians	3
ORLB 7090	Pharmacology and Therapeutics (Bi-yearly course – may be taken in Year 2)	3
<b>Hours</b>		<b>28</b>
<b>Year 2</b>		
DDSS 7260	Advanced Oral and Maxillofacial Surgery Seminar 2	3
DDSS 7270	Clinical Advanced Oral and Maxillofacial Surgery 2	6
<b>Hours</b>		<b>9</b>
<b>Year 3</b>		
DDSS 7280	Clinical Advanced Oral and Maxillofacial Surgery 3	6
<b>Hours</b>		<b>6</b>
<b>Year 4</b>		
DDSS 7290	Clinical Advanced Oral and Maxillofacial Surgery 4	6
Thesis Defense <sup>1</sup>		6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>49</b>

<sup>1</sup> The oral defense is open to all and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Dental Diagnostic and Surgical Sciences, M.Dent., (Periodontics)

Dental Diagnostic & Surgical Sciences

**Head:** A. Shah

**Program Director:** C. Stavropoulou (Acting)

**Campus Address/General Office:** D343 - 780 Bannatyne Avenue

**Telephone:** 204-789-3684

**Fax:** 204-272-3077

**Email Address:** [periodontics@umanitoba.ca](mailto:periodontics@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/dentistry/ddss/](https://umanitoba.ca/faculties/health_sciences/dentistry/ddss/)  
([https://umanitoba.ca/faculties/health\\_sciences/dentistry/ddss/](https://umanitoba.ca/faculties/health_sciences/dentistry/ddss/))

## Periodontics Program Information

The three-year Master of Dentistry (Periodontics) program entails clinical training, lectures, seminars in the clinical and related basic sciences and research. The program is certified and fully accredited by the Commission on Dental Accreditation of Canada and, as such, is also recognized by the American Dental Association.

The program provides periodontal consultation and treatment services, including dental implants, to patients attending the Faculty of Dentistry and patients referred by private practice dentists in Winnipeg and throughout Manitoba. Residents are provided the opportunity to treat a full range of periodontal problems and to participate in on-going clinical and basic periodontal research. The Graduate Periodontal Clinic simulates a private periodontal practice and provides dental hygienist and dental assistant support to residents. A conscious sedation hospital rotation as well as private practice periodontal office rotations are part of the curriculum as well.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Periodontics M.Dent. Admission Requirements

Applicants must have a D.M.D. degree or its equivalent from an approved college or university.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Periodontics M.Dent. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/periodontics.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/periodontics.html)) page.

## Degree Requirements

Students must complete:

- All courses listed under the "Progression Chart".
- An Essay/Research project (DDSS 7220) in a specified area selected in consultation with the department.

**Expected Time to Graduate:** 3 years

### Progression Chart

Course	Title	Hours
<b>Years 1-3</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be taken in first term)	0
GRAD 6000	Summer Research	0
GRAD 7020	Master's Re-registration	0
DDSS 7010	Biology and Pathology of the Periodontium (Bi-yearly course – may be taken in Year 2)	6
DDSS 7030	Advanced Oral Radiology (Bi-yearly course – may be taken in Year 2)	1
DDSS 7050	Oral Medicine and Oral Diagnosis (Spanned course taken in Year 1, Year 2 & Year 3)	3
DDSS 7120	Advanced Clinical Periodontics (Spanned course taken in Year 1, Year 2 & Year 3)	4
DDSS 7130	Occlusion (Bi-yearly course – may be taken in Year 2)	3
DDSS 7160	Basic Clinical Periodontics	2
DDSS 7210	Clinical Practice in Periodontics (Spanned course taken in Year 1, Year 2 & Year 3)	18
DDSS 7220	Essay/Research Project (Spanned course taken in Year 1, Year 2 & Year 3)	0
DDSS 7230	Advanced Oral Pathology (Bi-yearly course – may be taken in Year 2)	6
DDSS 7300	Dental Implantology (Bi-yearly course – may be taken in Year 2)	3
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy (Bi-yearly course – may be taken in Year 2)	6

CHSC 6810	Biostatistics for Clinicians	3
ORLB 7090	Pharmacology and Therapeutics (Bi-yearly course – may be taken in Year 2)	3
<b>Hours</b>		<b>58</b>
<b>Year 3</b>		
Thesis Defence <sup>1</sup>		
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>58</b>

- <sup>1</sup> The oral defence is open to all and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Oral Biology, M.Sc.

**Head:** Dr. James Gilchrist

**Campus Address/General Office:** D342 - 780 Bannatyne Avenue

**Telephone:** 204-789-3571 (Graduate Program Assistant)

**Fax:** 204-789-3912

**Email Address:** oral.biology@umanitoba.ca (oral\_biology@umanitoba.ca)

**Website:** [umanitoba.ca/explore/programs-of-study/oral-biology-msc/](https://umanitoba.ca/explore/programs-of-study/oral-biology-msc/)

(<https://umanitoba.ca/explore/programs-of-study/oral-biology-msc/>)

**Academic Staff:** Please refer to the Oral Biology website (<https://umanitoba.ca/dentistry/faculty-staff/#oral-biology>) for Academic staff information.

## Oral Biology Program Information

The Department of Oral Biology offers graduate instruction and research leading to Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Oral Biology M.Sc. Admission Requirements

Students should possess an appropriate professional degree or B.Sc. degree with a satisfactory background in biological sciences.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Oral Biology M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/oral-biology-msc/>) page.

## Degree Requirements

The M.Sc. program requires satisfactory completion of course requirements as specified by each student's advisory committee and a thesis based on original research. Minimum course requirements are 12 credit hours **which must include** course ORLB 7190 (unless students have previous credit for this or an equivalent course).

M.Sc. students are expected to attend all departmental seminars. Students shall present one seminar on their research to the department each year, updating it each year.

In addition, students must pass an oral examination on the subject of the thesis and matters relating thereto.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
ORLB 7190	Communication Skills in Dental Research <sup>1</sup>	3
Courses at the 7000 level <sup>2</sup>		9
<b>Hours</b>		<b>12</b>

### Year 2

GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> ORLB 7190 is required for all Oral Biology Master's students, but may not be offered every year. It may be taken in year 2 of the program.

<sup>2</sup> All other courses are chosen through discussion between student and advisor

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new or returning graduate students must have identified a faculty member willing to act as thesis advisor. This must be done through personal interviews prior to registration. All programs of study must be approved by the department head or chair of the Graduate Studies and Research Committee.

Not all departmental graduate level courses are offered each year. Consult with appropriate faculty members.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Oral Biology, Ph.D.

**Head:** Dr. James Gilchrist

**Campus Address/General Office:** D342 - 780 Bannatyne Avenue

**Telephone:** 204-789-3571 (Graduate Program Assistant)

**Fax:** 204-789-3912

**Email Address:** oral.biology@umanitoba.ca (oral\_biology@umanitoba.ca)

**Website:** [umanitoba.ca/explore/programs-of-study/oral-biology-phd/](https://umanitoba.ca/explore/programs-of-study/oral-biology-phd/)  
(<https://umanitoba.ca/explore/programs-of-study/oral-biology-phd/>)

**Academic Staff:** Please refer to the Oral Biology website (<https://umanitoba.ca/dentistry/faculty-staff/#oral-biology>) for Academic staff information.

## Oral Biology Information

The Department of Oral Biology offers graduate instruction and research leading to Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Oral Biology Ph.D. Admission Requirements

A M.Sc. degree is required, although students of exceptional or proven ability holding an appropriate professional degree or a B.Sc. (Hons.) degree may be admitted.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Oral Biology Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/oral-biology-phd/>) page.

## Degree Requirements

The Ph.D. program requires satisfactory completion of course requirements as determined by each student's advisory committee and a thesis based on original research. Minimum course requirements shall be 12 credit hours at the 7000 level beyond the Master's degree, **and must include** course ORLB 7190 (unless students have previous credit for this or an equivalent course). **Courses taken during the Master's programs cannot be transferred as credits towards the Ph.D. program.**

Ph.D. students are expected to attend all departmental seminars. Students shall present at least one seminar on their own research to the department each year.

**Expected Time to Graduate:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
ORLB 7190	Communication Skills in Dental Research <sup>1</sup>	3
Courses at the 7000 level <sup>2</sup>		9
<b>Hours</b>		<b>12</b>
<b>Years 2-4</b>		
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Unless student has previous credit for this or an equivalent course. ORLB 7190 may not be offered every year, course may be taken in year 2.

<sup>2</sup> All other courses are chosen through discussion between student and advisor.

<sup>3</sup> Doctoral Candidacy Exam cannot be taken until all PhD program coursework is completed, and should be completed no later than 1 year prior to expected graduation.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new or returning graduate students must have identified a faculty member willing to act as thesis advisor. This must be done through personal interviews prior to registration. All programs of study must be approved by the department head or chair of the Graduate Studies and Research Committee.

Not all departmental graduate level courses are offered each year. Consult with appropriate faculty members.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Preventive Dental Science (Orthodontics), M.Sc.

Preventive Dental Science

**Head/Program Director (Acting):** Adnan Shah

**Campus Address/General Office:** P342-790 Bannatyne Avenue

**Telephone:** 204-789-3571 (graduate program assistant)

**Fax:** 204-789-3912

**Email Address:** orthodontics@umanitoba.ca

**Website:** [umanitoba.ca/explore/programs-of-study/orthodontics-msc](https://umanitoba.ca/explore/programs-of-study/orthodontics-msc)

(<https://umanitoba.ca/explore/programs-of-study/orthodontics-msc/>)

**Academic Staff:** Please refer to the Preventive Dental Science (<https://umanitoba.ca/dentistry/faculty-staff/#preventive-dental-science>) website for Academic staff information.

## Preventive Dental Science Information

The department of Preventive Dental Science offers programs leading to the Master of Science (Orthodontics Speciality) and Master of Dentistry (Pediatric Dentistry) degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Orthodontics M.Sc. Admission Requirements

Applicants must be a graduate of a full-time minimum four-year University-based dentistry program and have at least one year of clinical experience.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Preventive Dental Science M.Sc. (Orthodontics) program of study (<https://umanitoba.ca/explore/programs-of-study/orthodontics-msc/>) page.

## Degree Requirements

Students must successfully complete:

- All courses listed under the "Progression Chart"
- A thesis based on original research and acceptable to the Faculty of Graduate Studies and successful oral defence is also required, as well as submission of a peer-reviewed paper suitable for publication to the satisfaction of the Program Director.

**Expected Time to Graduate:** 3 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 6000	Summer Research	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy	6
CHSC 6810	Biostatistics for Clinicians	3
		<b>Hours</b>
		<b>9</b>
<b>Years 1-3</b>		
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
PDSO 7000	Neural Basis of Oropharyngeal Function (Bi-yearly course – may be taken in Year 2)	3
PDSO 7020	The Mechanics of Orthodontic Therapy (Bi-yearly course – may be taken in Year 2)	6
PDSO 7040	Clinical Craniofacial Growth and Development (Spanned course taken in Year 1, Year 2, and Year 3)	3
PDSO 7060	Cephalometric Analysis (Bi-yearly course – may be taken in Year 2)	3
PDSO 7070	Biology of Orthodontics and Facial Orthopedics (Bi-yearly course – may be taken in Year 2)	3
DDSS 7030	Advanced Oral Radiology (Bi-yearly course – may be taken in Year 2)	1
DDSS 7130	Occlusion (Bi-yearly course – may be taken in Year 2)	3
DDSS 7230	Advanced Oral Pathology (Bi-yearly course – may be taken in Year 2)	6
RSTD 7150	Orthodontic Materials (Bi-yearly course – may be taken in Year 2)	3
		<b>Hours</b>
		<b>31</b>
<b>Year 3</b>		
Thesis Defense <sup>1</sup>		
		<b>Hours</b>
		<b>0</b>
		<b>Total Hours</b>
		<b>40</b>

<sup>1</sup> The oral defence is open to all and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Preventive Dental Science (Pediatric Dentistry), M.Dent.

Preventive Dental Science  
**Head (Acting):** Adnan Shah

**Program Director (Acting):** Eli Miranda  
**Campus Address/General Office:** P131-790 Bannatyne Avenue  
**Telephone:** 204-789-3684

**Fax:** 204-977-5699

**Email Address:** [pediatric@umanitoba.ca](mailto:pediatric@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/dentistry/pds/](https://umanitoba.ca/faculties/health_sciences/dentistry/pds/)  
[\(https://umanitoba.ca/faculties/health\\_sciences/dentistry/pds/\)](https://umanitoba.ca/faculties/health_sciences/dentistry/pds/)

**Academic Staff:** Please refer to the Preventive Dental Science ([https://umanitoba.ca/faculties/health\\_sciences/dentistry/pds/faculty-staff.html](https://umanitoba.ca/faculties/health_sciences/dentistry/pds/faculty-staff.html)) website for Academic staff information.

## Preventive Dental Science Information

The department of Preventive Dental Science offers programs leading to the Master of Science (Orthodontics Speciality) and Master of Dentistry (Pediatric Dentistry) degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Pediatric Dentistry M.Dent. Admission Requirements

Applicants must be Canadian Citizens / Permanent Residents of Canada, a graduate of a full-time minimum four-year University-based dentistry program and have at least one year of clinical experience.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Preventive Dental Science M.Dent. (Pediatric Dentistry) program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/pediatric\\_dentistry.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/pediatric_dentistry.html)) page.

## Degree Requirements

- All courses listed under the "Progression Chart".
- A thesis based on original research and acceptable to the Faculty of Graduate Studies and successful oral defence is also required.

**Expected Time to Graduate:** 3 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 6000	Summer Research	0
GRAD 7020	Master's Re-registration	0
GRAD 7000	Master's Thesis	0
PDS 7101	Preventive Programs in Pediatric Dentistry (Bi-yearly course - may be taken in Year 2)	3
PDS 7102	Hospital Pediatric Dentistry I	6
PDS 7104	Management and Restorative Treatment of Pediatric Patients I	6
PDS 7107	Special Needs and Emergency Care in Pediatric Patients	3



PDSO 7108	Growth and Development - Management of the Developing Occlusion (Spanned course taken in Year 1, Year 2, and Year 3)	3
PDSO 7110	Pharmacology and Toxicology in Pediatric Dentistry (Bi-yearly course - may be taken in Year 2)	3
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy (Bi-yearly course - may be taken in Year 2)	6
CHSC 6810	Biostatistics for Clinicians	3
DDSS 7230	Advanced Oral Pathology (Bi-yearly course – may be taken in Year 2)	6
DDSS 7030	Advanced Oral Radiology (Bi-yearly course – may be taken in Year 2)	1
<b>Hours</b>		<b>40</b>
<b>Year 2</b>		
PDSO 7103	Hospital Pediatric Dentistry II	6
PDSO 7105	Management and Restorative Treatment of Pediatric Patients II	6
INDG 3240	Indigenous Medicine and Health	3
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
<b>Hours</b>		<b>21</b>
<b>Year 3</b>		
PDSO 7106	Preventive and Community Pediatric Dentistry	3
Thesis Defense <sup>1</sup>		
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>64</b>

<sup>1</sup> The oral defense is open to all and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Prosthodontics, M.Sc.

Restorative Dentistry

**Head:** Vanessa Swain

**Program Director:** Igor Pesun

**Campus Address/General Office:** D227 - 780 Bannatyne Avenue

**Telephone:** 204-789-3516

**Fax:** 204-789-3916

**Email Address:** [prostho@umanitoba.ca](mailto:prostho@umanitoba.ca)

**Website:** [umanitoba.ca/dentistry/restorative-dentistry](https://umanitoba.ca/dentistry/restorative-dentistry) (<https://umanitoba.ca/dentistry/restorative-dentistry/>)

## Restorative Dentistry Information

The department of Restorative Dentistry offers a program leading to the Master of Science (Prosthodontics) degree.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Prosthodontics M.Sc. Admission Requirements

A D.M.D. or D.D.S. from a minimum four-year undergraduate Dental School is required. A D.M.D. or D.D.S. that is only three years in length is acceptable if the undergraduate dental school is accredited in Canada.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Prosthodontics M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/prosthodontics-msc/>) page.

## Degree Requirements

The M.Sc. program is comprised of didactic, laboratory, and clinical course requirements, and a research thesis. The minimum number of credit hours required in the program is 99 hours.

**Expected Time to Graduate:** 3 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
RSTD 7010	Dental Laboratory Technology	4
RSTD 7016	Clinical Practice in Prosthodontics 1	8
RSTD 7116	Clinical Practice in Prosthodontics 2	8
CHSC 6810	Biostatistics for Clinicians	3
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy	6
<b>Hours</b>		<b>29</b>

#### Years 1-2

Courses offered bi-yearly taken in Year 1 or Year 2

DDSS 7030	Advanced Oral Radiology	1
DDSS 7130	Occlusion	3
DDSS 7230	Advanced Oral Pathology	6
DDSS 7300	Dental Implantology	3
ORLB 7090	Pharmacology and Therapeutics	3
RSTD 7100	Dental Materials	6
RSTD 7014	Classic Fixed Prosthodontic Literature Review	1
RSTD 7114	Classic Removable Partial Denture Prosthodontic Literature Review	1
RSTD 7024	Classic Complete Denture Prosthodontic Literature Review	1
RSTD 7124	Classic Articulator and Maxillofacial Literature Review	1
<b>Hours</b>		<b>26</b>

#### Years 1-3

Courses offered once every 3 years taken in Year 1 or Year 2 or Year 3

RSTD 7012	Advanced Prosthodontic Seminars 1-TMD, Occlusion, Articulators	1
RSTD 7112	Advanced Prosthodontic Seminar 2 - Complete Dentures, Maxillofacial Prosthodontics	1
RSTD 7022	Advanced Prosthodontic Seminars 3 - Removable Partial Dentures, Dental Materials	1

RSTD 7122	Advanced Prosthodontic Seminars 4 - Conventional Fixed Prosthodontics	1
RSTD 7032	Advanced Prosthodontic Seminars 5 - Implant Prosthodontics	1
RSTD 7132	Advanced Prosthodontic Seminars 6- Practice Management, Ethics, and Sleep Medicine	1
RSTD 7018	Current Prosthodontic Literature Review 1	1
RSTD 7118	Current Prosthodontic Literature Review 2	1
RSTD 7028	Current Prosthodontic Literature Review 3	1
RSTD 7128	Current Prosthodontic Literature Review 4	1
RSTD 7038	Current Prosthodontic Literature Review 5	1
RSTD 7138	Current Prosthodontic Literature Review 6	1

**Hours** **12**

#### Year 2

RSTD 7026	Clinical Practice in Prosthodontics 3	8
RSTD 7126	Clinical Practice in Prosthodontics 4	8
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0

**Hours** **16**

#### Year 3

RSTD 7036	Clinical Practice in Prosthodontics 5	8
RSTD 7136	Clinical Practice in Prosthodontics 6	8
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0

Thesis Defense <sup>1</sup>

**Hours** **16**

**Total Hours** **99**

<sup>1</sup> The oral defense is open to all and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## **Bona Fide Academic Requirements (BFAR)**

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## **General Regulations**

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Max Rady College of Medicine

## Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biochemistry and Medical Genetics, M.Sc. (p. 1571)	2	11	
Biochemistry and Medical Genetics, Ph.D. (p. 1573)	4	11	
Community Health Sciences, M.P.H. (p. 1574)	2	30	
Community Health Sciences, M.Sc. (p. 1576)	2-4	21	
Community Health Sciences, Ph.D. (p. 1577)	4-6	18-24	
Genetic Counselling, M.Sc. (p. 1579)	2	30	
Human Anatomy and Cell Science, M.Sc. (p. 1581)	2-3	9	
Human Anatomy and Cell Science, Ph.D. (p. 1582)	4-5	6	
Immunology, M.Sc. (p. 1584)	2-3	9	
Immunology, Ph.D. (p. 1585)	4-5	9,15,18	
Medical Microbiology & Infectious Diseases, M.Sc. (p. 1587)	2-3	12	
Medical Microbiology and Infectious Diseases, Ph.D. (p. 1588)	5-6	6-12	
Pathology, M.Sc. (p. 1589)	2-4	9-33.5	
Pharmacology and Therapeutics, M.Sc. (p. 1591)	2-3	9-12	
Pharmacology and Therapeutics, Ph.D. (p. 1592)	3-5	6-12	
Physician Assistant Studies, M.P.A.S. (p. 1593)	2-3	86	
Physiology & Pathophysiology, M.Sc. (p. 1595)	2	9	
Physiology & Pathophysiology, Ph.D. (p. 1596)	4	9	
Surgery, M.Sc. (p. 1597)	2	12	

## Biochemistry and Medical Genetics, M.Sc.

Biochemistry and Medical Genetics

**Head:** Dr. B. Triggs-Raine

**Associate Head:** Dr. S. Gibson

**Grad Chair:** Dr. J. Wigle

**Campus Address/General Office:** 336 - 745 Bannatyne Avenue

**Telephone:** 204-789-3593

**Fax:** 204-789-3900

**Email Address:** bmgadmin@umanitoba.ca

**Website:** [umanitoba.ca/medicine/biochem/](https://umanitoba.ca/medicine/biochem/) (<https://umanitoba.ca/medicine/biochem/>)

**Academic Staff:** Please refer to the Biochemistry website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/biochem/faculty/facultylists.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/biochem/faculty/facultylists.html)) for Faculty information.

## Biochemistry and Medical Genetics Program Information

The department offers programs leading to the Masters of Science and the Doctor of Philosophy degrees. There are a wide range of potential thesis projects broadly related to one of the following areas of research: cancer, computational biology, epigenetics, genetic basis of development and disease, and regenerative medicine.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## Biochemistry and Medical Genetics M.Sc. Admission Requirements

Applicants must have an advanced (four year) degree with an appropriate background in biochemistry, genetics, or a closely related subject area; and, a minimum 3.5 GPA (based on a 4.5 scale), or equivalent, in the previous 60 credit hours of university study, or equivalent (normally 2 years). In addition, during this period there should be no grade less than C+ in any biochemistry, genetics, or life science course deemed relevant to the proposed course of study.

Admission will depend upon the availability of a Faculty Member to supervise the student and resources to support the student's research.

In rare cases, applicants with GPA's lower than 3.5 or with a grade below C+ in the previous 60 credit hours may be admitted to this department, based upon individual circumstances and the support of their prospective advisors. Students in this situation should consult with their prospective advisor and the Chair of the Graduate Student Admissions and Awards Committee.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biochemistry and Medical Genetics M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/bio\\_chem.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/bio_chem.html)) page.

## Degree Requirements

Students must complete a minimum of 9 credit hours of coursework in addition to BGEN 7000 Research Seminar for Master's Students.

A written thesis is required for the research-based Master's degree.

**Expected Time to Graduate:** 2-3 years

## Progression Chart

### Master of Science (Biochemistry and Medical Genetics)

*Research focus in Biochemistry and Medical Genetics*

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BGEN 7000	Research Seminar M.Sc. <sup>1</sup>	1
IMED 7120	Medical Biochemistry <sup>2</sup>	3
IMED 7170	Medical Genetics <sup>2</sup>	3
Select additional course(s) to be chosen by the student and his/her advisor and/or advisory committee		3
<b>Hours</b>		<b>10</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
BGEN 7000	Research Seminar M.Sc. <sup>1</sup>	1
<b>Hours</b>		<b>1</b>
<b>Total Hours</b>		<b>11</b>

<sup>1</sup> Students must enroll in BGEN 7000 every Fall and Winter term of program enrollment.

<sup>2</sup> If, after consultation with the student's advisory committee, the course coordinator, and the Graduate Student Affairs Committee, it is deemed that a student already holds a course equivalent to IMED 7120 or IMED 7170, then alternative coursework will be selected as agreed by the student's advisor or advisory committee.

### Master of Science (Biochemistry and Medical Genetics)

*Research focus in Computational Biology*

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BGEN 7000	Research Seminar M.Sc. <sup>1</sup>	1
IMED 7120 or IMED 7170	Medical Biochemistry <sup>2</sup> or Medical Genetics	3
IMED 7280	Medical Computational Biology	3
Select additional course(s) to be chosen by the student and his/her advisor and/or advisory committee		3
<b>Hours</b>		<b>10</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
BGEN 7000	Research Seminar M.Sc. <sup>1</sup>	1
<b>Hours</b>		<b>1</b>
<b>Total Hours</b>		<b>11</b>

<sup>1</sup> Students must enroll in BGEN 7000 every Fall and Winter term of program enrollment.

<sup>2</sup> If, after consultation with the student's advisory committee, the course coordinator, and the Graduate Student Affairs Committee, it is deemed that a student already holds a course equivalent to IMED 7120 or IMED 7170, then alternative coursework will be selected as agreed by the student's advisor or advisory committee.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the department of Biochemistry and Medical Genetics are required to complete a Course Approval Form in consultation with their supervisor **prior** to registering for courses and making program changes. The Course Approval Form must be signed by the student, supervisor, graduate chair or the department head and submitted to the graduate program coordinator. Only courses that are included on the Course Approval Form will be credited to the student's program. All course additions and withdrawals (registration revision) must be approved in the same manner by completing or filling out the Registration Revision Form available on the website.

Consult the department office or browse the web for a list of course offerings.

It should be noted that not all courses are offered every year and some courses will be held only with a minimum enrolment. Please check the Aurora catalog to find out when a course is offered.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Biochemistry and Medical Genetics, Ph.D.

Biochemistry and Medical Genetics

**Head:** Dr. B. Triggs-Raine

**Associate Head:** Dr. S. Gibson

**Grad Chair:** Dr. J. Wigle

**Campus Address/General Office:** 336 - 745 Bannatyne Avenue, Winnipeg, MB, R3E 0J9

**Telephone:** 204-789-3593

**Fax:** 204-789-3900

**Email Address:** [bmgadmin@umanitoba.ca](mailto:bmgadmin@umanitoba.ca)

**Website:** [umanitoba.ca/medicine/biochem/](https://umanitoba.ca/medicine/biochem/) (<https://umanitoba.ca/medicine/biochem/>)

**Academic Staff:** Please refer to the Biochemistry website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/biochem/faculty/facultylists.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/biochem/faculty/facultylists.html)) for Faculty information.

## Biochemistry and Medical Genetics Program Information

The department offers programs leading to the Masters of Science and the Doctor of Philosophy degrees. There are a wide range of potential thesis projects broadly related to one of the following areas of research: cancer, computational biology, epigenetics, genetic basis of development and disease, and regenerative medicine.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

#### Biochemistry and Medical Genetics Ph.D. Admission Requirements

A thesis-based Master's degree (of at least 2 years in duration), or equivalent, in biochemistry, genetics, or a closely related field, from a Canadian university is required for direct admission to the Ph.D. program. In addition, a cumulative GPA of 3.5 (4.5 scale), or equivalent, and no grade less than C+ in the courses taken during the Master's program is required.

Generally, there is no direct entry into the Ph.D. program for students with Master's degrees from non-Canadian universities. Admission will also depend upon the availability and willingness of a Faculty Member to supervise the student and resources to support the student's research.

#### TRANSFER TO A PH.D. PROGRAM

Students registered for a Master's degree who have made excellent progress over the first year in their program may be considered for transfer to the Ph.D. program. The transfer process, as outlined in the supplemental regulations, must be completed within 16 months of the student's commencement in the Master's program.

### Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biochemistry and Medical Genetics Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/bio\\_chem.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/bio_chem.html)) page.

### Degree Requirements

Students who transition from the M.Sc. program are required to take 6 credit hours (in addition to the 10 credit hours required in fulfillment of the MSc program). Students holding a thesis-based M.Sc. degree who enter directly into the Ph.D. program must take a minimum of 9 credit hours.

A written thesis is required for the Doctoral degree.

**Expected Time to Graduate:** 4–5 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

BGEN 8000	Research Seminar Ph.D. <sup>1</sup>	1
Select two of the following:		6
IMED 7120	Medical Biochemistry <sup>2</sup>	
IMED 7170	Medical Genetics <sup>2</sup>	
IMED 7280	Medical Computational Biology <sup>2</sup>	
Additional course(s) to be chosen by the student and his/her advisor and/or advisory committee		3
<b>Hours</b>		<b>10</b>
<b>Years 2-4</b>		
GRAD 8000	Doctoral Thesis	0
BGEN 8000	Research Seminar Ph.D. <sup>1</sup>	1
<b>Hours</b>		<b>1</b>
<b>Total Hours</b>		<b>11</b>

<sup>1</sup> Students must enroll in BGEN 8000 every Fall and Winter term of program enrollment.

<sup>2</sup> If, after consultation with the student's advisory committee, the course coordinator, and the Graduate Student Affairs Committee, it is deemed that a student has already completed or holds a course equivalent to IMED 7120, IMED 7170 or IMED 7280 then alternative coursework will be selected as agreed by the student's advisor or advisory committee.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the department of Biochemistry and Medical Genetics are required to complete a Course Approval Form in consultation with their supervisor **prior** to registering for courses and making program changes. The Course Approval Form must be signed by the student, supervisor, graduate chair or the department head and submitted to the graduate program coordinator. Only courses that are included on the Course Approval Form will be credited to the student's program. All course additions and withdrawals (registration revision) must be approved in the same manner by completing or filling out the Registration Revision Form available on the website.

Consult the department office or browse the web for a list of course offerings.

It should be noted that not all courses are offered every year and some courses will be held only with a minimum enrolment. Please check the Aurora catalog to find out when a course is offered.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Community Health Sciences, M.P.H.

Community Health Sciences

**Head:** Sharon Bruce

**Grad Chair:** S. Michelle Driedger

**Campus Address/General Office:** S111, Medical Services Building, 750 Bannatyne Avenue

**Telephone:** 204-789-3655

**Fax:** 204-789-3905

**Email Address:** [chsinfo@umanitoba.ca](mailto:chsinfo@umanitoba.ca)

**Website:** [umanitoba.ca/medicine/department-community-health-sciences](https://umanitoba.ca/medicine/department-community-health-sciences/) (<https://umanitoba.ca/medicine/department-community-health-sciences/>)

**Academic Staff:** Please refer to the Community Health Sciences website (<https://umanitoba.ca/medicine/department-community-health-sciences/#faculty-and-staff>) for Faculty information.

## Community Health Sciences Program Information

CHS offers broad, multidisciplinary, graduate training at the Master and Doctoral levels in the concepts and methods of the population-based health sciences and their application in the practice of public health and preventive medicine.

The Doctoral program is designed to produce individuals who will teach in the community health sciences, train other researchers, design and execute major research projects, and serve as senior advisors and consultants in the area of health care policy and planning.

In contrast, our two Master's programs, the Master of Science and Master of Public Health degrees, are intended to satisfy the demand of local, regional, provincial and federal health departments for trained community

health professionals. The M.Sc. program has a research focus requiring completion of a thesis while the M.P.H. program has a field-placement integrating applied public health concepts.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Community Health Sciences M.P.H. Admission Requirements

The M.P.H. program is open to individuals with four-year degrees in the health sciences or allied health professions or with honours degrees in the biological or social sciences, and a minimum of three years experience working in a field of health.

Please note that Community Health Sciences requires English Language Proficiency test scores (<https://umanitoba.ca/explore/programs-of-study/community-health-sciences-mph/#admission-requirements>) above the FGS minimum requirement.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Community Health Sciences M.P.H. program of study (<https://umanitoba.ca/explore/programs-of-study/community-health-sciences-mph/>) page.

## Degree Requirements

The M.P.H. program consists of 30 credit hours from 7000-level core and elective courses. Following course work completion the student may select one of two routes as part of this program of study, by completing either a zero component supervised field placement or capstone research project. The majority of students will only be eligible for the field placement. Students with extensive prior public health experience may be eligible for the capstone research project.

**Expected Time to Graduate:** 2 years full-time, 4 years part-time

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CHSC 7500	Conc. Public Health	3
CHSC 7502	Core Concepts in Public Health 2	3
CHSC 7520	Principles of Epidemiology	3
CHSC 7530	Applied Public Health Epidemiology	3
CHSC 7820 or CHSC 7810	Biostatistics for Community Health Sciences <sup>1</sup> or Biostatistics for the Health and Human Sciences	3
CHSC 7632	Evaluation of Family, Health and Social Development Programs	3

CHSC 7XXX	One Approved Elective Course designated as 7000 level offered by Community Health Sciences	3
<b>Hours</b>		<b>21</b>
<b>Year 2</b>		
CHSC 7XXX	Three Approved Elective Courses designated as 7000 level offered by Community Health Sciences	9
CHSC 7580 or CHSC 7590	Public Health Field Placement or Capstone Research Project in Public Health	0
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Since an undergraduate level course in Statistics is a prerequisite for CHSC 7820, all students must have completed such a course at time of admission, or additional statistical training will be required.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Part of the process prior to registration may include obtaining permission from the relevant course instructor (see course catalog or CHS website course offerings for courses needing instructor permission). All course additions and withdrawals must have prior advisor approval. Students should register themselves via Aurora Student on the University of Manitoba website. If students encounter difficulties with registration they may contact the Community Health Sciences Graduate Program office for assistance.

It should be noted that not all courses are offered each year and some courses will be held with a minimum enrolment. Please check Aurora class schedule or visit the Community Health Sciences website for a list of current course offerings.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:



- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Community Health Sciences, M.Sc.

Community Health Sciences

**Head:** Sharon Bruce

**Grad Chair:** S. Michelle Driedger

**Campus Address/General Office:** S111, Medical Services Building, 750 Bannatyne Avenue

**Telephone:** 204-789-3655

**Fax:** 204-789-3905

**Email Address:** chsinfo@umanitoba.ca

**Website:** [umanitoba.ca/medicine/department-community-health-sciences](https://umanitoba.ca/medicine/department-community-health-sciences) (<https://umanitoba.ca/medicine/department-community-health-sciences/>)

**Academic Staff:** Please refer to the Community Health Sciences website (<https://umanitoba.ca/medicine/department-community-health-sciences/#faculty-and-staff>) for Faculty information.

## Community Health Sciences Program Information

CHS offers broad, multidisciplinary, graduate training at the Master and Doctoral levels in the concepts and methods of the population-based health sciences and their application in the practice of public health and preventive medicine.

The Doctoral program is designed to produce individuals who will teach in the community health sciences, train other researchers, design and execute major research projects, and serve as senior advisors and consultants in the area of health care policy and planning.

In contrast, our two Master's programs, the Master of Science and Master of Public Health degrees, are intended to satisfy the demand of local, regional, provincial and federal health departments for trained community health professionals. The M.Sc. program has a research focus requiring completion of a thesis while the M.P.H. program has a field-placement integrating applied public health concepts.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Community Health Sciences M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Community Health Sciences M.Sc. program of study (<https://umanitoba.ca/explore/programs-of-study/community-health-sciences-msc/>) page.

## Degree Requirements

Twenty-one credit hours of course work from 7000-level courses: nine credit hours from required courses, three credit hours from methods and nine credit hours from electives and a thesis.

Students in the biostatistics concentration must complete nine credit hours of core courses, six credit hours of methods courses, six credit hours of electives, and a thesis.

**Expected Time to Graduate:** 2 years full-time, 4 years part-time

## Progression Chart

### Master of Science (Community Health Sciences)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CHSC 7320	Organization and Financing of the Canadian Health Care System	3
CHSC 7520	Principles of Epidemiology	3
CHSC 7860	Methods and Concepts for Community Health Sciences	3
Select one of the following:		3
CHSC 7820	Biostatistics for Community Health Sciences <sup>1</sup>	
CHSC 7810	Biostatistics for the Health and Human Sciences (with Advisor's permission)	
CHSC 7738	Qualitative Research Methods in Community Health Sciences	
CHSC 7XXX	Three Approved Elective Courses designated as 7000 level offered by Community Health Sciences <sup>2</sup>	9
Proposal Work / Proposal Defense <sup>3</sup>		
<b>Hours</b>		<b>21</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>4</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>21</b>

- <sup>1</sup> Since an undergraduate level course in Statistics is a pre-requisite for CHSC 7820, all students must have completed such a course at time of admission, or will be required to take additional statistical training if they intend to complete CHSC 7820.
- <sup>2</sup> On the recommendation of the student's advisor and with approval of the Director of the CHSC Graduate Program elective courses for the M.Sc. program may be taken in other departments.
- <sup>3</sup> Students may work on their thesis proposal while taking courses, however, the proposal defense can be held after CHSC 7520, CHSC 7860 and CHSC 7820 or CHSC 7810 or CHSC 7738 courses have successfully been completed.
- <sup>4</sup> Proposal work / proposal defense continuation (if not completed within year 1), Research and write-up; Thesis Defense.

### Master of Science Concentration in Biostatistics (Community Health Sciences)

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CHSC 7320	Organization and Financing of the Canadian Health Care System	3
CHSC 7520	Principles of Epidemiology	3
CHSC 7860	Methods and Concepts for Community Health Sciences	3
CHSC 7830	Advanced Biostatistics for Community Health Sciences	3
STAT 7080	Advanced Statistical Inference	3
CHSC/STAT 7XXX	Two Approved Elective Courses designated as 7000 level offered by Community Health Sciences and/or Statistics <sup>1</sup>	6
Proposal Work / Proposal Defense <sup>2</sup>		
<b>Hours</b>		<b>21</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
Proposal Work Continuation / Proposal Defense (if not completed within Year 1), Research; Thesis Defense		
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>21</b>

- <sup>1</sup> Normally, a student should take three credit hours from each department, but this will be determined by the student in consultation with his/her advisor.
- <sup>2</sup> Students may work on their thesis proposal while taking courses. However, in the Biostatistics concentration, the proposal defense can only be held after CHSC 7520, CHSC 7860, and CHSC 7830 courses have successfully been completed.

#### Note:

CHSC 7820, an additional core requirement for the MSc program will normally be waived for students accepted to the Biostatistics concentration, with appropriate documentation.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Part of the process prior to registration may include obtaining permission from the relevant course instructor (see course catalog or CHS website course offerings for courses needing instructor permission). All course additions and withdrawals must have prior advisor approval. Students should register themselves via Aurora Student on the University of Manitoba website. If students encounter difficulties with registration they may contact the Community Health Sciences Graduate Program office for assistance.

It should be noted that not all courses are offered each year and some courses will be held with a minimum enrolment. Please check Aurora class schedule or visit the Community Health Sciences website for a list of current course offerings.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Community Health Sciences, Ph.D.

Community Health Sciences

**Head:** Sharon Bruce

**Grad Chair:** S. Michelle Driedger

**Campus Address/General Office:** S111, Medical Services Building, 750 Bannatyne Avenue

**Telephone:** 204-789-3655

**Fax:** 204-789-3905

**Email Address:** chsinfo@umanitoba.ca

**Website:** [umanitoba.ca/medicine/department-community-health-sciences/](https://umanitoba.ca/medicine/department-community-health-sciences/) (<https://umanitoba.ca/medicine/department-community-health-sciences/>)

**Academic Staff:** Please refer to the Community Health Sciences website (<https://umanitoba.ca/medicine/department-community-health-sciences/#faculty-and-staff>) for Faculty information.

## Community Health Sciences Program Information

CHS offers broad, multidisciplinary, graduate training at the Master and Doctoral levels in the concepts and methods of the population-based health sciences and their application in the practice of public health and preventive medicine.

The Doctoral program is designed to produce individuals who will teach in the community health sciences, train other researchers, design and execute major research projects, and serve as senior advisors and consultants in the area of health care policy and planning.

In contrast, our two Master's programs, the Master of Science and Master of Public Health degrees, are intended to satisfy the demand of local, regional, provincial and federal health departments for trained community health professionals. The M.Sc. program has a research focus requiring completion of a thesis while the M.P.H. program has a field-placement integrating applied public health concepts.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Community Health Sciences Ph.D. Admission Requirements

The Ph.D. program is open to individuals with research-based M.A. and M.Sc. degrees. A thesis advisor must be identified at the time of application.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Community Health Sciences Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/community-health-sciences-phd/>) page.

## Degree Requirements

Eighteen credit hours of coursework from 7000-level courses (six from required courses, twelve from electives), candidacy examination and thesis. In addition, twelve credit hours of prerequisite courses, or their equivalents, must have been completed before entering the program or must be taken during the first year in the PhD program.

**Expected Time to Graduate:** 4 years full-time, 6 years part-time

## Progression Chart

### Admitted With an MSc in Community Health Sciences

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CHSC 8600	Senior seminar in Community Health Sciences	3
Select one of the following:		3
CHSC 7540	Advanced Epidemiology	
CHSC 7740	Advanced Qualitative Research Methods in Community Health Sciences	
CHSC 7830	Advanced Biostatistics for Community Health Sciences	
CHSC 7XXX	Four Approved Elective Courses designated as 7000 level of CHSC	12
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis (Proposal Work / Proposal Defense, Research)	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis (Thesis Research continued, Write up and Defense)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

### Admitted Without an MSc in Community Health Sciences

Course	Title	Hours
<b>Year 1</b>		
<b>Required</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Prerequisites</b>		
The following courses may count toward the PhD requirement of 12 electives credit hours: <sup>1</sup>		
CHSC 7320	Organization and Financing of the Canadian Health Care System	
CHSC 7520	Principles of Epidemiology	
CHSC 7860	Methods and Concepts for Community Health Sciences	
Select one of the following:		
CHSC 7820	Biostatistics for Community Health Sciences <sup>2</sup>	
CHSC 7810	Biostatistics for the Health and Human Sciences	
CHSC 7738	Qualitative Research Methods in Community Health Sciences	
<b>Formal Course Requirements</b>		
CHSC 8600	Senior seminar in Community Health Sciences	3
Select one of the following:		3

CHSC 7540	Advanced Epidemiology	
CHSC 7740	Advanced Qualitative Research Methods in Community Health Sciences	
CHSC 7830	Advanced Biostatistics for Community Health Sciences	
CHSC 7XXX	Four Approved Elective Courses designated as 7000 level offered by Community Health Sciences	12
<b>Hours</b>		<b>18</b>
<b>Year 2</b>		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis (Proposal Work / Proposal Defense, Research)	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis (Thesis Research continued, Write up and Defense)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> The following courses are considered prerequisites to the PhD program which may or may not be required, depending on the student's background, Master's degree and training. These courses *may* count toward the PhD requirement of 12 electives credit hours.

<sup>2</sup> Since an undergraduate level course in Statistics is a pre-requisite for CHSC 7820, all students must have completed such a course at time of admission, or will be required to take additional statistical training if they intend to complete CHSC 7820.

**Total Credit Hours: 18 – 24** as standard; up to **12** credit hours as auxiliary which in some instances may represent the necessary prerequisites.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Part of the process prior to registration may include obtaining permission from the relevant course instructor (see course catalog or CHS website course offerings for courses needing instructor permission). All course additions and withdrawals must have prior advisor approval. Students should register themselves via Aurora Student on the University of Manitoba website. If students encounter difficulties with registration they may contact the Community Health Sciences Graduate Program office for assistance.

It should be noted that not all courses are offered each year and some courses will be held with a minimum enrolment. Please check Aurora class schedule or visit the Community Health Sciences website for a list of current course offerings.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Genetic Counselling, M.Sc.

Genetic Counselling

**Head:** Dr. B. Triggs-Raine

**Associate Head:** Dr. S. Gibson

**Grad Chair:** Ms. J. Hartley

**Campus Address/General Office:** 336 - 745 Bannatyne Avenue

**Telephone:** 204-789-3593

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**Email Address:** [bmgadmin@umanitoba.ca](mailto:bmgadmin@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/biochem/](https://umanitoba.ca/faculties/health_sciences/medicine/units/biochem/) ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/biochem/](https://umanitoba.ca/faculties/health_sciences/medicine/units/biochem/))

**Academic Staff:** Please refer to the Biochemistry website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/biochem/faculty/facultylists.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/biochem/faculty/facultylists.html)) for Faculty information.

## Genetic Counselling Program Information

The Genetic Counselling Program offers a Master of Science degree in Genetic Counselling. This program is accredited by the Accreditation Council for Genetic Counseling (ACGC). Graduates will be eligible to sit for certification through the American Board of Genetic Counseling (ABGC) and/or the Canadian Association of Genetic Counsellors (CAGC).

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Genetic Counselling M.Sc. Admission Requirements

Applicants require the following:

- Bachelor's degree (or equivalent) that should include undergraduate genetics courses in principles of genetics, cell biology, human genetics and molecular biology
- At least one course in psychology
- Courses in developmental biology, statistics and embryology are an asset but not required
- Minimum 3.7 GPA (on a 4.5 scale) or equivalent in the most recent 60 credit hours of university study
- Practical counselling experience (ex: crisis programs, planned parenthood, peer-to-peer counselling, which usually have a training component)

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Genetic Counselling M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/genetic\\_counselling.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/genetic_counselling.html)) page.

## Degree Requirements

Students must submit an acceptable thesis and pass an oral thesis examination, all clinical rotations, ancillary experiences and 30 credit hours of coursework.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BGEN 7000	Research Seminar M.Sc. <sup>1</sup>	1
BGEN 7090	Principles and Practice of Human Genetics	3
BGEN 7130	Genetic Epidemiology of Human Populations	3
BGEN 7142	Clinical Genetics 1	3
BGEN 7144	Clinical Genetics 2	3
Select one of the following:		3
IMED 7410	Biomedical Trainee Skills	
3 credit hour Elective in Research Methodology		
BGEN 7270	Introduction to Genetic Counselling Clinic Rotation	4
Counselling Skills 1 (Extended Education)		0
Counselling Elective (Extended Education) <sup>2</sup>		0
5-week Clinical Rotation External to Manitoba		
<b>Hours</b>		<b>20</b>

### Year 2

GRAD 7000	Master's Thesis	0
BGEN 7000	Research Seminar M.Sc. <sup>1</sup>	1
BGEN 7280	Advanced Genetic Counselling Clinic Rotation	4
BGEN 7160	Theory and Practice of Genetic Counselling	3
BGEN 7040	Seminars in Human Genetics	3
<b>Hours</b>		<b>11</b>
<b>Total Hours</b>		<b>31</b>

<sup>1</sup> BGEN 7000 is one credit hour over the course of the program.

<sup>2</sup> The elective course will be selected from Counselling Skills II (COUNS 0200), Working with Families (COUNS 0240) or Counselling Theories (COUNS 0202) selected in consultation with the program director based on past experience and training (as documented). For course descriptions please visit <https://umextended.ca/>

### Ancillary Requirements

- Course on Research Ethics (CORE)
- Personal Health Information (PHIA) session
- Attend one Patient Support Group Meeting
- Complete one Community Outreach presentation
- Participate in Molecular Diagnostic Out of Centre Meeting
- Participate in Pan-Can Genetic Counselling Rounds
- Participate in Genetic Academic Session:
  - a. Present at One Genetic Academic Session per Year
  - b. Lead One Journal Club Per Year

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the department of Biochemistry and Medical Genetics are required to complete a Course Approval Form in consultation with their supervisor **prior** to registering for courses and making program changes. The Course Approval Form must be signed by the student, supervisor, graduate chair or the department head and submitted to the graduate program coordinator. Only courses that are included on the Course Approval Form will be credited to the student's program. All course additions and withdrawals (registration revision) must be approved in the same manner by completing or filling out the Registration Revision Form available on the website.

Consult the department office or browse the web for a list of course offerings.

It should be noted that not all courses are offered every year and some courses will be held only with a minimum enrolment. Please check the Aurora catalog to find out when a course is offered.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult

unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Human Anatomy and Cell Science, M.Sc.

Human Anatomy and Cell Science

**Head:** S. Hombach-Klonisch

**Campus Address/General Office:** 130 Basic Medical Sciences Building, 745 Bannatyne Avenue

**Telephone:** 204-789-3411

**Fax:** 204-789-3920

**Email Address:** [hacs.info@umanitoba.ca](mailto:hacs.info@umanitoba.ca)

**Website:** [umanitoba.ca/healthsciences/medicine/units/anatomy/](https://umanitoba.ca/healthsciences/medicine/units/anatomy/) (<https://umanitoba.ca/healthsciences/medicine/units/anatomy/>)

**Academic Staff:** Please see the HACS website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/anatomy/haresearch.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/anatomy/haresearch.html)) for Faculty information.

## Human Anatomy Program Information

The Department of Human Anatomy and Cell Science (HACS) offers graduate training at both the Master of Science and Doctor of Philosophy levels.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

## Human Anatomy and Cell Science M.Sc. Admission Requirements

The following categories of students may be accepted for graduate study in this department:

- Four-year undergraduate Science degree
- Students who have completed a three-year general undergraduate degree may be admitted following completion of the required pre-Master's courses. Contact the Department for details.
- Graduates in medicine or dentistry holding M.D., D.M.D. (D.D.S.), or equivalent degrees.
- Other suitable graduates will be considered.

The minimum standard for acceptance into any graduate program in the Department of HACS is a 3.5 Grade Point Average (GPA) or equivalent in the last two previous years of full time university study (60 credit hours).

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Human Anatomy Cell Science M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/hacs.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/hacs.html)) page.

## Degree Requirements

Students are required to take Biomedical Trainee Skills (IMED 7410) plus 6 credit hours of approved coursework at the 7000 level. Students must then complete a thesis.

**Expected Time to Graduate:** 2-3 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMED 7410	Biomedical Trainee Skills	3
ANAT/IMED 7XXX	Approved coursework designated 7000 level including at least one course from the list below <sup>1</sup>	6
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>2</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> The coursework required for an individual student will be specified in consultation with the student's faculty advisor, and will depend upon the student's background.

<sup>2</sup> M.Sc. students will normally be required to present at least one paper (poster or platform) at a scientific meeting before submission of their thesis for examination.

### Notes:

- Mandatory attendance at seminars that are part of the Departmental Seminar Program is required.

- A written research proposal must be submitted to the department for approval within six months of the student's entering the program.

### Approved Coursework

Course	Title	Hours
ANAT 7460	Human Histology: Basic Tissues	1.5
ANAT 7462	Human Histology: Blood, Immune, and Cardiopulmonary Systems	1.5
ANAT 7464	Human Histology: Gastrointestinal System and Endocrine Glands	1.5
ANAT 7466	Human Histology: Reproductive and Urinary Systems, Skin, and Special Senses	1.5
ANAT 7380	Human Developmental Anatomy (Embryology)	3
ANAT 7392	Human Neuroanatomy	3
IMED 7004	Human Brain Imaging Methods	1.5
ANAT 7470	Course no longer offered	
IMED 7092	Cell Biology A Introductory	3
IMED 7094	Cell Biology B Special Topics	3
IMED 7112	Fundamental Cellular Neurobiology	1.5
IMED 7114	Fundamental Neural Development and Plasticity	1.5
IMED 7116	Fundamental Systems Neuroscience	1.5
IMED 7118	Fundamental Neurobiology of Disease	1.5
IMED 7180	Molecular Approaches in Medical Research	3
IMED 7200	Cancer Biology	3
IMED 7210	Epigenetics in Development and Human Diseases	1.5
IMED 7242	Nucleic Acids: Structure and Function in Normal Development and Diseases	1.5
IMED 7244	Nucleic Acids: Manipulation in Biomedical Research	1.5
IMED 7290	Developmental Biology	3
IMED 7300	Microscopy, Optics, Imaging and Analysis in Health Research	3
IMED 7302	Advanced Molecular Imaging	3

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All programs of study must be approved by the Chair of Graduate Studies or by the department.

Not all courses are offered each year. Please consult with your Advisor and the department office or check with the catalog for a list of courses offered.

Students should register themselves by signing up for the Aurora Student on-line service of the University of Manitoba website. All course additions and or withdrawals (registration revisions) must be approved by the department.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Human Anatomy and Cell Science, Ph.D.

Human Anatomy and Cell Science

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**Campus Address/General Office:** 130 Basic Medical Sciences Building, 745 Bannatyne Avenue

**Telephone:** 204-789-3411

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**Academic Staff:** Please see the HACS website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/anatomy/haresearch.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/anatomy/haresearch.html)) for Faculty information.

## Human Anatomy Program Information

The Department of Human Anatomy and Cell Science (HACS) offers graduate training at both the Master of Science and Doctor of Philosophy levels.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Human Anatomy and Cell Science Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

The minimum standard for acceptance into any graduate program in the Department of HACS is a 3.5 Grade Point Average (GPA) or equivalent in the last two previous years of full time university study (60 credit hours).

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Human Anatomy Cell Science Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/hacs.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/hacs.html)) page.

## Degree Requirements

Students are required to take Readings in Anatomy (ANAT 7330) plus a minimum of 3 credit hours of approved coursework at the 7000 level. Students must then complete a thesis.

**Expected Time to Graduate:** 4-5 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANAT 7330	Readings in Anatomy	3
ANAT/IMED 7XXX	Approved coursework designated 7000 level including at least one course from the list below <sup>1</sup>	3
<b>Hours</b>		<b>6</b>
<b>Years 2-3</b>		
GRAD 8010	Doctoral Candidacy Examination	0
Thesis Proposal <sup>2</sup>		
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>6</b>

<sup>1</sup> The coursework required for an individual student will be specified in consultation with the student's faculty advisor, and will depend upon the student's background.

<sup>2</sup> The thesis proposal should be completed within two years of entering the program.

<sup>3</sup> Prior to submission of their thesis for examination, the student normally will be expected to have presented their research at scientific meetings; and, contributed to a manuscript that is submitted, in press, or published.

#### Note:

- Mandatory attendance at seminars that are part of the Departmental Seminar Program is required.

### Approved Coursework

Course	Title	Hours
ANAT 7460	Human Histology: Basic Tissues	1.5
ANAT 7462	Human Histology: Blood, Immune, and Cardiopulmonary Systems	1.5
ANAT 7464	Human Histology: Gastrointestinal System and Endocrine Glands	1.5
ANAT 7466	Human Histology: Reproductive and Urinary Systems, Skin, and Special Senses	1.5
ANAT 7380	Human Developmental Anatomy (Embryology)	3
ANAT 7392	Human Neuroanatomy	3
ANAT 7470	Course no longer offered	6
IMED 7004	Human Brain Imaging Methods	1.5
IMED 7092	Cell Biology A Introductory	3
IMED 7094	Cell Biology B Special Topics	3
IMED 7112	Fundamental Cellular Neurobiology	1.5
IMED 7114	Fundamental Neural Development and Plasticity	1.5
IMED 7116	Fundamental Systems Neuroscience	1.5
IMED 7118	Fundamental Neurobiology of Disease	1.5
IMED 7180	Molecular Approaches in Medical Research	3
IMED 7200	Cancer Biology	3
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IMED 7244	Nucleic Acids: Manipulation in Biomedical Research	1.5
IMED 7290	Developmental Biology	3
IMED 7300	Microscopy, Optics, Imaging and Analysis in Health Research	3
IMED 7302	Advanced Molecular Imaging	3

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All programs of study must be approved by the Chair of Graduate Studies or by the department.

Not all courses are offered each year. Please consult with your Advisor and the department office or check with the catalog for a list of courses offered.

Students should register themselves by signing up for the Aurora Student on-line service of the University of Manitoba website. All course additions and or withdrawals (registration revisions) must be approved by the department.



## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Immunology, M.Sc.

Immunology

**Head:** A. Marshall

**Campus Address/General Office:** 471 Apotex Centre, 750 McDermot Avenue

**Telephone:** 204-977-5610

**Email Address:** [Angela.Peloquin@umanitoba.ca](mailto:Angela.Peloquin@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/immunology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/immunology/) ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/immunology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/immunology/))

**Academic Staff:** Please see the Immunology website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/immunology/contactus.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/immunology/contactus.html)) for Faculty information.

## Immunology Program Information

The Department offers a diverse program of graduate studies and research in Immunology, leading to Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Immunology M.Sc. Admission Requirements

The Department of Immunology requires a minimum TOEFL score of 250 (computer based) or 88 (internet based, with a minimum of 20 points from each section of the test). In most cases a grade point average (GPA) above 3.5 is needed to be competitive for available positions in the program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Immunology M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/immunology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/immunology.html)) page.

## Degree Requirements

The minimum course load consists of 9 credit hours of IMMU courses at the 700 level. Must include IMMU 7070 and IMMU 7100. Students must submit an acceptable thesis and pass a thesis oral examination.

**Expected Time to Graduate:** 2 - 3 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMMU 7070	Introductory Immunology	3
IMMU 7100	Advanced Topics in Immunology	3
Approved coursework at the 7000 level		3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9</b>

#### Notes:

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- An outline of the proposed thesis research must be presented orally to the advisory committee, in a closed session, within the first 3 months of the program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students must meet with their advisor to determine their program of study prior to registration. Once the student has met with their advisor and subsequently receives approval from the Department Head, they must contact the Administrative Assistant, who will register the student in their courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

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All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Immunology, Ph.D.

Immunology

**Head:** A. Marshall

**Campus Address/General Office:** 471 Apotex Centre, 750 McDermot Avenue

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**Email Address:** [Angela.Peloquin@umanitoba.ca](mailto:Angela.Peloquin@umanitoba.ca)

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## Immunology Program Information

The Department offers a diverse program of graduate studies and research in Immunology, leading to Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Immunology Ph.D. Admission Requirements

The Department of Immunology requires a minimum TOEFL score of 250 (computer based) or 88 (internet based, with a minimum of 20 points from each section of the test.). In most cases a grade point average (GPA) above 3.5 is needed to be competitive for available positions in the program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Immunology Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/immunology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/immunology.html)) page.

## Degree Requirements

Candidates admitted directly into the Ph.D. program or wishing to transfer from the M.Sc. to the Ph.D. program must pass a thesis proposal defence taken within the first 18 or 16 months, respectively, of their admission into the Department. In addition, the candidacy examination required of all students in the Ph.D. program will be in the form of a research proposal.

**Expected Time to Graduate:** 4 - 5 years

### Progression Chart

#### 9 Credit Hour Option

#### Students Entering With a M.Sc. Degree in Immunology <sup>1</sup>

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>0</b>
<b>Year 2</b>		
IMMU XXXX	Courses in an area of the department	6
COURSE 7XXX	Approved coursework designated 7000 level	3
Thesis Proposal <sup>2</sup>		
<b>Hours</b>		<b>9</b>

<b>Year 3</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>3</sup>	0
	<b>Hours</b>	<b>0</b>

<b>Year 4</b>		
GRAD 8000	Doctoral Thesis	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>9</b>

<sup>1</sup> Students entering with a M.Sc. degree in Immunology do not need to take the IMMU 7070 or IMMU 7100. They will only need to take at least 6 credit hours offered by Immunology and/or other graduate departments.

<sup>2</sup> The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.

<sup>3</sup> The written component of the exam is in the form of a grant proposal to a major funding agency.

**Notes:**

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

**15 Credit hour Option****M.Sc. Students Entering Without Adequate Background in Immunology**

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMMU 7070	Introductory Immunology	3
IMMU 7100	Advanced Topics in Immunology	3
IMMU XXXX	Courses in an area of the department	3
	<b>Hours</b>	<b>9</b>

<b>Year 2</b>		
IMMU XXXX	Courses in an area of the department	3
COURSE 7XXX	Approved coursework designated 7000 level	3
Thesis Proposal <sup>1</sup>		
	<b>Hours</b>	<b>6</b>

<b>Year 3</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
	<b>Hours</b>	<b>0</b>
<b>Year 4</b>		
GRAD 8000	Doctoral Thesis	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>15</b>

<sup>1</sup> The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.

<sup>2</sup> The written component of the exam is in the form of a grant proposal to a major funding agency.

**Notes:**

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

**18 Credit Hour Option****Students Entering with an Honours Bachelor Degree**

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMMU 7070	Introductory Immunology	3
IMMU 7100	Advanced Topics in Immunology	3
IMMU XXXX	Courses in an area of the department	3
	<b>Hours</b>	<b>9</b>

<b>Year 2</b>		
IMMU XXXX	Courses in an area of the department	3
COURSE 7XXX	Approved coursework designated 7000 level	6
Thesis Proposal <sup>1</sup>		
	<b>Hours</b>	<b>9</b>

<b>Year 3</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
	<b>Hours</b>	<b>0</b>
<b>Year 4</b>		
GRAD 8000	Doctoral Thesis	0
	<b>Hours</b>	<b>0</b>
	<b>Total Hours</b>	<b>18</b>

<sup>1</sup> The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.

<sup>2</sup> The written component of the exam is in the form of a grant proposal to a major funding agency.

**Notes:**

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

**Registration Information**

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students must meet with their advisor to determine their program of study prior to registration. Once the student has met with their advisor and subsequently receives approval from the Department Head, they must contact the Administrative Assistant, who will register the student in their courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Medical Microbiology & Infectious Diseases, M.Sc.

Medical Microbiology and Infectious Diseases

**Head:** Dr. Keith Fowke

**Campus Address/General Office:** 543 Basic Medical Sciences Building, 745 Bannatyne Avenue

**Telephone:** 204-789-3444

**Fax:** 204-789-3926

**Email Address:** [angela.nelson@umanitoba.ca](mailto:angela.nelson@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/medical\\_microbiology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/medical_microbiology/) ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/medical\\_microbiology/faculty/index2.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/medical_microbiology/faculty/index2.html))

**Academic Staff:** Please refer to the Medical Microbiology website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/medical\\_microbiology/faculty/index2.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/medical_microbiology/faculty/index2.html)) for academic staff information.

## Medical Microbiology and Infectious Diseases Program Information

The Department of Medical Microbiology and Infectious Diseases offers programs of study leading to the Master of Science and Doctor of Philosophy degrees with research and academic experience suitable for a career in Basic Microbiology or Infectious Diseases.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

#### Medical Microbiology and Infectious Diseases M.Sc. Admission Requirements

Graduates in Medicine, Dentistry, Veterinary Medicine, or general Science may apply for entry into this graduate program. The department requires that an incoming student have a minimum Grade Point Average of 3.0, or its equivalent, in the 60 credit hours (or two years depending on the type of transcript) immediately preceding first registration. Students with a three-year B.Sc. degree must normally enrol in a pre-Master's course arranged in consultation with the Graduate Studies Committee and the head of the department.

#### Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 1347). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Medical Microbiology and Infectious Diseases M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/medical\\_microbiology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/medical_microbiology.html)) page.

## Degree Requirements

The minimum of 12 credit hours of coursework in Medical Microbiology and Infectious Diseases normally includes the departmental required course MMIC 7050 Microbial Pathogenicity (6 credit hours) plus 6 additional credit hours at the 6000 level or above. Students must also complete a thesis.

Students are required to participate in the Medical Microbiology and Infectious Diseases seminar and graduate journal club programs, which meet regularly.

**Expected Time to Graduate:** 2 - 3 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7020	Master's Re-registration <sup>1</sup>	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial <sup>2</sup>	0
MMIC 7050	Microbial Pathogenicity <sup>3</sup>	6
Select 6 credit hours at the 6000 level or above (not restricted to home department)		6
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>4</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Must be included in registration every term throughout the program.

<sup>2</sup> All graduate students must register for and complete GRAD 7500 in their first term of study. This is a zero (0) credit-hour course intended to introduce students to their basic responsibilities regarding academic integrity and to the resources available to them.

<sup>3</sup> Successful completion of this course is a department requirement to graduate.

<sup>4</sup> Must present proposal to Student Advisory Committee for approval.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Students should register themselves by signing up for the Aurora Student service on the University of Manitoba website. If difficulties are incurred students may contact the Graduate Studies Committee Office Assistant as per the information below.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Not all courses are offered each year.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Medical Microbiology and Infectious Diseases, Ph.D.

Medical Microbiology and Infectious Diseases

**Head:** Dr. Keith Fowke

**Campus Address/General Office:** 543 Basic Medical Sciences Building, 745 Bannatyne Avenue

**Telephone:** 204-789-3444

**Fax:** 204-789-3926

**Email Address:** [angela.nelson@umanitoba.ca](mailto:angela.nelson@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/medical\\_microbiology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/medical_microbiology/) ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/medical\\_microbiology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/medical_microbiology/))

**Academic Staff:** Please refer to the Medical Microbiology website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/medical\\_microbiology/faculty/index2.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/medical_microbiology/faculty/index2.html)) for academic staff information.

## Medical Microbiology and Infectious Diseases Program Information

The Department of Medical Microbiology and Infectious Diseases offers programs of study leading to the Master of Science and Doctor of Philosophy degrees with research and academic experience suitable for a career in Basic Microbiology or Infectious Diseases.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

## Medical Microbiology and Infectious Diseases Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Medical Microbiology and Infectious Diseases Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/medical\\_microbiology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/medical_microbiology.html)) page.

## Degree Requirements

Where admission to the Ph.D. is directly from a Master's Degree, a minimum of 6 credit hours at the 7000 level or higher plus a thesis is required. Any further coursework beyond the minimum 6 credit hours at the 7000 level must be at the 3000 level or above.

Where students have completed the minimum of 12 credit hours of 7000 level coursework required to transfer to the Ph.D., 6 additional credit hours of 7000 level or higher coursework plus a thesis are required.

If the candidate has not already taken a course during their prior Master's degree studies that is equivalent to MMIC 7050 Microbial Pathogenicity (as determined by the department Head, or designate), then this course must normally be taken as part of the Ph.D. program of study.

**Expected Time to Graduate:** 5 - 6 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MMIC 7050	Microbial Pathogenicity <sup>1</sup>	0-6
Courses at the 7000 level or above		6
<b>Hours</b>		<b>6-12</b>
<b>Years 2-5</b>		
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>6-12</b>

<sup>1</sup> If not already completed during prior Master's degree studies.

<sup>2</sup> The candidacy exam will be taken by all Ph.D. students no later than 12 months prior to their expected graduation date and preferably much earlier given possible time constraints due to overlaps with thesis writing.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Students should register themselves by signing up for the Aurora Student service on the University of Manitoba website. If difficulties are incurred students may contact the Graduate Studies Committee Office Assistant as per the information below.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Not all courses are offered each year.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Pathology, M.Sc.

Pathology

**Head:** Dr. Gabor Fischer

**Campus Address/General Office:** 401 Brodie Centre, 727 McDermot Avenue

**Telephone:** 204-789-3212

**Fax:** 204-789-3931

**Email Address:** [pathology@umanitoba.ca](mailto:pathology@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/pathology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/pathology/) ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/pathology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/pathology/))

**Academic Staff:** Please refer to the Pathology website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/pathology/path\\_faculty.html](https://umanitoba.ca/faculties/health_sciences/medicine/units/pathology/path_faculty.html)) for Academic staff information.

## Pathology Program Information

The Department of Pathology offers a program of study leading to a Master of Science degree. Honours Science graduates with a strong background in biology can carry out coursework, plus one of: a research-based program and thesis; or, a practicum leading to a paramedical qualification as a Pathologist's Assistant.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Pathology M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pathology M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/pathology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/pathology.html)) page.

## Degree Requirements

### M.Sc. Research/Thesis-based Program

All students in this program are required to take a minimum of 9 credit hours of coursework, to carry out a supervised research project, and to present an acceptable thesis.

Maximum time to complete the program is 4 years for full-time students.

### M.Sc. Pathologists' Assistant Practicum Stream

All students are required to successfully complete the major courses as listed in Progression Chart below. Further requirements include:

1. Complete a Medical Terminology workbook/course prior to the start of the program.
2. Complete a log book of a required number of surgical and autopsy cases.
3. A written and Practical Examination is given at the completion of PATH 7036 and PATH 7042, for which students must acquire a Pass grade/or a grade equivalent to a B.
4. Successfully complete a research/practicum project on a subject related to Pathology work.

It is highly recommended that students complete this program in 2 years.

## Progression Chart

### Pathologists' Assistant Practicum Stream

A student must have passed the following courses outlined below and must have achieved a minimum grade of a B average in Introduction

to Disease Mechanisms (IMED 7212). Students will also have to successfully complete a research/practicum project on a subject related to Pathology work and it will be defended as a Thesis.

Course	Title	Hours
<b>Year 1</b>		
ANAT 7470	Course no longer offered	6
IMED 7212	Introduction to the Mechanisms of Disease	3
PATH 7032	Pathologists Assistant Field Practicum I	4
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PATH 7120	Diseases of Human Organ Systems	1.5
PATH 7034	Pathologists Assistant Field Practicum II	4
PATH 7036	Pathologists Assistant Field Practicum III	4
Research/Practicum Project <sup>1</sup>		
<b>Hours</b>		<b>22.5</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
PATH 7130	Clinical Pathological Correlations 1	1.5
PATH 7038	Pathologists Assistant Filed Practicum IV	4
PATH 7140	Clinical Pathological Correlations 2	1.5
PATH 7042	Pathologists Assistant Field Practicum V	4
Research/Practicum Project <sup>2</sup>		
<b>Hours</b>		<b>11</b>
<b>Total Hours</b>		<b>33.5</b>

<sup>1</sup> Student will begin to start working on their research/practicum project on a subject related to Pathology work.

<sup>2</sup> Student should almost be completed their research/practicum project which they will present by the end of summer term.

### Research/Thesis-Based Program

All students in the program are required to take a minimum of 9 credit hours of coursework, to carry out a supervised research project, and to present an acceptable thesis.

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMED 7212	Introduction to the Mechanisms of Disease	3
GRAD 7XXX	Additional Graduate Courses <sup>1</sup>	6
Thesis Outline <sup>2</sup>		
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Additional credit hours at the 7000 level are mandatory to a total a minimum of 9 credit hours. These additional courses vary from student to student and course select will be made in consultation with the advisor.

<sup>2</sup> Three months following the commencement of their program and following consultation with their supervisor, the student should submit a detailed thesis outline to their committee for advice and approval. The outline should be 1-2 pages long, adhering to the following format: Introduction (Background); Hypothesis; Objectives; Proposed Methods/ Potential Significance of Work.

<sup>3</sup> Students continue to work on their thesis. Students are required to allow 4 weeks for members of their advisory committee to read their thesis or practicum prior to the oral exam

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Pharmacology and Therapeutics, M.Sc.

Pharmacology and Therapeutics

**Head:** Chris Anderson

**Campus Address/General Office:** A205 Chown Building, 753 McDermot Avenue, Winnipeg, MB, R3E 0T6

**Telephone:** 204-789-3553

**Email Address:** [pharmacology@umanitoba.ca](mailto:pharmacology@umanitoba.ca)

**Website:** [umanitoba.ca/medicine/department-pharmacology-and-therapeutics/](https://umanitoba.ca/medicine/department-pharmacology-and-therapeutics/) (<https://umanitoba.ca/medicine/department-pharmacology-and-therapeutics/>)

**Academic Staff:** Please refer to the Pharmacology and Therapeutics website (<https://umanitoba.ca/medicine/department-pharmacology-and-therapeutics/faculty-staff/>) for Academic staff information

## Pharmacology and Therapeutics Program Information

The department offers both Master of Science and Doctor of Philosophy degrees. A joint M.D.-Ph.D. program is available to students in Medicine.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Pharmacology and Therapeutics M.Sc. Admission Requirements

Qualified students holding B.Sc., M.Sc., B.Pharm., D.V.M. or M.D. degrees may apply for entry into Graduate Programs. Ancillary work in Pharmacology may be arranged for students pursuing their major studies in related departments.

Normally, a student will have a prospective advisor identified as a requirement for admission.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pharmacology and Therapeutics M.Sc. program of study (<https://umanitoba.ca/explore/pharmacology-and-therapeutics-msc/>) page.

## Degree Requirements

Course requirements will depend on prior degree held and research experience.

**Expected Time to Graduate:** 2 – 3 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHAC 7136	General Pharmacology	3
COURSE 7XXX	Approved coursework at the 7000 level	0-3
<b>Hours</b>		<b>3-6</b>
<b>Year 2</b>		
PHAC 7222	Molecular Pharmacology 2	3
COURSE 7XXX	Approved coursework at the 7000 level	0-3



GRAD 7000	Master's Thesis	0
	<b>Hours</b>	<b>3-6</b>
	<b>Total Hours</b>	<b>6-12</b>

**Notes:**

- Students will be required to attend all departmental seminars, M.Sc. and Ph.D. thesis defences, student research presentations and any discussion sessions with visitors to the Department.
- Students will have an oral exam at the end of the first year of the program.
- Within ten months from the start of the program the student will present a thesis proposal to the Advisory Committee.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor and Pharmacology Director of Graduate Studies to determine their program of study.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Pharmacology and Therapeutics, Ph.D.

Pharmacology and Therapeutics

**Head:** Chris Anderson

**Campus Address/General Office:** A205 Chown Building, 753 McDermot Avenue, Winnipeg, MB, R3E 0T6

**Telephone:** 204-789-3553

**Email Address:** [pharmacology@umanitoba.ca](mailto:pharmacology@umanitoba.ca)

**Website:** [umanitoba.ca/medicine/departement-pharmacology-and-therapeutics](https://umanitoba.ca/medicine/departement-pharmacology-and-therapeutics) (<https://umanitoba.ca/medicine/departement-pharmacology-and-therapeutics/>)

**Academic Staff:** Please refer to the Pharmacology and Therapeutics website (<https://umanitoba.ca/medicine/departement-pharmacology-and-therapeutics/faculty-staff/>) for Academic staff information.

## Pharmacology and Therapeutics Program Information

The department offers both Master of Science and Doctor of Philosophy degrees. A joint M.D.-Ph.D. program is available to students in Medicine.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Pharmacology and Therapeutics Ph.D. Admission Requirements

Students with a research based M.Sc. degree in a related field (Science, Pharmacy, and Nursing) may be admitted directly into the Ph.D. Program. Students with a B.Sc. (Hons) degree (or 4-year equivalent) and no graduate degree will first be admitted to the M.Sc. Program.

If recommended by the Advisory Committee and the Department Graduate Committee, an M.Sc. student may be encouraged to apply for transition into the Ph.D. Program. Students with an M.Sc. in an unrelated field will be evaluated on an individual basis.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pharmacology and Therapeutics Ph.D. program of study (<https://umanitoba.ca/explore/pharmacology-and-therapeutics-phd/>) page.

## Degree Requirements

Course requirements will depend on prior degree held and research experience. Entry with a B.Sc. (Hon) degree (or four year equivalent) may require a course schedule similar to that described for the M.Sc. degree.

Students entering with a graduate degree (M.Sc.) will have a course schedule that is dependent on previous course work.

**Expected Time to Graduate:** 3 – 5 years

#### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHAC 7136	General Pharmacology	3
COURSE 7XXX	Approved coursework at the 7000 level <sup>1</sup>	0-3
<b>Hours</b>		<b>3-6</b>
<b>Year 2</b>		
PHAC 7222	Molecular Pharmacology 2	3
COURSE 7XXX	Approved coursework at the 7000 level	0-3
GRAD 8010	Doctoral Candidacy Examination <sup>1</sup>	0
Thesis Proposal <sup>1</sup>		
<b>Hours</b>		<b>3-6</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>6-12</b>

<sup>1</sup> A written thesis proposal is to be provided to the Advisory Committee at least two weeks prior to the proposal presentation date. The Candidacy Exam and Thesis Proposal must not be more than four weeks apart.

#### Notes:

- Students in the pharmacology M.Sc. program who elect to transfer to the Ph.D. program are required to take 15 credit hours at the 7000 level. Courses taken as part of the M.Sc. program will count toward this requirement.
- Students are expected to attend all departmental seminars, M.Sc. and Ph.D. thesis defences, student research presentations and any discussion sessions with visitors to the Department.
- Direct entry students in the Ph.D. Program will have an oral exam at the end of the first year of the program.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor and Pharmacology Director of Graduate Studies to determine their program of study.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

## Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Physician Assistant Studies, M.P.A.S.

Master of Physician Assistant Studies

**Program Director:** Rebecca Mueller

**Campus Address/General Office:** 260 Brodie - 727 McDermot Avenue

**Telephone:** 204-272-3094

**Fax:** 204-480-1372

**Email Address:** mpas@umanitoba.ca

**Website:** [umanitoba.ca/physicianassistant/](https://umanitoba.ca/physicianassistant/) (<https://umanitoba.ca/physicianassistant/>)

**Academic Staff:** Please see the M.P.A.S. website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/education/paep/contact\\_info.html](https://umanitoba.ca/faculties/health_sciences/medicine/education/paep/contact_info.html)) for Academic staff information

## Master of Physician Assistant Studies Program Information

The Master of Physician Assistant Studies (M.P.A.S.) degree is a nationally accredited coursework-based graduate program, designed to educate generalist medical providers who are eligible for the national certification exam and qualify for PA licensure in Manitoba.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### M.P.A.S. Admission Requirements

This program is open to Canadian Citizens or Permanent Residents of Canada who are graduates of four-year bachelor's degrees from recognized colleges and universities, with a minimum Grade Point Average of 3.0 in the most recent 60-credit hours of study (full time or part-time study). Note that a GPA of 3.5 or better is competitive.

Completion of the required courses, Human Anatomy, Human Physiology, and Biochemistry, from an accredited university or college, is required. Undergraduate level asset courses include Microbiology and Psychology. All courses require at least three credit hours each for consideration.

MPAS uses the Multiple-Mini Interview (MMI) Panel Interview and a Written Essay as part of the selection process for candidates. The program also requires Situational Judgement Testing (e.g., Canadian Professional Health Sciences CASPer test).

On enrolment, accepted students must be eligible for the Educational Register with the College of Physicians and Surgeons of Manitoba (<http://cpsm.mb.ca/>).

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.P.A.S. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/paep.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/paep.html)) page.

## Degree Requirements

The MPAS is a two year program. The first year consists of 56 credit hours of coursework, delivered in three semesters from September - July as a combination of lecture, clinical skills training, and seminars. The second year includes 30 credit hours (48 weeks) of core clinical rotations. All courses are required major courses, and students must maintain full-time registration throughout the Program.

**Expected Time to Graduate:** 26 months inclusive of the National Certification Examination

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
<b>Academic</b>		
PHAC 7230	Fundamental in Pharmacology for Health Care I	3
PAEP 7000	Physiology and Pathophysiology for Physician Assistants	3
PAEP 7010	Human Anatomy for Physician Assistants	3
PAEP 7030	Professional Studies of Physician Assistants	3
PAEP 7042	Biochemistry for Physician Assistants	1

PAEP 7045	Research and Clinical Practice for Physician Assistants	1
PAEP 7052	Patient Assessment for Physician Assistants I	2
PAEP 7084	Microbiology for Physician Assistants	1
Curriculum Integration		0
PHAC 7240	Fundamentals in Pharmacology for Health Care II	3
PAEP 7002	Physiology and Pathophysiology for Physician Assistants II	3
PAEP 7054	Patient Assessment for Physician Assistants II	2
PAEP 7090	Principles of Psychiatry for Physician Assistants	3
PAEP 7068	Adult Medicine for Physician Assistants 1	6
PAEP 7110	Emergency and Critical Care for Physician Assistants	3
Early Exposure		0
Curriculum Integration		0
PAEP 7046	Genetics for Physician Assistants	1
PAEP 7082	Diagnostic Imaging for Physician Assistants	1
PAEP 7050	Obstetrics and Gynecology for Physician Assistants	3
PAEP 7056	Patient Assessment for Physician Assistants III	2
PAEP 7100	Principles of Surgery for Physician Assistants	3
PAEP 7078	Adult Medicine for Physician Assistants II	6
PAEP 7048	Pediatrics for Physician Assistants	3
PAEP 7150	Year 1 Comprehensive Examination (Pass/Fail)	0
Procedures Lab		0
Early Exposure		0
Curriculum Integration		0

**Hours 56**

### Year 2

#### Clinical Rotations

PAEP 7202	Family Medicine for Physician Assistants	6
PAEP 7210	Clinical Internal Medicine for Physician Assistants	3
PAEP 7220	Clinical Surgery for Physician Assistants	3
PAEP 7240	Clinical Pediatrics for Physician Assistants	3
PAEP 7250	Clinical Psychiatry for Physician Assistants	3
PAEP 7260	Community Health for Physician Assistants	3
PAEP 7270	Clinical Emergency Medicine for Physician Assistants	3
PAEP 7280	Clinical Obstetrics and Gynecology for Physician Assistants	3
PAEP 7204	Clinical Elective for Physician Assistants I	1.5
PAEP 7206	Clinical Elective for Physician Assistants II	1.5
PAEP 7300	Comprehensive Assessment of Clinical Skills	0
PAEP 7350	PAEP Final Project	0

PAEP 7212	External Electives for Physician Assistant Students	0
	<b>Hours</b>	<b>30</b>
	<b>Total Hours</b>	<b>86</b>

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

## Physiology & Pathophysiology, M.Sc.

Physiology & Pathophysiology

**Head:** Dr. Peter Cattini

**Grad Chair:** Dr. Brent Fedirchuk

**Campus Address/Administration Office:** 433 Basic Medical Sciences Building

**Telephone:** 204-789-3694

**Fax:** 204-789-3934

**Email Address:** [physiology@umanitoba.ca](mailto:physiology@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/physiology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/physiology/) ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/physiology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/physiology/))

**Academic Staff:** Please refer to the Physiology & Pathophysiology website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/physiology/contacts/](https://umanitoba.ca/faculties/health_sciences/medicine/units/physiology/contacts/)) for current staff listing.

## Physiology & Pathophysiology Program Information

The department offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees.

### Admission Information

#### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 1350) section of the Guide.

### Physiology & Pathophysiology M.Sc. Admission Requirements

Applicants must possess a four-year Bachelor's degree (or equivalent); or, three-year Bachelor's degree plus successful completion of Post Baccalaureate Diploma in Medical Physiology & Pathophysiology from the University of Manitoba.

### Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Physiology & Pathophysiology M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/physiology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/physiology.html)) page.

### Degree Requirements

A minimum of 9 credit hours or 1.5 full-credit equivalents (FCE) in 7000 level courses from any suitable discipline is mandatory for completion of the M.Sc. program; a 0.5 FCE corresponds to a course that runs for a full term. In most cases, a student will be required to complete:

Course	Title	Hours
PHGY 7252	Respiratory Physiology & Pathophysiology <sup>1</sup>	1.5
PHGY 7254	Cardiovascular Physiology & Pathophysiology <sup>1</sup>	1.5
PHGY 7256	Endocrine Physiology & Pathophysiology <sup>1</sup>	1.5
PHGY 7258	Neurophysiology & Pathophysiology <sup>1</sup>	1.5
IMED 7410	Biomedical Trainee Skills	3

<sup>1</sup> 4 x 1.5 credit hours or 1.0 FCE total.

**Expected Time to Graduate:** 2 years

### Progression Chart

Course	Title	Hours
<b>Year 1</b>		
PHGY 7252	Respiratory Physiology & Pathophysiology	1.5
PHGY 7254	Cardiovascular Physiology & Pathophysiology	1.5
PHGY 7256	Endocrine Physiology & Pathophysiology	1.5

PHGY 7258	Neurophysiology & Pathophysiology	1.5
IMED 7410	Biomedical Trainee Skills	3
<b>Hours</b>		<b>9</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9</b>

Students may be required to take other courses.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Please note that registration for all students will be completed by the graduate program assistant for the department once the worksheet provided each term has been completed and signed by the student's advisor.

Not all courses are offered every year and some courses will be held only with a minimum enrolment.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

**Note:** Physiology & Pathophysiology requires a higher minimum course grade. Students are required to maintain a **B (3.0)** in all course work.

## Physiology & Pathophysiology, Ph.D.

Physiology & Pathophysiology

**Head:** Dr. Peter Cattini

**Grad Chair:** Dr. Brent Fedirchuk

**Campus Address/General Office:** 433 Basic Medical Sciences Building

**Telephone:** 204-789-3694

**Fax:** 204-789-3934

**Email Address:** [peter.cattini@umanitoba.ca](mailto:peter.cattini@umanitoba.ca) ([physiology@umanitoba.ca](mailto:physiology@umanitoba.ca))

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/physiology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/physiology/) ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/physiology/](https://umanitoba.ca/faculties/health_sciences/medicine/units/physiology/))

**Academic Staff:** Please refer to the Physiology & Pathophysiology website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/physiology/contacts/](https://umanitoba.ca/faculties/health_sciences/medicine/units/physiology/contacts/)) for current staff listing.

## Physiology & Pathophysiology Program Information

The department offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 1339).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 1355) section of the Guide.

### Physiology & Pathophysiology Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Physiology & Pathophysiology Ph.D. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/physiology.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/physiology.html)) page.

## Degree Requirements

Students who have obtained a Master's degree (including 9 or more credit hours of coursework at the 7000 level) will be required to take a minimum of an additional 9 credit hours to meet the requirements of the Ph.D. For students transferring from the M.Sc. program into the Ph.D., a minimum of 6 credit hours are required to meet the requirements of the Ph.D. beyond the 9 credit hours obtained under the M.Sc. program.

Additional courses that are deemed appropriate by the Student's Advisory Committee may be taken with the approval of the Department of Physiology & Pathophysiology Graduate Program Committee, up to a maximum of 24 credit hours (4 FCE). Note: a 0.5 FCE corresponds to a course that runs for a full term.

**Expected Time to Graduate:** 4 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Coursework <sup>1</sup>		9
<b>Hours</b>		<b>9</b>
<b>Years 2-5</b>		
GRAD 8000	Doctoral Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Student & Advisor decide on courses.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Not all courses are offered every year and some courses will be held only with a minimum enrolment.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

## General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

**Note:** Physiology & Pathophysiology requires a higher minimum course grade. Students are required to maintain a **B (3.0)** in all course work.

## Surgery, M.Sc.

Surgery

**Head:** Dr. Edward Buchel

**Grad Chair:** Krista Hardy

**Campus Address/General Office:** 3rd Floor- SMD Building, 825 Sherbrook Street

**Telephone:** 204-787-1219

**Fax:** 204-940-8970

**Email Address:** [surgery\\_graduate@umanitoba.ca](mailto:surgery_graduate@umanitoba.ca) (surgery\_graduate@umanitoba.ca)

**Website:** [umanitoba.ca/faculties/health\\_sciences/medicine/units/surgery/](https://umanitoba.ca/faculties/health_sciences/medicine/units/surgery/) ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/surgery/](https://umanitoba.ca/faculties/health_sciences/medicine/units/surgery/))

**Academic Staff:** Please refer to the Surgery website ([https://umanitoba.ca/faculties/health\\_sciences/medicine/units/surgery/](https://umanitoba.ca/faculties/health_sciences/medicine/units/surgery/)) for current staff listing.

## Surgery Program Information

The Master of Science program is open to residents in Surgery at the University of Manitoba who are currently enrolled in a Royal College of Physicians and Surgeons of Canada (RCPSC) speciality training program through the Max Rady College of Medicine in the Rady Faculty of Health Sciences.

The RCPSC program is a postgraduate clinical speciality certification program and residents earn the designation of M.Sc. as an additional degree to their certification. Through the Thesis Stream, the Surgery program provides surgical residents a year free of clinical<sup>1</sup> duties to complete the required course hours.

<sup>1</sup> It is strongly advised that residents discuss with their Program Director the expectations of their responsibilities within their Program during the year of research.

## Surgery M.Sc. Admission Requirements

This program is **only** open to holders of an M.D. degree who are currently enrolled in a postgraduate residency program in the Max Rady College of Medicine at the University of Manitoba. As residents incorporate

this program as part of their residency training, concurrent curriculum registration is required.

Applicants must complete the *Application Guide & Supplemental Form* available online through the MSc website. An appointment must be made through the Department of Surgery Research & Graduate Office with the Graduate Chair to review the applicant's research proposal and all accompanying documentation for approval before admissions to the Faculty of Graduate Studies can be approved.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Surgery M.Sc. program of study ([https://umanitoba.ca/faculties/graduate\\_studies/admissions/programs/surgery.html](https://umanitoba.ca/faculties/graduate_studies/admissions/programs/surgery.html)) page.

## Degree Requirements

Students must complete:

- The minimum course requirements of 12 credit hours at the 7000 level;
- Twelve months' work of research, under the direct supervision of an approved Thesis Advisor;
- Submit a major thesis on the research project;
- Defend their thesis to a Committee of Examiners, demonstrating adequate knowledge of the subject involved

**Expected Time to Graduate:** 2 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
<b>Required Courses</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SURG 7012	Surgery- Major Course in Surgical Problems (Part A & Part B)	3
SURG 7030	Advanced Surgery	3
<b>Elective Courses</b>		
Select 6 credit hours of the following:		6
SURG 7022	Surgery- Specialty Rounds in Surgical Problems (Part A & Part B)	
CHSC 7810	Biostatistics for the Health and Human Sciences	
CHSC 7820	Biostatistics for Community Health Sciences	
CHSC 7830	Advanced Biostatistics for Community Health Sciences	
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

### Notes:

- Within six months of the student's MSc program the student shall present their thesis proposal to their Advisory Committee.

- Surgery recommends one year full-time study and two years to complete and defend for graduation; preferred to be completed prior to the end of their final year of training (June 30).
- A decision to extend this time will be made by the Department of Surgery Graduate Chair on a case-by-case basis.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 1372). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new or returning graduate students must contact the Department.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

### Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 1345) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 1346) and Mandatory Research Integrity Online Course (p. 1346).

Students must also meet additional BFAR that may be specified for their program.

### General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

# Course Descriptions

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- Agribusiness and Agricultural Economics (ABIZ) (p. 1600)
- Animal Science (ANSC) (p. 1601)
- Anthropology (ANTH) (p. 1602)
- Applied Health Sciences (AHS) (p. 1603)
- Architecture (ARCH) (p. 1603)
- Architecture Interdisciplinary (ARCG) (p. 1604)
- Astronomy (ASTR) (p. 1605)

## B

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- Biological Sciences (BIOL) (p. 1606)
- Biomedical Engineering (BME) (p. 1607)
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- Canadian Studies St. Boniface (CDSB) (p. 1609)
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- Civil Engineering (CIVL) (p. 1611)
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## D

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## E

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- Surgery (SURG) (p. 1698)

**W**

- Women's and Gender Studies (WOMN) (p. 1698)

## Agribusiness and Agricultural Economics (ABIZ)

### **ABIZ 7110 Attributes of Market Organization 3 cr**

Analysis of agricultural market structure, conduct and performance of processing industries.

### **ABIZ 7140 Resource Efficiency and Allocation in Agriculture 3 cr**

Seminar on research issues in production economics related to technological change, risk and uncertainty, management and firm growth.

### **ABIZ 7230 Agricultural Market Regulation 3 cr**

A review of economic theories of regulation and their application in agricultural marketing. Analysis of specific regulation in agricultural markets.

### **ABIZ 7240 Research in Agricultural Marketing 3 cr**

Advanced economic theory and quantitative techniques relevant to agricultural marketing. Topics include model building, market demand and supply, market regulation, and review of literature on marketing research.

### **ABIZ 7260 Econometrics with Applications in Food, Agribusiness and Resources 3 cr**

Econometrics as applied to food, agriculture, agribusiness, resources and related areas. Econometric applications in these areas may cover generalized least squares, instrumental variables, nonstationarity and other topics. Econometric software and data will be used. Students will conduct a related applied econometric study.

### **ABIZ 7270 Research Methodology 3 cr**

Critical discussion of scientific methodology and the scientific status of agricultural economics. Discussion of methodological issues as they relate to the research process in agricultural economics.

### **ABIZ 7300 Topics in Agricultural Economics 3 cr**

Application of economic analysis to contemporary problems in agriculture.

### **ABIZ 7310 Agricultural Economic Development 3 cr**

Theory and policy of agricultural development in underdeveloped countries: problems of stimulating growth in agriculture and evaluation of alternative approaches to economic development of agriculture.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

### **ABIZ 7330 Transportation Economics and Research 3 cr**

Rate determination and cost analysis for different modes of transportation; transportation issues in Canadian agriculture; and research techniques in transportation problems. Prerequisite is consent of instructor.

### **ABIZ 7350 Regional Development 3 cr**

Review policy, goals, theories, methods and applications relevant to analyzing Canadian and developing country rural development, regional economic growth and project evaluation.

### **ABIZ 7360 Current Issues in Policies Relating to Agriculture 3 cr**

Seminar dealing with current issues in policies relating to agriculture.

### **ABIZ 7380 Agricultural Policy 3 cr**

Bearing of economic theory on agricultural policy: relevance of allocative efficiency, distributive equity and other criteria, and economic evaluation of alternative policies.

### **ABIZ 7400 Forecasting and Simulation Models 3 cr**

Application of simulation modelling to characterizing and predicting the behaviour of complex systems (ecological, engineering and economic). Foundations of simulation and statistical approaches to analysis are emphasized.

### **ABIZ 7410 Agricultural Finance 3 cr**

Analysis of financial structure and goal criteria of agricultural firms, analysis of financial markets and institutions, evaluation and application of techniques in risk analysis, investment analysis, financial analysis, and growth and evaluation models.

### **ABIZ 7430 Advanced Theory of Resource Economics 3 cr**

Economic theory of the development and management of natural resources. Application of capital theory, investment theory, the theory of externalities and decision-making theories to resource utilization and management. A strong background in microeconomics is required. Also offered as ECON 7430 by the Department of Economics.

**Equip To:** ECON 7430

**ABIZ 7460 Research Management 3 cr**

Application of research management concepts in agriculture and the resource sectors. Research definitions and methodology; the macro environment in relation to research (social and grantor priorities, economic and institutional constraints, institution and project (micro) level (priorities, objectives, budgeting, time and personnel management, performance assessment): proposal and report writing; project evaluation.

**ABIZ 7630 Theory of International Trade 3 cr**

Theories of trade flow; trade and income distribution; economic growth and changes in trade flows; instruments of trade intervention; international labour and capital movements; and economic integration. Also offered as ECON 7630 by the Department of Economics.

**Equiv To:** ECON 7630

**ABIZ 7940 Production Economics 3 cr**

Development of static microeconomic theories of the firm, functional forms, aggregation issues, productivity analysis, risk and uncertainty, and an introduction to dynamics. The following are emphasized; a rigorous treatment of the models using duality; a critical understanding of the limitations and possibilities for generalizing the models; and relevance of the models for empirical research, especially in agriculture. Also offered as ECON 7940 by the Department of Economics.

**Equiv To:** ECON 7940

**ABIZ 7950 Advanced Agricultural Demand Analysis 3 cr**

Critical evaluation of economic theory as applied to agricultural demand. Topics include demand systems; equilibrium; product transformation over time, place and form; and price analysis. Also offered as ECON 7950 by the Department of Economics. Not to be held with ECON 7950 or the former ABIZ 7100 or the former ECON 7900.

**Equiv To:** ABIZ 7100, ECON 7900, ECON 7950

## Accounting (ACC)

**ACC 7010 Accounting Fundamentals 3 cr**

This course covers the principles underlying accounting, with an emphasis on the interpretation of accounting information and its usefulness to stakeholders. Not to be held with ACC 6050.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MSCI 5110 Basic Quantitative Analysis for Management 1 AX (auxiliary) cr hrs.

**Equiv To:** ACC 6050

**ACC 7020 Managerial Accounting 1.5 cr**

Provide the information required within an organization to effectively plan and control business results and make sound decisions. Involves the generation, communication, interpretation and sharing of information to facilitate decision-making across functions. Not to be held with ACC 6060.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ACC 7010 Accounting Fundamentals.

**Mutually Exclusive:** ACC 6060

## Animal Science (ANSC)

**ANSC 7140 Animal Science Seminar 3 cr**

Reports and discussions on current problems and investigational work with mammals and poultry. This course is graded pass/fail.

**ANSC 7220 Genetic Principles of Animal Improvement 3 cr**

Designed for the development of a framework of theory for the study of the genetics of populations. Changing gene frequency. Genetic and environmental subdivision of the phenotypic variance. Principles of selection.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANSC 3500 or equivalent.

**ANSC 7360 Advanced Reproductive Physiology, Male 3 cr**

A lecture-seminar course on sexual function and testicular physiology in males of livestock species; environmental factors influencing reproductive efficiency; recent developments in semen preservation and artificial insemination.

**ANSC 7370 Advanced Reproductive Physiology, Female 3 cr**

A lecture-seminar on current topics related to female reproduction in the livestock species.

**ANSC 7380 Endocrine Control of Animal Metabolism 3 cr**

A lecture-seminar course on current topics concerning the control of physiological processes of -importance in domestic animal species.

**ANSC 7390 Advanced Animal Science Seminar 3 cr**

Ph.D. Candidates are expected to complete a grant application form, review and critique current literature, and present a seminar on current research topics. This course is graded pass/fail.

**ANSC 7400 Quantitative Genetics in Animal Science 3 cr**

A study of advanced techniques used in animal breeding research, their theoretical basis, analysis and interpretation. Case studies in the student's area of interest will be examined. Prerequisite ANSC 7220 or its equivalent.

**ANSC 7440 Protein Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the fields of protein nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7440 by the Department of Human Nutritional Sciences.

**Equiv To:** HNSC 7440

**ANSC 7450 Energy and Carbohydrate Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of energy/carbohydrate nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7450 by the Department of Human Nutritional Sciences.

**ANSC 7460 Lipid Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of lipid nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7460 by the Department of Human Nutritional Sciences.

**Equiv To:** HNSC 7460

**ANSC 7470 Vitamin Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of vitamin nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7470 by the Department of Human Nutritional Sciences.

**Equiv To:** HNSC 7470

**ANSC 7480 Mineral and Trace Element Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of mineral nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7480 by the Department of Human Nutritional Sciences.

**Equiv To:** HNSC 7480

**ANSC 7490 Phytochemical Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of phytochemical nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7490 by the Department of Human Nutritional Sciences.

**Equiv To:** HNSC 7490

**ANSC 7500 Methodology in Agricultural and Food Sciences 3 cr**

The application of experimental techniques and procedures to agricultural and food sciences research. Recording, processing, interpretation, and critical appraisal of experimental data.

**ANSC 7510 Special Topics in Animal Nutrition 3 cr**

Students will be required to investigate and report on a nutrition problem in a species other than that of their thesis research. Projects may be avian, bovine, ovine, swine or laboratory animal species.

**ANSC 7520 Special Topics in Animal Improvement 3 cr**

Assigned readings, papers and discussions specific problems in animal genetics. Analysis of original data may be required.

**ANSC 7530 Special Topics in Animal Physiology 3 cr**

Students will investigate a minor research problem in an area of physiology other than that in which the major is being taken. Problems areas may include: digestion, environment, renal function or reproduction.

**ANSC 7540 Advanced Applied Animal Nutrition 3 cr**

An advanced study of the theoretical and applied aspects of monogastric and ruminant nutrition. A laboratory component will provide training in current techniques in feed analyses and computer modeling.

**ANSC 7550 Special Topics in Animal Behaviour and Welfare 3 cr**

Assigned readings, papers and discussions on specific issues in animal behaviour. A short behavioural experiment may be required.

**ANSC 7560 Mathematical Modeling of Agricultural Systems 3 cr**

Lectures and computer based laboratory exercises will be used to discuss various aspects of model development focusing on mechanistic (compartmental analysis), growth functions and an introduction to linear programming. Construction of a simulation model may be required. Not to be held with ANSC 4240 Mathematical Modeling of Biological Systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MATH 1500 or MATH 1520

## Anthropology (ANTH)

**ANTH 7000 Professional Development in Anthropology 0 cr**

The course is designed for graduate students to develop the professional skills needed to pursue careers in anthropological research, teaching, and practice. The course prepares students for academic and applied careers through regular group meetings, participation in workshops, and departmental community outreach initiatives. This course is graded Pass/Fail.

**ANTH 7040 Seminar in Ethnography of Power Systems 3 cr**

Comparative study of a particular theme or problem in political anthropology.

**ANTH 7050 Seminar in the Anthropology of Religion 3 cr**

An intensive analysis of religion as a cultural subsystem, dealing comparatively with ideologies, rituals, and ceremonies and the various anthropological theories put forward to explain religious behaviour.

**ANTH 7070 Seminar in the Anthropology of Illness 3 cr**

Selected topics in the study of cultural factors involved in health/illness, with emphasis upon a particular cultural system. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ANTH 7080 Museums, Memory, and Witnessing 3 cr**

Discussing key issues in museology such as collections and collecting, conservation, representation, repatriation, and restitution, this course will explore the museum as witness. Particularly examining how museums are entangled with violence, we will attend to memory as our approach for delving into both museums' histories and their imagined futures. The course will bring scholarship, contemporary art, exhibitions, activism, and policy into creative and critical conversation on the state and idea of museums today. Not open to students who have completed ANTH 4080 or equivalent. Permission of Instructor.

**ANTH 7100 Anthropology of Human Rights 3 cr**

This seminar examines diverse global conceptualizations and practice of human rights and social justice with particular attention to instances where human rights are emergent, and where they are contested or are subjects of conflict. May not be held with ANTH 7900 under the same topic subtitle.

**Mutually Exclusive:** ANTH 7900

**ANTH 7102 Environmental Conflict, Rights and Justice 3 cr**

This course will focus on anthropological studies and perspectives related to environmental issues. Students will gain familiarity with current academic debates and new theoretical approaches to nature, environmental rights, and environmental justice issues. May not be held with ANTH 7900 under the same topic subtitle.

**Mutually Exclusive:** ANTH 7900

**ANTH 7130 Cultural Ecology 3 cr**

An examination of the systematic nature of culture and its interrelationships with natural environmental factors.

**ANTH 7140 Ethnographic Research Methods 3 cr**

Approaches and techniques in field research.

**ANTH 7350 Prehistoric Human Ecology 3 cr**

Data and techniques involved in the reconstruction of past environments, with special emphasis on the influences of environment on prehistoric cultural development.

**ANTH 7380 Archaeological Laboratory Techniques 3 cr**

Laboratory techniques for analysis and presentation of archaeological data.

**ANTH 7400 Seminar in the Archaeology of a Selected Area 3 cr**

An intensive survey of the archaeology of a major region or culture area of the world. Content will vary according to the interests of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ANTH 7410 Seminar in Selected Topics in Archaeology 3 cr**

The seminars will consist of an intensive examination of major methodological, analytical and interpretive issues in current archaeological research. Content will vary according to the interests of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ANTH 7430 Archaeological Interpretive Methods 3 cr**

This course is an intensive seminar on major methodological issues in archaeological analysis and interpretation.

**ANTH 7440 Archaeological Theory 3 cr**

Archaeological theory as seen from historical and contemporary perspectives.

**ANTH 7450 Cultural Resource Management 3 cr**

An intensive examination of archaeological cultural resource management. Emphasis will be placed on current Canadian CRM issues and on practical applications of concepts and methods.

**ANTH 7460 Advanced Faunal Analysis in Archaeology 3 cr**

The course will cover the major theoretical, methodological, and practical issues in the analysis of archaeological faunal remains. Topics are addressed through lectures, demonstrations, and laboratory exercises.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ANTH 3990 or written consent of instructor.

**ANTH 7470 Scientific Methods and Applications in Archaeology and Biological Anthropology 3 cr**

In this course, a range of scientific methods that can be applied to answer questions in archaeology and biological anthropology will be considered. These include microscopy, 3-D and virtual technologies ancient DNA, and elemental analyses. Students will learn how many of the core techniques are transferable across fields and will learn the strengths and limitations of the methods. Not open to students who have completed ANTH 4470 or equivalent. Permission of Instructor.

**ANTH 7630 History of Anthropological Theory 3 cr**

A broad overview of the history of anthropological theory and method from the 18th century to World War II. Focus on British and American developments in the context of the rise of industrialization and imperialism.

**ANTH 7640 Contemporary Anthropological Theory 3 cr**

Investigation, comparison and evaluation of contemporary approaches to culture theory in the areas of symbolism, social organization and ecology.

**ANTH 7650 Applied Anthropology 3 cr**

Investigation of major case studies, research methodologies, intervention strategies, and substantive areas of application in applied anthropology. Topical emphases such as economic development, health care delivery, resettlement schemes, will reflect the interests of the instructor.

**ANTH 7720 Seminar in Human Adaptability 3 cr**

An intensive study of human population biology in diverse environments inhabited by human populations. Emphasis on selected examples of cultural adaptability as a specifically human mechanism for dissipating stress on the biological system.

**ANTH 7790 Advanced Topics in Human Skeletal Biology 3 cr**

Analysis of metric and nonmetric morphological skeletal variation in human populations, with emphasis on the cultural and physical environment. Exemplary problems are drawn from the literature as well as from current research.

**ANTH 7830 Social Organization 3 cr**

Selected theories of social organization in cross cultural perspective. Subject matter may include kinship, age grading, territorial groupings, social stratification or ethnicity.

**ANTH 7900 Problems in Ethnological Research 3 cr**

Problems in ethnological research. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ANTH 7100, ANTH 7102

**ANTH 7930 Special Problems in Human Biology 3 cr**

Special problems in Human Biology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ANTH 7940 Graduate Reading and Research 1 3 cr**

Reading and research. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ANTH 7950 Graduate Reading and Research 2 3 cr**

Reading and research. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

## Applied Health Sciences (AHS)

**AHS 7000 Research and Practice in Applied Health Sciences 3 cr**

The objective is to promote in students advanced knowledge, skills, and abilities needed to evaluate and conduct multidisciplinary, applied health research. This course is theoretical in nature and will require a high level of independence and participation by students.

**AHS 7002 Seminar I Applied Health Sciences 0 cr**

A monthly interdisciplinary seminar on current issues in applied health sciences, involving presentation by students, faculty, and invited speakers from inside and outside the University of Manitoba. Attendance and participation are required for AHS students during the first year of their doctoral program.

**AHS 7004 Seminar II Applied Health Sciences 0 cr**

A monthly interdisciplinary seminar on current issues in applied health sciences, involving presentation by students, faculty, and invited speakers from inside and outside the University of Manitoba. Attendance and participation are required for AHS students during the second year of their doctoral program.

**AHS 7010 Introductory Research Project in Applied Health Sciences 6 cr**

Students will conduct a research project under the direction of their advisor. To include all research phases: identification of question, literature review, proposal writing, conducting research, analyzing data and reporting results. Topics, paradigms and methods will vary by student. Intended for students who do not possess a research-based Master's degree. Course graded pass/fail.

## Architecture (ARCH)

**ARCH 6450 Inquiry by Design 3 cr**

(Formerly 050.645) An exploration of design/research, to contrasting design and research via dialectical and practical inquiry. Research design and research methods instruction, in support of applied research to critique design theory and to build new design knowledge.

**ARCH 7000 Advanced Technology Topics I 1.5 cr**

One five-week seminar and/or project-based topics offering in-depth study of advanced building systems, technology, and methods. Options are grounded in faculty research and build upon foundation technology courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

**ARCH 7010 Advanced Technology Topics 2 1.5 cr**

One five-week seminar and/or project-based topics offering in-depth study of advanced building systems, technology, and methods. Options are grounded in faculty research and build upon foundation technology courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

**ARCH 7020 Research Topics: History and Theory 1 1.5 cr**

One five-week lecture, seminar and/or project-based topics offering an in-depth study of an historical and/or theoretical subject. Options are grounded in faculty research and build upon foundation history/theory courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

**ARCH 7030 Research Topics: History and Theory 2 1.5 cr**

One five-week lecture, seminar and/or project-based topics offering an in-depth study of an historical and/or theoretical subject. Options are grounded in faculty research and build upon foundation history/theory courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

**ARCH 7040 Professional Practice 3 cr**

Is concerned with the duties and responsibilities of an architectural practice; its divisions, office organization and administration, in Manitoba and Canada. The lectures relate in scope and standard to current models of practice and their requirements, including issues of building economics and construction cost control.

**ARCH 7050 Arch Studio 5 and Comprehensive Program Report 9 cr**

Develop design explorations and seek to clarify relations between architectural criteria and the urban/natural environments in national or international contexts. Conceptual, programmatic, material, technological, economic, and political principles and systems employed are to be evident in the Comp. Prog Report.

**ARCH 7060 Arch Studio 6 9 cr**

The previous term's investigations are further developed into a comprehensive architectural design proposal. The thorough integration of design and programming criteria, with building and environmental systems and assemblies are examined.

**ARCH 7070 Design Research Studio 9 cr**

This final design studio involves concerted research and design explorations of an individually defined subject of inquiry, within a selected studio thematic focus. These investigations are intended to prepare students for their final Design Thesis.

**ARCH 7080 Technology Thesis Report 3 cr**

Technology Thesis Report is an advanced project-based course done in conjunction with the Design Thesis project. The report is related to an individual student's design thesis topic, focusing on specific aspects of technology and applied tech. research. Advisor supervision and external engineering consultancy or agreed equivalent are required.

**ARCH 7100 Advanced Technology Topics 3 cr**

Seminar and/or project-based topics offering in-depth study of advanced building systems, technology, and methods. Options are grounded in faculty research and build upon foundation technology courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms. Different topics under the same course may be taken for credit.

**ARCH 7120 Research Topics: History and Theory 3 cr**

Lecture, seminar and/or project-based topics offering an in-depth study of an historical and/or theoretical subject. Options are grounded in faculty research and build upon foundation history/theory courses. Some topics may be deemed at the department's discretion. Topics may be taken in the fall and or winter terms. Different Topics under the same course number many be taken for credit.

**ARCH 7350 Legal Aspects of Architectural Practice 3 cr**

Discusses the importance of the knowledge of law as it relates to professional practice of architecture, including a discussion of the historical development of legal responsibilities of a practicing professional generally and of architects specifically. There is also discussion of trends in the development of professional responsibility and liability.

## Architecture Interdisciplinary (ARCG)

**ARCG 6102 Topics in Environmental Processes 3 cr**

A detailed study of some special topics in architecture, city planning, landscape architecture or interior design.

**ARCG 7070 Topics in Environment P & D 1 3 cr**

A course designed for graduate students in the departments of Architecture, Landscape Architecture, and City Planning to pursue interdepartmental studies in environmental processes and design (Architecture, Landscape Architecture, and City Planning).

**ARCG 7080 TPS ENV P&D 2 3 cr**

A course designed for graduate students in the departments of Architecture, Landscape Architecture, and City Planning to pursue interdepartmental studies in environmental processes and design (Architecture, Landscape Architecture, and City Planning).

**ARCG 7090 LEED Core Concepts and Strategies 3 cr**

This course provides a comprehensive overview of techniques, approaches, materials and technologies used in creating more sustainable buildings and communities in Canada. It provides an introduction to the LEED Rating System and is formulated as a preparatory course for persons interested in becoming a LEED Green Associate in Canada.

**ARCG 7102 Studio Topics in Environmental Processes 6 cr**

A detailed studio study of some special topics in architecture, city planning, landscape architecture or interior design.

**ARCG 7150 Cooperative Education/ Integrated Work Term 1 0 cr**

Work assignment in practice, business, industry, or government. Requires acceptance into the Faculty of Architecture Co-op/I graduate stream and submission of a written report covering the work completed for each four-month professional assignment. Course evaluated on a pass/fail basis.

**ARCG 7202 Studio Topics in Environmental Process and Design 9 cr**

A detailed studio study of special topics in architecture, city planning, landscape architecture or interior design to pursue interdepartmental studies in environmental design processes.

**ARCG 7250 Cooperative Education/Integrated Work Term 2 0 cr**

Work assignment in practice, business, industry, or government. Requires acceptance into the Faculty of Architecture Co-op/I graduate stream and submission of a written report covering the work completed for each four-month professional assignment. Course evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ARCG 7150.

**ARCG 7350 Cooperative Education/Integrated Work Term 3 0 cr**

Work assignment in practice, business, industry, or government. Requires acceptance into the Faculty of Architecture Co-op/I graduate stream and submission of a written report covering the work completed for each four-month professional assignment. Course evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ARCG 7250.

## Astronomy (ASTR)

### ASTR 7020 Cosmology and Black Holes 3 cr

Topics include static solutions of Einstein's equations, gravitational waves, static models for stars \*(white dwarfs, neutron stars), dynamic models for stars (Birkhoff theorem, black holes), and cosmology (Robertson-Walker metric, Friedmann equations). Further topics discussed in the course are cosmic inflation, dark matter and energy, as well as large-scale structure of the universe. Students may not hold credit for both ASTR 4020 and ASTR 7020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7010.

**Mutually Exclusive:** ASTR 4020, PHYS 4020

### ASTR 7100 High-Energy Astrophysics 3 cr

This course provides an introduction to the growing field of high-energy radiation processes and astrophysical sources. Processes include Bremsstrahlung, inverse Compton scattering, pion decay, and particle acceleration. Sources include compact objects, supernovae and their remnants, gamma-ray bursts, clusters of galaxies. Students may not hold credit for both ASTR 4100 and ASTR 7100.

**Mutually Exclusive:** ASTR 4100

### ASTR 7200 Radio Astronomy 3 cr

This course provides an introduction to observational radio astronomy and processes in radio astrophysics. Topics include radiative transfer; blackbody radiation; radio telescopes, receivers, and interferometers; thermal (e.g., HII regions) and non-thermal (e.g., radio galaxies) continuum sources; pulsars and spectral-line sources. Students may not hold credit for both ASTR 4200 and ASTR 7200.

**Mutually Exclusive:** ASTR 4200

### ASTR 7400 Magnetohydrodynamics, Astrophysical Plasmas, and the Interstellar Medium 3 cr

This course develops a theoretical understanding of the interstellar magnetic fields for a diverse range of astrophysical objects, processes, and phenomena. Furthermore, the theoretical aspects of magnetohydrodynamics, and foundations for the physics of cosmic ray diffusion and acceleration, are also discussed. Students may not hold credit for both ASTR 4400 and ASTR 7400.

**Mutually Exclusive:** ASTR 4400

## Biochem. and Medical Genetics (BGEN)

### BGEN 7000 Research Seminar M.Sc. 1 cr

Consists of presentations of the student's current research. For Masters students only.

### BGEN 7020 Proteins 3 cr

Three hours per week, one term. Purification, bioinformatics, characterization, expression, structure, folding and engineering of proteins.

### BGEN 7040 Seminars in Human Genetics 3 cr

Current research in human genetics will be explored in the context of the evolving genetic counselling profession. Term paper, reflections and presentations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Enrollment in the M.Sc. Genetic Counselling Program or consent of instructor.

### BGEN 7070 Special Topics in Human Genetics 3 cr

An assignment, tutorial and discussions course taken only through consultation with the head of the department. The topics will vary depending upon students' needs and interests, and may include specialized topics not available in regular course offerings.

### BGEN 7090 Principles and Practice of Human Genetics 3 cr

Lectures, tutorials and assignments designed to review major topics in human genetics and give practical experience in the analysis and interpretation of human genetics data and critical review of published work.

### BGEN 7120 Laboratory Methods in Human and Medical Genetics 3 cr

A seminar and assignment course covering an outline of the methods currently in use in human and medical genetic diagnostic and research laboratories. The principles of cell culture, cytogenetic, molecular and biochemical genetic techniques that are used in the diagnosis of human genetic disease and the study of human variation will be reviewed. Students will undertake a practical assignment and write a report.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

### BGEN 7130 Genetic Epidemiology of Human Populations 3 cr

Lectures, tutorials, and assignments on key concepts, principles, and their applications in mapping the genetic loci/variants for monogenic and complex human diseases/traits.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BGEN 7090 or consent of instructor.

### BGEN 7142 Clinical Genetics 1 3 cr

This course lays the groundwork for the development of genetic counselling clinical skills. Concepts include pedigree development and analysis, history taking, and risk evaluation as it relates to the genetic counselling practice. Overviews of human development, prenatal genetics, cancer genetics, carrier screening and hemoglobinopathies are provided.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Enrollment in the M.Sc. Genetic Counselling Program or consent of instructor.

### BGEN 7144 Clinical Genetics 2 3 cr

This course builds on the genetic counselling clinical skills developed in BGEN 7142 course. The genetic counselling approach to rare and common genetic/metabolic conditions in the adult and pediatric populations is discussed. The roles of the genetic counsellor, clinical geneticist, other medical specialist and allied health in an interdisciplinary approach to patient care is explored.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BGEN 7142, enrollment in the M.Sc. Genetic Counselling Program or consent of instructor.

### BGEN 7160 Theory and Practice of Genetic Counselling 3 cr

Advanced theoretical and practical aspects of genetic counselling. Ethics, grief, and culture will be explored in the context of genetic counselling practice. Active participation component includes role plays/practical case scenarios.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Enrollment in the M.Sc. Genetic Counselling Program or consent of instructor.

**BGEN 7180 Clinical and Molecular Cytogenetics 3 cr**

Cytogenetic methodology; chromosome architecture; karyotype interpretation; indications for referral; chromosome syndromes and anomalies; prenatal diagnosis; chromosomal basis of oncogenesis; flow cytometry; immunogenetics; fluorescent in situ hybridization; the application of molecular technology to chromosome analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**BGEN 7200 Topics in Biochemistry 1 3 cr**

Advanced study and reading on two topics chosen by the course director in consultation with the student's supervisor. Topics include but are not limited to Neurochemistry, Lipids, Carbohydrates, Biomembranes, Inborn Errors, Cytoskeleton Proteins.

**BGEN 7210 Topics in Biochemistry 2 3 cr**

Advanced study and reading on two topics chosen by the course director in consultation with the student's supervisor. Topics include but are not limited to Neurochemistry, Lipids, Carbohydrates, Biomembranes, Inborn Errors, Cytoskeleton Proteins.

**BGEN 7250 Gene Expression and Epigenetics 3 cr**

Three hours per week, one term. Chromatin structure. Epigenetic regulation of transcription. Gene expression regulation. Bioinformatics.

**BGEN 7260 Cellular and Molecular Biochemistry 3 cr**

Three hours per week, one term. Recent research advances on the study of cellular components, assembly and organization of plasma membrane components, cell signaling, and cell cycle.

**BGEN 7270 Introduction to Genetic Counselling Clinic Rotation 4 cr**

This rotation will allow students to observe and participate in various genetic counselling settings. Participation will allow for skill development and practical application of genetic counselling fundamentals. Course graded Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: acceptance into the M.Sc. Genetic Counselling program.

**BGEN 7280 Advanced Genetic Counselling Clinic Rotation 4 cr**

This rotation will provide year two students full participation in various genetic counselling settings. Students will be able to use advance genetic counselling skills, building on their skill set from the previous introduction to genetic counselling clinical rotation course. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BGEN 7270.

**BGEN 7290 Visiting Genetic Counselling Student Elective 0 cr**

A clinical rotation of varying length designed to provide a genetic counselling student not from the University of Manitoba with clinical education and training within a clinical site associated with the University of Manitoba MSc in Genetic Counselling Program (GCP). Course credit is assigned by the student's home institution. Course graded Pass/Fail.

**BGEN 8000 Research Seminar Ph.D. 1 cr**

Consists of presentations of the student's current research. For Ph.D. students only.

## Biological Sciences (BIOL)

**BIOL 7100 Core Skills in Biological Sciences Research 3 cr**

Learning skills for a career in scientific research in Biological Sciences including: using the scientific method, applying for NSERC funding, maintaining a CV, abstract writing, ethics in research, research protocols and biosafety and biohazards, statistical designs and their assumptions, literature searching, critical thinking, critiquing the scientific literature, making teaching and research presentations. Not to be held with Methodology of Research ANAT 7090.

**BIOL 7140 Advanced Physiology 6 cr**

An in-depth study of topics related to how changing internal and external environments influence life sustaining physiological processes. Topics include plant and animal stress, endocrine & electrophysiology, metabolism and molecular biology of solute transport.

**Equiv To:** ZOOL 7140

**BIOL 7142 Advanced Physiology 3 cr**

An in-depth study of topics selected from physiological research of the department including plant, animal, stress physiology, ecophysiology, electrophysiology, endocrine or neurophysiology and others. Topics will be focused on the research area of each student to acquire specialized knowledge in a particular topic.

**BIOL 7202 Evolutionary Biology 3 cr**

An in-depth study of topics selected from research interests within the department that may cover an evolutionary theme. This course will allow students to acquire or expand on specialized knowledge in a particular evolutionary topic through a series of readings or a combination of readings and lectures.

**BIOL 7220 Critical Thinking in Biological Sciences 3 cr**

A core graduate level course within the Ph.D. program designed to stimulate discussion and thought in key areas applicable to the student's research discipline.

**BIOL 7230 Advanced Topics in Zoology 6 cr**

A seminar on current research topics in Zoology.

**Equiv To:** ZOOL 7230

**BIOL 7240 Wetland Ecology 6 cr**

A study of marsh, bog, and fen communities, with emphasis on their history, soil-plant relationships, and species distribution. Field work at the University Field Station (Delta Marsh) and nearby bog and fen sites will be an integral part of the course.

**Equiv To:** BOTN 7240

**BIOL 7250 Advanced Evolution and Systematics 3 cr**

This course will first consider theoretical and practical aspects of systematics, and then consider how systematic and population-level studies have illuminated our understanding of evolutionary processes.

**BIOL 7302 Environmental Biology and Ecology 3 cr**

An in-depth study of topics selected from environment and ecology interests of the department, including population ecology, fisheries biology, plant/animal interactions, animal behaviour, ecosystem dynamics and restoration. Topics will be chosen to acquire specialized knowledge in a particular topic.

**BIOL 7352 Aquatic Biology 3 cr**

An in-depth study of topics covering all aspects of aquatic biological interests in the department including wetland ecology, limnology, oceanography, toxicology, conservation, and others. Topics will focus on the research interests of students so they may acquire specialized knowledge in particular areas.

**BIOL 7360 Problems in Biological Statistics 3 cr**

The course discusses statistical problems and techniques which specifically apply to biological research. Laboratory exercises will be based primarily on examples from field research.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: STAT 3130 or the consent of the instructor.

**Equiv To:** ZOO 7360

**BIOL 7370 Special Topics in Algal Ecology 6 cr**

Directed study and project(s) in selected aspects of the ecology of freshwater phytoplankton, periphyton and metaphyton.

**Equiv To:** BOTN 7370

**BIOL 7440 Methods and Approaches to the Analysis of Biological Data Part 1 3 cr**

Methods for handling biological data arising from field surveys; planning and undertaking biological studies. Theory of experimental design, vegetation sampling, multivariate analysis, techniques of remote sensing, spatial analysis and modeling.

**Equiv To:** BOTN 7440

**Mutually Exclusive:** BIOL 4312

**BIOL 7450 Methods and Approaches to the Analysis of Biological Data Part 2 3 cr**

Analysis of complex biological data sets arising from field surveys, vegetation sampling and remote sensing using techniques from Part 1.

**Equiv To:** BOTN 7450

**BIOL 7502 Cell and Developmental Biology 3 cr**

An advanced topics course which will be an in-depth study of current research topics in cellular and developmental biology. An undergraduate background in cell and developmental biology or related areas is required.

**BIOL 7540 Methods for Analysing Biological Data 3 cr**

A survey of methods and approaches for analyzing biological data containing many variables, suitable for graduate students. Offered in alternate years. Not to be held with BIOL 4312.

**Equiv To:** BIOL 4312, BIOL 4650, BOTN 7440

**BIOL 7554 Molecular Biology of Eukaryotes (DNA) 3 cr**

This is a lab intensive techniques course designed for 4th year undergraduate and graduate students interested in understanding the theory application of molecular methods specifically focusing on eukaryotic DNA. Students will learn essential and cutting-edge molecular techniques involved in gene-structure, amplification, transformation and sequencing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: BIOL 2520 (Cell Biology) or equivalent.

**BIOL 7556 Molecular Biology of Eukaryotes (RNA) 3 cr**

This is a lab intensive techniques course designed for 4th year undergraduate and graduate students interested in understanding the theory and application of molecular methods specifically focusing on eukaryotic RNA. Students will learn essential and cutting-edge molecular techniques involved in identifying messenger RNA expression of a particular target protein in plant or animal tissue.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 2520 (Cell Biology) or equivalent.

**BIOL 7580 Topics in Plant Pathology 3 cr**

Current and specialized aspects of plant pathology studied through lectures, seminars, prescribed readings and laboratory projects.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 4250 or equivalent, or consent of department head.

**Equiv To:** BOTN 7380

**BIOL 7590 Pathology of Trees and Shrubs 3 cr**

Lectures, seminars and readings focusing on special problems relating to the pathology of woody plants. Emphasis on ornamental shrub, shade tree, and forest tree species of local importance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: BIOL 4250 or equivalent, or consent of department head.

**Equiv To:** BOTN 7390

**BIOL 7600 Topics in Biological Sciences 3 cr**

A general topics course to reflect an in-depth study of current interest topics to extend or acquire specialized knowledge in a particular area of biological interest. A subtitle may be added to the current title to reflect specialized interests.

**BIOL 7602 Directed Studies in Biological Sciences 3 cr**

A course to provide a broad knowledge of different topics within Biological Sciences peripheral to the specific topic of the student's thesis and will not become the introductory chapter of the thesis. Students will complete assignments by themselves but will participate and be evaluated as a group.

**BIOL 7880 Ecology Project Course 3 cr**

This course provides experience in the organization and execution of team research into current ecological issues. Teams consist of a graduate student team leader, 3-6 undergraduates, and a faculty advisor. Each project team identifies a specific research question, creates a proposal for answering it, and presents their results in a public forum.

**Equiv To:** BOTN 7880, ZOO 7880

## Biomedical Engineering (BME)

**BME 7000 Biomedical Engineering Seminar 0 cr**

The goal of this course is to train students with research methods and scientific presentations as well as providing exposure to the top research achievements in Biomedical Engineering (BME). In this bi-weekly seminar course, both students and established researchers will present on BME research topics. Course graded pass/fail.

**BME 7012 Foundation of Physiology 2 cr**

The goal of this course is to introduce human physiology for engineering students with no background in physiology. The offers the foundation of function and regulation of the systems and major organs of the human body.

**BME 7022 Biomedical Instrumentation 2 cr**

The goal of this course is to introduce the basics of biomedical instrumentation to students with no background in engineering. The course offers basics of electrical circuits, design of instrumentation amplifiers using EMG as an example, signal digitization and electrical safety of medical devices.

**BME 7024 Basics of Electromagnetic 2 cr**

The goal of this course is to introduce the basics of electromagnetic principles to students with no background in engineering. It will offer lectures on electrostatics, electric fields in matter, magnetostatics, electrodynamics, and Poynting's theorem.

**BME 7026 Basics of Biological Signal Analysis 2 cr**

The goal of this course is to introduce the basics of biological signal analysis to students with no background in signal processing. The course offers classification of signals and systems, stochastic nature of biological signals, Fourier Transform of signals, and power spectral analysis.



**BME 7028 Basics of Biomechanics 2 cr**

The goal of this course is to introduce the basics of biomechanics to students with no background in engineering. The course offers basics of mechanical and anatomical analysis of human movement, principles of human motor performance and motor learning and applications on rehabilitation.

**BME 7040 Biomedical Ethics 0 cr**

The goal of this course is to introduce the ethical issues encountered in biomedical research. The course presents several actual examples and offers the fundamental ethical rules of any biomedical research. This course is graded on a pass/fail basis.

**BME 8990 Current Research Topics in Biomedical Engineering 3 cr**

A discussion of current topics in biomedical engineering. The latest in instrumentation, procedures and practices relevant both to clinical engineering and ongoing research are covered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Consent of instructor.

## Biosystems Engineering (BIOE)

**BIOE 7040 Fluid Mechanics of Unsaturated Porous Solids 3 cr**

Statics and dynamics of two immiscible fluid phases occupying the voids of porous solids. Concepts include capillary pressure, bubbling pressure, saturation, intrinsic and relative permeability, pore-size distribution indices.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7110 Grain Storage 3 cr**

A synthesis of major aspects of the storage of grain including: abiotic and biotic characteristics of stored grain bulks, regional variables, grain pressure theories, methods of controlling deterioration, and health hazards.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7140 Advanced Irrigation and Drainage 3 cr**

Selected advanced problems and new developments in irrigation and drainage. Interrelationships between irrigation and drainage and the environment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7180 Bioprocessing 3 cr**

This course allows students with a background in either biological sciences or engineering to gain an understanding of biochemical engineering processes. Topics include production of biofuels, bioplastics, biopharmaceuticals, and processing technologies. This course is also offered in the Department of Microbiology as MBIO 7070. BIOE 7180 is not to be held with MBIO 7070.

**Equip To:** MBIO 7180

**BIOE 7200 Bulk Solids Storage and Handling 3 cr**

Fundamental characteristics of bulk solids, bulk solids flow during storage and handling, loads in bulk solids storage and handling systems, mechanical, pneumatic and hydraulic conveying of bulk solids, safety in storage and handling of bulk solids.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7210 Numerical Modelling of Biosystems 3 cr**

Applications of numerical methods to the solution of problems dealing with biological systems: structure analysis, mechanical behaviour of biological materials, moisture sorption and desorption, cooling and heating of biological materials, and flow through saturated and unsaturated porous media. Solution of transient and non-linear problems. Use of commercial finite element packages for problem solving.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7220 Advanced Machine Design Analysis for Biosystems 3 cr**

Analysis of machines for use in biosystems with respect to design and functional performance, in-field traction, operator safety and comfort, and energy source, transmission and application. Engineering analyses will be used to study biosystems machinery problems of current and future interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7230 Advanced Topics on Light-Frame Buildings 3 cr**

Structural and environmental design and analysis of light-frame buildings. Topics include: loads in light-frame buildings; frame design; construction management; environmental control in light-frame buildings; and structure-environment interactions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7240 Special Problems in Biosystems Engineering 3 cr**

Advanced work in a specialized field involving engineering applications to biological systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7250 Mechanical Behavior of Biological Materials 3 cr**

Elastic and inelastic behavior of biological materials under applied load. Emphasis on unprocessed and semi-processed food products. Use of mechanical behavior properties in the design of handling, storage, processing and sensing systems for food products.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7260 Research Methods in Biosystems Engineering 3 cr**

Introduction to quantitative research methods emphasizing reproducible research and analysis. Topics include statement of research objectives and hypotheses; moving through experimentation, measurements, and data acquisition; and ending with exploratory analysis, statistical analyses and estimation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7270 Advanced Seminar in Biosystems Engineering 3 cr**

A series of seminars to be given by Ph.D. candidates on research topics of current interest in Biosystems Engineering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7280 Advanced Topics in Biosystems Engineering 3 cr**

An opportunity to extend, update or acquire specialized knowledge in particular area of interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: consent of instructor.

**BIOE 7290 Biosystems Engineering Seminar 1 3 cr**

Oral and written presentation of engineering research is discussed. Students are expected to actively participate in weekly seminars and to present two seminars both orally and written.

**BIOE 7300 Food Process Engineering 3 cr**

Food engineering concepts are presented using quantitative relationships that define the process. Various advanced methods of heating and processing foods are discussed and their mathematical and physical relationships described. Descriptive information of typical equipment assists students in utilizing engineering principles in design.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**BIOE 7310 Materials Incorporation into Soil 3 cr**

Types and characteristics of agricultural materials; solid and liquid waste (including manure) incorporation; crop residue incorporations, seed placement; chemical incorporation; methods and equipment; performance evaluation; measurement technique.

**BIOE 7320 Membrane Processes for Water and Waste Treatment 3 cr**

Principles of membrane filtration, classification, design and manufacture. Principle mechanisms of mass transport to the membrane surface and particle/solute rejection. Investigation of membrane bio-fouling and bio-film control strategies. Fundamentals of reverse osmosis, nano-, ultra-, and micro-filtration process design and operation. Practical applications of membranes in the area of water and wastewater treatment. Innovative and novel bio-reactor designs utilizing membrane filtration for environmental reclamation.

**BIOE 7350 Bioresource Engineering and Sustainability 3 cr**

Students will gain an understanding of overall sustainability of industrial activities, energy usage, and resource depletion. Course topics will include: environmental emissions (as it relates to air and water pollution, solid and hazardous wastes, noise and traffic impacts); life-cycle assessment and related techniques for evaluating sustainability; design improvements to enhance environmental performance of engineered systems; and methodologies for assessing social and economic impacts of new developments.

**BIOE 7360 Biological Systems: Behaviour, Modelling and Simulation 3 cr**

Applications of engineering principles and mathematical methods to model and simulate biological ecosystems. Course materials will analyze critical elements of a biological system and interactions among these elements, principles and techniques of modelling biological systems, the modeling process, estimation of model parameters, and model analysis and validation. Examples of existing models will be discussed and used to simulate various biological systems.

**BIOE 7370 Engineering Properties of Fibres for Industrial Uses 3 cr**

Students will gain an understanding of various engineering properties of fibre and textiles for industrial uses. Case studies are used to illustrate the failure of textiles in engineering applications. The course will emphasize how to engineer and evaluate a fibre for biomedical, geotechnical, or athletic applications.

**BIOE 7380 Biomaterial Science and Engineering 3 cr**

The course provides students with an overview of materials that are synthesized for, or have agricultural, environmental or biomedical applications, including their sources, physical/chemical/biological properties and applications. The course includes the synthesis/isolation/fabrication and characterization of biomaterials, and the structure-property relationship of those materials. Students will be exposed to concepts on several material characterization techniques at the morphological, chemical and biological level.

## Canadian Studies St. Boniface (CDSB)

**CDSB 7010 CDN PEUP TERR 6 cr**

**Equiv To:** CDSB 7011

**CDSB 7020 CDN ID MYTH IM 6 cr**

**Equiv To:** CDSB 7021

**CDSB 7030 PROB MET ET CDN 3 cr**

**Equiv To:** CDSB 7031

**CDSB 7040 TEXT CDN BASE 3 cr**

**Equiv To:** CDSB 7041

**CDSB 7051 Francophonies canadiennes et internationales 3 cr**

Ce cours en ligne explore l'émergence de la francophonie institutionnelle et le rôle du Canada dans ce processus. Il traite des enjeux sociaux, culturels, économiques et politiques de la francophonie à l'échelle régionale, nationale et internationale ainsi que des défis contemporains de la francophonie dans le contexte de la mondialisation, des enjeux identitaires et socioéconomiques chez les francophones en situation minoritaire.

**CDSB 7071 L'état canadien : mondialisation et flux migratoires 3 cr**

Ce cours en ligne propose une approche interdisciplinaire pour étudier les enjeux multiples qui entourent le sujet des flux migratoires au Canada dans le contexte de la mondialisation de l'économie et des communications. Il s'agira également de saisir l'histoire des phénomènes migratoires en tenant compte des facteurs politiques, économiques et sociaux et d'explorer les effets de l'immigration sur les expressions culturelles (arts et littérature).

## Chemistry (CHEM)

**CHEM 7400 Topics in Biochemistry 3 cr**

A lecture and seminar course dealing with selected topics of current interest in biochemistry and molecular biology.

**CHEM 7410 Spectroscopy and Molecular Structure 3 cr**

Applications of spectroscopic methods to chemical problems with emphasis on mass spectrometry and related techniques.

**CHEM 7450 Topics in Organic Chemistry 3 cr**

A discussion of current and general topics related to novel and interesting areas of organic chemistry appearing in the current literature.

**CHEM 7460 Topics in Synthetic Organic Chemistry 3 cr**

A course designed to acquaint students with specific methods of synthesis.

**CHEM 7520 Topics in Physical Chemistry 3 cr**

The topics will vary, depending on student needs and interests; they may include, but will not be limited to the following: electrochemistry, surface chemistry, electrochemical kinetics, or other specialized topics not available in regular course offerings.

**CHEM 7550 Design of Organic Synthesis 3 cr**

Conceptual methodology in the design of synthesis will be discussed with inclusion of computer-aided approaches. Examples from the current literature will be used to emphasize the conceptual aspects.

**CHEM 7560 Organometallic Chemistry 3 cr**

Recent advances in synthetic and structural organometallic chemistry.

**CHEM 7580 Chemical Crystallography 3 cr**

Theory and practice of crystal structure analysis with emphasis on single crystal x-ray diffractometry; structure-activity relationships in small organic and inorganic compounds; introduction to protein and nucleic acid crystal structure analysis.

**CHEM 7600 Topics in Inorganic Chemistry 3 cr**

Topics of current research interest in the area of inorganic chemistry including, but not limited to synthesis, structures, catalysis and reaction mechanisms.

**CHEM 7700 Topics in Analytical Chemistry 3 cr**

Topics of current research interest in analytical chemistry including, but not limited to, mass spectrometry of large molecules, separation techniques, analysis of metals, surface analytical techniques, analysis of environmental samples, analysis of 'real' samples, and sampling techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHEM 4590 or permission of instructor.

**CHEM 7800 Topics in Theoretical Chemistry 3 cr**

Topics of current research interest in theoretical and computational chemistry from such areas as ab initio quantum chemistry, molecular simulations, nonlinear reaction dynamics, spectroscopy and statistical mechanics.

**CHEM 7900 Seminar in Current Research Issues in Chemistry 3 cr**

Student-led seminars covering areas of interest to the faculty and students in the graduate Chemistry program, and current research issues in the field of Chemistry (including biochemistry, spectroscopy, organic chemistry, physical chemistry, organic synthesis, organometallic chemistry, inorganic chemistry, analytical chemistry and theoretical chemistry).

## City Planning (CITY)

**CITY 6020 PL METH TECH 1 3 cr****CITY 7020 Planning Methods and Techniques II 3 cr**

A survey of quantitative and qualitative methods and techniques used in planning analysis and decision making including sampling survey, case study, contingency and spatial analysis as well as phenomenological and simulation techniques and methodologies.

**CITY 7030 Planning Theory 1 3 cr**

The principal ideas and ideals influencing planning thought and practice, ranging from rational comprehensive planning to theories of societal guidance, ethics and the human-environment interface.

**CITY 7050 City Planning Capstone 6 cr**

This course prepares students to undertake a self-directed planning research project, under the supervision of a City Planning faculty member and a second reader. Students conduct original research and analysis to address a contemporary issue in planning practice. Limited to students enrolled in the second year of the Master of City Planning (M.C.P.) degree.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CITY 7410, CITY 7030, and CITY 7020.

**CITY 7070 Housing and Urban Revitalization 3 cr**

Housing and urban revitalization in the Canadian context. Housing demand and supply, structure of the housing market, Canadian housing policy, affordability and other selected housing issues; processes and strategies related to urban decline and revitalization.

**CITY 7160 Land Development 3 cr**

Application of theories and techniques of urban land development, formulation of industrial policies and financial and political implications of land development.

**CITY 7200 Urban Analysis 3 cr**

Theoretical framework for the dominant theories of urban structure, property and land-use relevant to city planning.

**CITY 7270 Seminar in Regional Planning 3 cr**

An exploration of eco-regional planning drawing on concepts of cities-states (or city-regions) and bioregionalism; including contemporary theme research, and a region-specific analysis to inform an understanding of regional planning's past, present and future.

**CITY 7300 Urban Society 3 cr**

An interdisciplinary seminar on social policy and social planning in the contemporary urban setting. National, provincial and local contexts shaping the provision of welfare and well-being. Demonstration of selected social planning techniques. Application to current issues.

**CITY 7310 Law and Local Government 3 cr**

Topics of common law, torts, real property, land use planning and control, expropriation, and local government, including some recent cases.

**CITY 7340 Urban Development 3 cr**

The mechanics of urban development and its socio-economic implications and underlying political forces. Practical field experience is involved in the form of an internship.

**CITY 7350 Thesis/Practicum Preparation 0 cr**

A preparatory course for students registered in thesis or practicum. Methods of constructing problems, formulating hypotheses, methods of investigation, sources of information, and appropriate form and content of thesis and/or practicum. This course is graded pass/fail.

**CITY 7360 Development Process for Design Professions 3 cr**

Introduction to the development process and method. Site selection and planning. Feasibility and case studies. The dynamics of development teams, including marketing strategies and management of completed projects. Joint public and private enterprises.

**CITY 7370 Urban Design 3 cr**

Theory and concepts of urban design from historical and contemporary perspectives. Urban design seen as (a) a multidisciplinary activity, (b) conscious three-dimensional design, and (c) process and public policy. Implementation and control techniques of urban design. Case studies.

**CITY 7410 Planning Design 1 6 cr**

Studio/workshop developing problem solving techniques and design skills in an area subject to environmental, social and economic change. Preparation of a planning report comprising of research and analysis, evaluation of feasible alternative strategies and designs, synthesis and recommendations for implementation. Case studies from planning journals and planning practice in cities and regions.

**CITY 7420 Planning Design 2 6 cr**

Studio/workshop building upon CITY 7410 as applied to an area of greater complexity, requiring the evaluation and integration of contributions from several planning-related disciplines. Selected projects emphasize both the multidisciplinary and interdisciplinary nature of planning, and in the resolutions of the problems posed. Case studies from planning journals and planning practice in cities and regions.

**CITY 7430 Planning Design 3 (Urban Design) 6 cr**

The application of urban design theories and techniques to a large scale urban area of complex land uses and community development issues. The studio is also open to advanced students in architecture, landscape architecture and interior design and develops a broad approach to multi-disciplinary problem solving design solutions.

**CITY 7440 Planning Design 4 6 cr**

Advanced planning design studio/workshop, experimental and innovative in approach and content, involving special techniques and skills. Studio may also be off-campus and/or focused on a special topic centred around a distinguished guest expert.

**CITY 7450 Concepts in Sustainable Planning and Design 3 cr**

Examination of the concepts and theories involved in the development of sustainability as a force in socio-economic and environmental decision-making. Explores the implications of sustainability for contemporary design and planning thought and practice.

**CITY 7460 Urban Ecology and Environmental Management 3 cr**

Theoretical frameworks and theories in urban ecology and environmental management as they apply to municipal institutional frameworks and the role of environmental planning in urban and regional government.

**CITY 7470 Professional Planning Practice 3 cr**

An examination of the professional practice and praxis of planning, presented in collaboration with the Manitoba Association of the Canadian Institute of Planners, emphasizing the practice aspects of planning processes, and the political, institutional and legal systems that direct and/or inform planning.

## Civil Engineering (CIVL)

**CIVL 7010 Modern Railway Engineering 3 cr**

A course in aspects of the design, construction, and operation of modern railways, examining main lines, branch lines, and terminals.

**CIVL 7040 Analysis and Design of Freight Transport Systems 3 cr**

Overview of the structure and organization of Canada's freight transport system; measurement, analysis and forecasting of freight movements; transportation system performance; operating, service and cost characteristics of freight transport systems; design considerations for freight handling facilities; case studies in analysis and design of freight transport systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 4840 or permission of the instructor for non-engineering students specializing in transport studies.

**CIVL 7050 Transportation Engineering in Developing Regions 3 cr**

Aspects of transportation in developing regions that differ significantly from those of conventional North American practice. Factors and assumptions in developing region context; analysis and design of surface transportation systems and components in developing regions; special aspects of professional practice; case studies from Third World and northern Canada.

**CIVL 7060 Analysis and Design of Passenger Transport Systems 3 cr**

Passenger travel forecasting principles and techniques; demand models; passenger transportation system performance; vehicle cycles; cost functions; congestion; evaluation; examination of case studies.

**CIVL 7090 Water Resources Systems 3 cr**

The application of operations research/systems analysis techniques to water resources and urban and environmental systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**CIVL 7100 Prestressed Concrete 3 cr**

A study of the analysis and design of prestressed concrete structures; pre-tensioning; post-tensioning; importance of material properties; modern design specifications.

**CIVL 7140 Structural Masonry 3 cr**

Masonry materials, properties and behaviour. Plain and reinforced masonry, axial load, flexure, combined loading. Design methods, building code developments, building design.

**CIVL 7190 Solid Mechanics 3 cr**

Cartesian Tensors, analysis of stress and strain, constitutive relations, formulation and solution of problems in 2-D and 3-D elasticity, Hankel integral transforms, plasticity; yield surface and criteria, flow rule, plastic potential, hardening, viscoelasticity; creep, relaxation, basic viscoelastic models, stress-strain relations, correspondence principle.

**CIVL 7200 Topics in Environmental Engineering 3 cr**

Includes topics such as energy and the environment, solid waste management, and environmental problems in transport. Topics are studied through case histories of contemporary issues.

**CIVL 7210 Solid Waste Composting and Disposal 3 cr**

Advanced engineering principles related to resource recovery and solid waste disposal. Biological conversion technologies and the disposal of solid wastes are discussed in detail.

**CIVL 7260 Behaviour of Reinforced Concrete Members 3 cr**

Study of the actual behaviour and strength of reinforced concrete members; examination of recent significant publications, correlation to research with current design specifications and codes.

**CIVL 7300 Use of Fibre-Reinforced Polymers (FRP) in Structural Design 3 cr**

Fibre-reinforced polymers (FRP) constituents and properties; design of concrete structures internally reinforced with FRP, concrete members prestressed with FRP, externally bonded FRP liminates for strengthening and rehabilitation of structures; construction details and case studies of projects using FRP reinforcement.

**CIVL 7340 Sustainability in Construction 3 cr**

Introduction and overview of sustainable construction and green buildings, green building assessment tools; the green building process; green building design, construction and commissioning, the economics of green buildings and future directions in sustainable construction and green buildings.

**CIVL 7350 Topics in Advanced Structural Engineering 3 cr**

Lectures and seminars on selected advanced topics in structural engineering; current problems; implications on current research.

**CIVL 7360 Landslides and Slope Failures: Identification, Causes, and Control 3 cr**

Slope movement types and processes in soil and rock masses; recognition and identification: factors influencing stability; field investigation and instrumentation; strength properties and their measurement; stability analysis; assessment of hazard and risk analysis; stability in open pit mining; remedial measures including stabilization, protection, and warning.

**CIVL 7370 Advanced Construction Management 3 cr**

Strategic management of construction organizations; strategy systems and processes; health and safety management; human resources management; benchmarking; financing; budgeting; value management and financial performance; and quantitative decision-making for construction organizations.

**CIVL 7400 Finite Element Method in Engineering Mechanics 3 cr**

Review of flexibility and stiffness methods; concept of finite elements and energy formulations; various shape functions; solutions of planar and three-dimensional elasticity problems; beams, plates and shells; special problems, e.g., seepage, non-linear material.

**CIVL 7430 Special Topics in Geotechnical Engineering 3 cr**

A tutorial approach to the study of topics in soil, rock and ice engineering not covered in the formal coursework.

**CIVL 7450 Soil Properties and Behaviour 3 cr**

Testing methods for strength, compressibility and hydraulic conductivity of engineering soils; traditional models for soil characterization; introduction to hypoelastic and elastic plastic modelling; extension of models to account for strain-rate, temperature, and unsaturation; influence of soil chemistry; relationship between laboratory results and computational needs.

**CIVL 7460 Geotechnical Design with Geosynthetics 3 cr**

Properties and test methods of geosynthetics (i.e., geotextiles, geogrids, geomembranes, geonets and geocomposites); functions of geosynthetics (separation, reinforcement, filtration, drainage and containment); design of reinforced soil structures (retaining walls, slopes, embankments and unpaved roads); design of filtration and drainage works; design of lined waste containment facilities; case histories.

**CIVL 7480 Soils Engineering 3 cr**

Analysis and design for construction in engineering soils: review of soil strength and compressibility, site characterization, stability and settlements of shallow foundations, deep foundations, earth retaining structures, slope design and remediation, earth dams. Emphasis will be placed on published records comparing predictions with field performance.

**CIVL 7610 Special Topics in Theoretical and Applied Mechanics 3 cr**

Lectures and seminar on selected advanced topics in the field of mechanics; current problems and research.

**CIVL 7650 Selected Topics in Water-Resources Development 3 cr**

Lectures and seminars on selected advanced topics in water-resources engineering.

**CIVL 7652 River Ice Engineering 3 cr**

This course will provide students with an introduction to River Ice Engineering topics and principles. River ice processes such as freeze-up, ice growth, break-up and jamming will be explained in detail. The effects of ice on river hydraulics and hydraulic systems operation will be investigated. River and lake ice mechanics, ice safety and ice mitigation strategies will be discussed. Where possible, students will have an opportunity to gain practical experience through labs and project work.

**CIVL 7654 Advanced Hydraulics 3 cr**

This course provides an introduction to advanced hydraulics, including physical hydraulic modelling, sediment transport (cohesive and non-cohesive) and analysis and design of several different types of hydraulic structures. Additional advanced topics such as coastal engineering and fish passage will be covered as appropriate.

**CIVL 7656 Advanced Fluid Mechanics 3 cr**

Introduce concepts in advanced fluid mechanics including topics in theoretical fluid mechanics, experimental fluid mechanics and environmental fluid mechanics.

**CIVL 7658 Computational Hydraulics 3 cr**

Introduce concepts and procedures for the computational modelling of open channel hydraulic engineering problems including numerical methods and best modelling practices.

**CIVL 7660 River Engineering 3 cr**

Classification of rivers; regime of river channels; channel patterns, sediment transport; design of stable channels; engineering interference (diversions, dams, dredging); river training works; hydraulic-model studies of rivers.

**CIVL 7680 Soil/Ground Improvement Techniques 3 cr**

Analysis and design of mechanical and chemical treatment techniques commonly applied to problem foundation soils for civil engineering structures. Mechanical modification; hydraulic modification; modification by admixtures; modification by reinforcement and confinement; in-situ evaluation of soil improvement and monitoring.

**CIVL 7700 Water Resources Planning 3 cr**

Principles and methodologies of planning water resources development projects. An evaluation of a major multi-purpose project from inter-disciplinary viewpoints, incorporating those of designers, planners, critics and political decision makers.

**CIVL 7710 Coastal Hydraulics 3 cr**

Mechanics of wave motion; wave and water level predictions; types and design of coastal protection; littoral processes.

**CIVL 7720 Groundwater and Solute Transport Modelling 3 cr**

The physics and numerical solution of mathematical models of steady-state and transient groundwater flow and mass transport in the saturated and unsaturated zones; introduction to the finite difference and finite element methods; popular software; other modelling techniques, including random-walk particle methods; modelling groundwater contamination; non-linear problems; applications to regional groundwater flow and groundwater recharge, aquifer resource evaluations, contamination prediction.

**CIVL 7730 Groundwater Engineering 3 cr**

The role of geology and hydrogeology in the siting, design of engineering structures; synthesis of groundwater mechanics in various geologic environments; case studies in construction dewatering, groundwater resource evaluation, subsidence, seepage in dams and foundations and slope stability; basic review of analytic solutions and numerical methods.

**CIVL 7740 Special Topics in Hydrology 3 cr**

Selected topics examining the statistical aspects of hydrology. Time series analysis; disaggregation processes; flood frequency analysis; analysis of extremes.

**CIVL 7750 Advanced Civil Engineering Systems 3 cr**

Optimization of Civil Engineering Systems. Use of linear and dynamic programming and network theory in all aspects of civil engineering. Introduction to the use of stochastic processes in operations research. Particular emphasis is given to water resources and environmental and transportation engineering.

**CIVL 7760 Recent Developments in Bridge Engineering and Structural Health Monitoring 3 cr**

Introduction to Intelligent Sensing for Innovative Structures (ISIS); Introduction to Civionics and Structural Health Monitoring; Sensors and Data Acquisition Systems; Theoretical Evaluation of Bridge Decks; Theoretical Evaluation of Cantilever Slabs; Theoretical Evaluation of Girders; Theoretical Evaluation of Columns; Bridge Inspections and Maintenance; Conceptual Design and Aesthetic Design of Bridges.

**CIVL 7770 Hydrological Processes 3 cr**

Runoff generation and runoff modelling; scale effects in hydrology; ramifications of distributed and lumped approaches; computer models of watershed modelling; optimization schemes and minimization functions; special concerns dealing with digital elevation models.

**CIVL 7776 Advanced Concrete Technology 3 cr**

Advanced properties of concrete are introduced through studying key constituent materials (e.g. cement, mineral and chemical admixtures). Concepts of design and control of concrete mixtures are described through defining performance criteria in the field. Characteristics and applications of special concretes (e.g. high-performance and self-consolidating concrete) are covered. Each topic is discussed with respect to mechanisms of action, construction specifications and requirements in Canadian and American standards.

**CIVL 7778 Durability of Concrete 3 cr**

Durability of concrete as a material. Deterioration of concrete in the field due to various damage mechanisms. Frost damage, corrosion of reinforcement, sulfate attack, etc. Durability-based design requirement in building codes.

**CIVL 7780 Advanced Behaviour and Design of Steel Structures 3 cr**

Behaviour and design of welded thin-walled members; plate girders, composite construction, beam-columns, and connections. Special topics such as stability of metal structures and bracing requirements are also covered.

**CIVL 7790 Pavement Evaluation and Performance 3 cr**

Pavement classification, pavement management, performance measures, condition surveys, sensor technology, material sampling, test methods on asphalt binders and unbound layers, non-destructive testing, sources of variability, pavement maintenance, rehabilitation, long-term performance.

**CIVL 7800 Design of Light Industrial Steel Buildings 3 cr**

Design criteria for metal building systems; behaviour and design of tapered and prismatic built-up columns and girders; design of gable frames; behaviour and design of cold-formed members; bracing requirements for metal buildings and design of connections.

**CIVL 7810 Flow and Transport in Fractured Rock 3 cr**

The physics and numerical solution of mathematical models of flow and transport processes in fractured rocks; scale effects; single, dual, and mixed modelling techniques; heat flow and transport in fractured rock systems; applications to local and regional groundwater flow.

**CIVL 7820 Operational Hydrology 3 cr**

Hydrographic analysis; relation between the physical processes and the hydrograph; estimation and prediction. Floods; statistical analysis; maximum probable floods. Water supply; estimates of dependable flow, simulation, synthetic flow series, statistical analysis.

**CIVL 7840 Traffic Systems Analysis 3 cr**

Mathematical theories of traffic flow, introductory queueing theory with application to traffic performance at intersections; travel forecasting principles and techniques; the use of simulation in traffic engineering design.

**CIVL 7850 Advanced Structural Dynamics 3 cr**

Responses of single-degree-of-freedom and multi-degree-of-freedom systems, damped and undamped systems, linear and inelastic systems to dynamic excitations; free vibration, forced vibrations. Special emphasis on responses of civil structures to seismic and blast loadings.

**CIVL 7870 Advanced Engineering Analysis 3 cr**

Analytical techniques used in engineering, including such topics as the application of complex variables, partial differential equations, generated Fourier series, integral transforms, and special functions, to advanced problems in civil engineering.

**CIVL 7920 Theory of Water Treatment 3 cr**

Physical and chemical characteristics of water; water treatment processes including coagulation/flocculation, sedimentation, filtration, softening, adsorption, ion exchange, disinfection, and membrane processes.

**CIVL 7930 Theory of Waste Treatment 3 cr**

Characteristics of waste-specific and generic determinations; unit operations and unit process for physical, chemical and biological treatment and transformation of particulate and dissolved contaminants. Biochemical transformations and degradation of hazardous pollutants; unit processes for enhanced nutrient removal and hazardous waste treatment. Full treatment trains for industrial and municipal waste treatment, including solids handling.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CIVL 3700 and CIVL 3690 or permission of instructor.

**CIVL 7950 Environmental Engineering Laboratory 3 cr**

Laboratory work in water and wastewater analysis and treatment processes related to water quality management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 7930 and CIVL 7920.

**CIVL 7960 Environmental Engineering Design 3 cr**

Design of unit operations. Planning, cost effectiveness analysis, and conceptual design of a whole wastewater treatment plant.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 7930.

**CIVL 7990 Special Topics in Transportation 3 cr**

Lectures and seminars on selected topics in transportation not covered in the formal coursework.

## Classical Studies (CLAS)

**CLAS 7000 Proseminar in Classical Studies 1 0 cr**

Seminars in which faculty members or invited speakers introduce subfields, methods, and resources within Classics. Attendance and participation are required from Classics MA students during the first year of their program. This is part of a pair of required courses. This course is graded Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none.

**CLAS 7002 Proseminar in Classical Studies 2 0 cr**

Seminars in which faculty members or invited speakers introduce subfields, methods, and resources within Classics. Attendance and participation are required from Classics MA students during the first year of their program. This is part of a pair of required courses. This course is graded Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none.

**CLAS 7300 Topics in Greek Art and Archaeology 3 cr**

This course will investigate aspects of Greek art, archaeology, and material culture, emphasizing different topics, methods, genres, or theoretical approaches. Possible topics include artistic media, the archaeology of particular regions, and archaeological approaches to the economy and other issues in social history. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**CLAS 7302 Topics in Roman Art and Archaeology 3 cr**

This course will investigate aspects of Roman art, archaeology, and material culture, emphasizing different topics, methods, genres, or theoretical approaches. Possible topics include artistic media, the archaeology of particular regions, and archaeological approaches to the economy and other issues in social history. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**CLAS 7310 Readings in Selected Topics 3 cr**

Intensive study of one or more authors in Greek or Latin literature or of a special topic in ancient history. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**CLAS 7400 Major Research Paper 0 cr**

Develop advanced skills in the formulation of a focused research question, develop a method for approaching it, assemble an in-depth bibliography comprising primary and secondary sources, and independently write a research paper of 8,000-10,000 words documenting the results of this research. This course is graded on a pass/fail basis.

## Community Health Sciences (CHSC)

**CHSC 6810 Biostatistics for Clinicians 3 cr**

This course is designed for students in clinical Master's programs in Medicine, Pharmacy, Dentistry and Nursing. It is designed as a basic biostatistics course that will introduce the tools needed to read and understand quantitative health literature.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: Permission of instructor.

**CHSC 7200 Current Concepts in Global Health: Populations, Policies and Programs 3 cr**

The course will focus on global patterns of mortality and morbidity, and the organization of health care services. Social, cultural, and economic issues will be related to health and health services.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: instructor permission.

**CHSC 7212 Critical Perspectives on Gender and Health 3 cr**

This course explores gendered health issues from an interdisciplinary feminist perspective. Placing particular emphasis on the intersections amongst race, class, gender, and sexuality, this course explores how the contemporary concepts of "health" and "illness" have come to make sense in and through constructions of masculinity and femininity. Using feminist theories of gender embodiment to examine a range of topics pertaining to health, this course requires students to question common-sense and bio-medical understandings of health and illness.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor permission required.

**CHSC 7220 Health and Health Services of First Nations, Métis and Inuit Peoples 3 cr**

Seminar-based course critically examines First Nations, Metis and Inuit health status, health care services, historical assumptions about indigenous populations, and 'pre-Canada' world events influencing European colonization of this land with resultant marginalization of original indigenous Peoples.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission to register.

**CHSC 7230 Maternal Health 3 cr****CHSC 7232 Families and Care Across the Life Course 3 cr**

Advanced study of the provision of care by family members and friends for dependent children and adults with long-term care needs in the context of increasing family diversity and population aging. Topics include theoretical perspectives on care, the gendered nature of care, consequences of care and policy implications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7250 Science and Practice of Knowledge Translation in Health Research 3 cr**

This course will provide students with an overview of the fundamental aspects and current state of knowledge translation (KT) science and practice in health research and care. The topics covered in this course will equip the student with the basic principles required to integrate knowledge translation science into health research and apply best KT evidence and methodologies to their dissemination and implementation activities.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor permission is required.

**CHSC 7270 Epidemiology of Chronic (Non-Cancer) Diseases 3 cr**

The objective is to study the natural history of chronic diseases including the distribution of diseases, risk and prognostic factors, rationale and strategies for prevention. The methodological issues concerning the investigation of severe disease are also discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520, CHSC 7820, or instructor permission.

**CHSC 7290 Economic Evaluation of Health Care 3 cr**

The objectives of this course are to enable students to understand economic evaluation methodologies (cost-effectiveness, cost-benefit, cost-utility analysis) as applied to health care and to familiarize them with the applied literature on economic evaluation of health care.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7810 or CHSC 7820, and CHSC 7520, or instructor permission.

**CHSC 7300 Health Policy and Planning 3 cr**

This course defines health policy and describes the planning and decision-making process. Case studies will be used to illustrate and critique the substance, process and outcome of policy papers that address contemporary policy issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7310 Epidemiology of Health Care 3 cr**

This course will discuss the advantages and disadvantages of using large administrative data bases for research purposes. Substantive topics dealt with include: population health and the role of medical care, assessing system performance, quality of care and outcomes, short and long-term outcome studies, technology assessment, and use of pharmaceuticals. Policy implications are considered. Students are required to learn SAS, a computer programming language and to analyze and interpret data for the term project.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor permission is required.

**CHSC 7320 Organization and Financing of the Canadian Health Care System 3 cr**

The purpose of this course is to help students develop the knowledge and skills to understand and improve Canadian healthcare. The course provides an introduction to the way the Canadian health system is organized and financed; covers key policy issues and controversies; and examines the challenge of change.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Students outside CHS require instructor permission.

**CHSC 7330 Cultural Perspectives on Illness and Medical Practice 3 cr**

The objective of this course is to make students aware of the ways in which disease, illness, and medical practice are socially and culturally mediated. The course will examine cultural influences on the experience and expression of illness and consider the medical practitioner's role in the development and provision of culturally responsive health care.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Students outside CHS require instructor permission.

**CHSC 7360 Clinical Trials 3 cr**

The Randomized Clinical Trial is the only true experiment in clinical research. This course is intended to give students detailed knowledge of the design and implementation of RCTs. Students will participate in a qualitative review of RCTs. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: CHSC 7520, CHSC 7820.

**CHSC 7362 Systematic Reviews and Meta-Analysis 3 cr**

Systematic reviews and meta-analysis are integral to research success. Lectures and skill sessions will parallel the steps needed for successful completion of rigorous systemic reviews and meta-analyses of intervention studies. Instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: CHSC 7520 and CHSC 7820.

**CHSC 7380 Prevention and Health 3 cr**

The course will cover frameworks used in formulating preventive strategies. Topics will include risk factor assessment, screening, health education, legislation, litigation, lifestyle and prevention. Actual case studies will be used. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: CHSC 7520.

**CHSC 7390 Health Promotion 3 cr**

Examination of the history, theories, principles, and settings for health promotion. Assumptions underlying the discipline and how they affect practice are explored. Different conceptualizations of health and implications for practice are examined. Recent health promotion strategies are critically analyzed using case studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Students outside CHS require instructor permission.

**CHSC 7400 Directed Readings I: In Epidemiologic Methods 3 cr**

An opportunity for advanced students to acquire knowledge in a defined and specific area of interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: permission of instructor and Graduate Program Director.

**CHSC 7410 Directed Readings: II - In Epidemiology 3 cr**

An opportunity for advanced students to acquire knowledge in a defined and specific area of interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: permission of instructor and Graduate Program Director.

**CHSC 7430 Seminars on Advanced Topics: II - In Methods of Health Care 3 cr**

Seminars dealing with current research issues, emerging methodologies and analytical techniques will be offered for advanced students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Students outside CHS require instructor permission.

**CHSC 7450 Epidemiology of Communicable Diseases 3 cr**

Overview of epidemiological principals in communicable disease investigation and prevention and specific issues in controls of certain specific communicable diseases of public health importance in Canada will be introduced. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: CHSC 7520, CHSC 7820.

**CHSC 7460 Environmental and Occupational Health 3 cr**

The aim of the course is to acquaint the student with the role of the environment (general and specifically working) as the determinant of health. The content of the course will be presented in the form of lectures, seminars, and field visits. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: CHSC 7520.

**CHSC 7490 Empirical Perspectives on Social Organization and Health 3 cr**

This course will focus on a selected review of the epidemiological literature which has integrated social factors in the investigation of the distribution of health and illness in society. The course will review a selection of important empirical studies in investigating the roles played by social, psychological and economic status factors in determining health and illness. Emphasis will be placed on identifying the central theoretical and methodological approaches to defining and measuring socioeconomic status in this literature. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: CHSC 7520, CHSC 7820.

**CHSC 7500 Conc. Public Health 3 cr**

Public Health is a multi-disciplinary field of inquiry and practice that addresses the social and biological dimensions of population health. This course represents part one (with CHSC 7502) that is designed to provide students with a breadth of exposure to core competencies and content areas important to public health practice. This course provides students with an introduction to the historical and current theoretical debates relating to the science and art of protecting, promoting and restoring the health of the population through organized societal activity, public health law and ethics. Students will also gain relevant introductions to inequities in health, Indigenous health, environmental and occupational health, knowledge translation, and so forth. Specific content for each part of the two courses will be structured in such a way to complement more advanced program offerings in these topic areas.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Instructor permission is required for students not admitted to the CHS Master of Public Health Program.



**CHSC 7502 Core Concepts in Public Health 2 3 cr**

Public Health is a multi-disciplinary field of inquiry and practice that addresses the social and biological dimensions of population health. This course represents part two (with CHSC 7500) of the breadth of exposure to core competencies and content areas important to public health practice. Combined with CHSC 7500, this course adds to relevant debates relating to the science and art of protecting, promoting and restoring the health of the population through organized societal activity, public health law and ethics. Students will also gain relevant introductions to health policy, health promotion, prevention and health, and so forth. Specific content for each part of the two courses will be structured in such a way to complement more advanced program offerings in these topic areas.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor permission is required for students not admitted to the CHS Master of Public Health program.

**CHSC 7510 Problem Solving in Public Health 3 cr**

This seminar based course focuses on current issues and topics in community health to advance skills of thinking critically and communicating clearly about practical solution to public health problems. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520.

**CHSC 7520 Principles of Epidemiology 3 cr**

This course will introduce the basic concepts and methods of epidemiology, including the definition and measurement of health status and health determinants in populations, assessing health risks and inferring causation, and issues in the design and analysis of population health studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7530 Applied Public Health Epidemiology 3 cr**

This course builds on the Principles of Epidemiology course through an applied focus. It discusses the application of epidemiological principles in applied public health practice including the investigation of outbreaks, disease surveillance and the basic concepts of social network analysis, vaccine epidemiology and mapping. Students will also gain an understanding of the principles of prevention in public health practice, the benefits of qualitative methods and the role of the laboratory in outbreak investigation. They will receive instruction on the use of software for database development, data entry, analysis, and presentation of results. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520, CHSC 7810 or CHSC 7820.

**CHSC 7540 Advanced Epidemiology 3 cr**

Advanced epidemiological research methods focusing on selected epidemiological issues (bias, confounding, matching, etc.). Discussion will be directed to both epidemiological and statistical considerations to find the optimal solution to a research problem. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520 (B+) or CHSC 7820 (B+).

**CHSC 7560 Epidemiology of Cancer 3 cr**

This course introduces the magnitudes, risk factors and prevention strategies of cancer. It focuses on current knowledge related to the etiology of cancer, medical interventions and potential for prevention. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520.

**CHSC 7580 Public Health Field Placement 0 cr**

The aim of the field placement is to highlight the relationship between learning and application of public health principles and practice through the integration of coursework with supervised fieldwork undertaken in local, provincial, or national public health settings. It is specifically designed for MPH students who do not have extensive public health experience, or who seeks a public health experience in a setting different from their primary professional background, and is open to any MPH student seeking further public health practice experience. In addition, to meeting educational objectives (to be set in consultation with the MPH Advisory committee and the Field Placement Supervisor at the host agency), students will participate in the day-to-day activities of the host agency. The site of the field placement will be based on the student's career interests and learning needs, and be located in a public health organization or agency, or situated within a public health program or service. Field placements are expected to be anywhere from 12 – 16 weeks full time equivalent (minimum is 12 weeks) and evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Students must have the permission of the Director of the Graduate Program to register.

**CHSC 7590 Capstone Research Project in Public Health 0 cr**

The capstone project in public health is designed as an alternative to CHSC 7580 for eligible MPH students who already have extensive public health practice experience. The aim of the capstone project is for a student to develop some research experience in carrying out a research project, limited in scope, that has applied public health relevance. The capstone research project is expected to be conducted within 12 – 16 weeks full time equivalent (minimum is 12 weeks). For the majority of students, their project will be part of a larger research program led by a Faculty PI who will be a research supervisor for the project. On occasion, students may develop an independent research question to pursue, but this will be done in consultation with faculty, and the project will need to be completed within the allotted timeframe. As part of the project, students will consult the relevant published literature, other sources, develop and carry out a research plan, write a report of their findings, and make a public presentation. Prior to the start of the capstone project, the student will have already developed the research question and a proposal that has been reviewed by the Research Project Supervisor and the MPH Advisory Committee, following which, if appropriate, a submission to the research ethics office will have been initiated. Evaluation is based on a pass/fail basis. Students must have the permission of the Director of the Graduate Program to register.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7860.

**CHSC 7610 Advanced Topics in Community Health 1 1.5 cr**

Special advanced research topics in Community Health Sciences.

**CHSC 7620 Advanced Topics in Community Health 2 1.5 cr**

Special advanced research topics in Community Health Sciences.

**CHSC 7630 Work and Family Interrelationships 3 cr**

In this course students will engage in advanced study of the intersection of earning and caring activities of families over the life course and how these activities interrelate at the community, provincial, national, and global levels. The influence of gender and demographic trends will be explored and family, private sector, and public sector responses to the issue will be examined. There will also be an emphasis on relating current research to relevant theoretical perspectives and professional practice. May not be held with the former FMYL 7230.

**Mutually Exclusive:** FMYL 7230

**CHSC 7632 Evaluation of Family, Health and Social Development Programs 3 cr**

This course teaches the theory and practice of program evaluation with a focus on health and social development programs. It emphasizes a utilization-focused evaluation approach. It studies program evaluation from a "real world" perspective, including the political and ethical issues related to evaluation. The course provides strong theoretical foundations. Students put this into practice by working with a particular agency/program to fully develop an evaluation plan to be actually used by the agency/program. May not be held with the former FMLY 7500.

**Mutually Exclusive:** FMLY 7500

**CHSC 7634 Research Data Centre Research Methods Part I 1.5 cr**

This course will introduce the processes and methods involved in using Statistics Canada's confidential master data files at the Research Data Centre (RDC). Students will gain skills in conducting secondary analyses in order to address important health and social policy research questions. May not be held with the former FMLY 7510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or Co-requisite: Graduate level biostatistics course or equivalent.

**Mutually Exclusive:** FMLY 7510

**CHSC 7636 Research Data Centre Research Methods Part II 1.5 cr**

A continuation of the introduction to the processes and methods involved in using Statistics Canada's confidential master data files at the Research Data Centre (RDC). Students will gain skills in conducting secondary analyses in order to address important health and social policy research questions. May not be held with the former FMLY 7520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: Successful completion of Part I (CHSC 7634).

**Mutually Exclusive:** FMLY 7520

**CHSC 7638 Children and Violence 3 cr**

An examination of children's experiences of violence at the levels of families, communities and societies. Relevant theoretical and measurement issues are addressed, as well as the developmental outcomes of various forms of violence. The incidence and prevalence of violence in children's lives is examined. Models of prevention, intervention and policy are explored. May not be held with the former FMLY 7620.

**Mutually Exclusive:** FMLY 7620

**CHSC 7640 Family Violence 3 cr**

Advanced study of current topics in family violence. Topics may include child abuse, sibling abuse, parent abuse, dating violence, intimate partner violence, and elder abuse. Emphasis is on understanding and critiquing current theory and research. May not be held with the former FMLY 7800.

**Mutually Exclusive:** FMLY 7800

**CHSC 7642 Family Conflict and Health and Well-being 3 cr**

The origins and manifestation of conflict in family relationship across the life course will be reviewed with an emphasis on its relation to individual, dyadic, and family health and well-being. May not be held with the former FMLY 7810.

**Mutually Exclusive:** FMLY 7810

**CHSC 7644 Social Development in Theory and Practice 3 cr**

This advanced seminar examines the concepts and practices of social development within specific contexts. It examines the interplay between theory and practice and the epistemological underpinnings of social development research, programs, and policies as applied to families, communities, and populations. Case studies are assessed and critiqued. May not be held with the former FMLY 7930.

**Mutually Exclusive:** FMLY 7930

**CHSC 7710 Social Aspects of Aging 3 cr**

This course is an advanced seminar designed to examine current social issues in aging. The course is organized around selected topics related to aging. Where possible, the Canadian experience will be compared to international trends and diversity will be highlighted. The first section is a review of the field of gerontology, ageism, demographic trends, theoretical perspectives and methods and the second section explores contemporary social issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7720 Health and Aging 3 cr**

This course is an advanced seminar designed to examine health and health care issues in aging. Where possible, the Canadian (or Manitoban) experience will be highlighted. Key topics in the health domain will be covered, such as frailty, mental health and dementia. The provision of care for older adults will also be covered, focusing on both the formal care system, as well as informal care providers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7730 Topics in Health Services Research 3 cr**

This course will expose students to select health services research topics that are particularly relevant in Manitoba and Canada. Students are expected to actively engage in seminars led by health services researchers and decision-makers, and also provide informative presentations in their own area of research. Students will also gain knowledge about various communication and knowledge translation strategies. Students outside CHS require instructor permission.

**CHSC 7738 Qualitative Research Methods in Community Health Sciences 3 cr**

The purpose of this course is to provide students with fundamental knowledge on theoretically informed qualitative inquiry for applied health services and health policy research. The course will include an introduction to social theory and respective qualitative methodologies best suited for population health, health services, social and cultural determinants of health, and health policy research. By the end of the course, students will have an understanding of the principles and practices involved in: integrating theory and qualitative methods; community engagement in qualitative research, including indigenous methodologies and diverse cultural contexts; the design of a theory driven qualitative research study; various ways of generating and analyzing qualitative data; integrated Knowledge Translation; and ethics, among other topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7740 Advanced Qualitative Research Methods in Community Health Sciences 3 cr**

The purpose of this seminar-based course is to provide students with advanced knowledge on transformative qualitative research methodologies, methods and analysis related to redressing health inequities from a strength-based interdisciplinary perspective. Using case study and other applied approaches students will gain knowledge and experience in: the application of critical social theories to health research; understanding processes of community, stakeholder, and partnership engagement from multiple scales and perspectives (e.g. indigenous populations locally and globally); various ways of generating qualitative data and analyzing texts consistent with selected theory; developing different products for knowledge exchange activities; and the ethics and politics inherent within the research process.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7738 (formerly FMYL 7710) or instructor permission is required.

**CHSC 7810 Biostatistics for the Health and Human Sciences 3 cr**

An introduction to statistical ideas and techniques for health sciences and human research. Describing data, patterns in data, the normal distribution. Principles of estimation and principles of hypothesis testing. Principles and practice of the major statistical tests (t tests, analysis of variance, Chi squared tests, correlation and regression). Nonparametric statistical techniques. The use of statistical software to carry out statistical analysis. Analytical decision strategies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7820 Biostatistics for Community Health Sciences 3 cr**

The course will cover techniques of research design and analysis for community health researchers. Topics include: principles of experimental design, study size determination, statistical software as an analytical tool, techniques for the analysis of continuous outcomes, analysis of variance for multi-way, factorial and split-unit experiments, and multiple regression and general linear models. Introduction to more advanced statistical methods including logistic regression and survival models. Instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: 3 credit hour statistics course within five years.

**CHSC 7830 Advanced Biostatistics for Community Health Sciences 3 cr**

This course focuses on Generalized Linear Models. Upon completion of the course, students will be able to: 1) give examples of different types of data arising in public health studies; 2) understand differences and similarities between standard linear regression and models for discrete outcomes; 3) use modern statistical concepts such as binomial and Poisson in public health studies; 4) understand models for polytomous outcomes; 5) conduct and interpret logistic, conditional logistic (case-control), and prohibit regression inference; 6) conduct and interpret time-related outcome variables including survival analysis and proportional hazard regression; 7) conduct and interpret Poisson outcome variables and Poisson regression. Instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7820 (B+).

**CHSC 7840 Current Topics in Biostatistics: Design and Analysis 3 cr**

This course will introduce students to leading-edge advanced study design and statistical analysis methods for health research. The course will use case studies to explore the study design and analysis topics and their applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: CHSC 7520; CHSC 7820 (B+); CHSC 7860, or instructor permission is required.

**CHSC 7850 Advanced Biostatistical Methods for Hierarchical and Longitudinal Data 3 cr**

The course teaches statistical methods for analyzing hierarchical ("multi-level") data and longitudinal data. Mixed models are rapidly becoming the principal statistical tools for understanding hierarchical or "multi-level" data, such as the academic achievement of students within school classes within schools and perhaps within communities. The longitudinal application of "mixed models" provides analysis of temporal trajectories, for example, of the health of individuals (potentially nested within families, or communities) over time. Mixed models also can be utilized to analyze relationships, for example between health and income, over time, for individuals or families within communities, etc. The course will focus on the conceptualization, estimation, and interpretation of mixed models in SAS. The primary emphasis will be on linear mixed models for continuous outcomes, however, nonlinear mixed models for categorical or count outcomes will also be discussed. Instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHSC 7820 (B+).

**CHSC 7860 Methods and Concepts for Community Health Sciences 3 cr**

This course is designed to provide a practical introduction to qualitative, quantitative, and mixed method approaches used in health research. The emphasis in the course will be on developing research questions, selecting appropriate methods, and writing a research proposal. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Co-requisites: 1) CHSC 7520 and ONE of the following: CHSC 7820 or CHSC 7810 or CHSC 7738.

**CHSC 7870 Health Survey Research Methods 3 cr**

Students critically examine the use of health survey methodology within epidemiology. They also learn to apply survey methodology, as a means to gain a strong appreciation of the reflective, theoretical and analytical thinking required to successfully design and implement epidemiological health surveys. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520.

**CHSC 8600 Senior seminar in Community Health Sciences 3 cr**

This course is an advanced seminar designed to examine various aspects of health research and health. The emphasis in the course will be on: interrogating assumptions that underlie what research is conducted and how it is conducted; including a diversity of experiences and perspectives in research; and critically appraising the quality of research. This is an advanced course intended for Ph.D. students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7810 or CHSC 7820, or CHSC 7738, and CHSC 7860; instructor permission is required for students outside the Community Health Sciences Ph.D.

## Computer Science (COMP)

### COMP 7210 Research Methodologies 3 cr

This course explores the research process in general and the resources for research in computer science. Traditional research approaches and use of emerging technology will be discussed. Attendance at department seminars and classes is required.

### COMP 7570 Advanced Topics in Computer Science 1 3 cr

Topics of current research interest in areas of computer science, available on an occasional basis, subject to the interests and availability of faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### COMP 7600 Graduate Workterm I 0 cr

Work assignment in business, industry, or government for students registered in the Computer Science Graduate Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. Graded Pass/Fail.

### COMP 7720 Advanced Topics in Algorithms 3 cr

Topics of current research interest in advanced algorithms. Possible topics include string matching, data compression, computational geometry, probabilistic algorithms; subject to the interests and availability of faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 3170 or equivalent or written consent of instructor.

### COMP 7750 Advanced Topics in Computation Theory 3 cr

Topics of current research interest in computation and complexity theory. Possible topics include decidability and complexity theoretic issues in parallel computation, cryptography, graph theory, or number theory, subject to the interests and availability of faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### COMP 7770 Coding Theory 3 cr

Algebraic background of coding theory. Possible topics include theory of linear codes; Hamming, Golay, Reed-Miller, Macdonald, and Hadamard codes; structure of finite fields; application to cyclic and Bose Chaudhuri codes; and decoding algorithms and error-correcting bounds.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### COMP 7780 Queuing Theory and Performance Evaluation 3 cr

Theory and application of queuing systems applied to problems of computer systems performance. Possible topics include investigation of deterministic and stochastic models of single and multiple queuing systems using analytical, numerical, and simulation techniques; performance evaluation methods for computer systems and communications networks.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: written consent of instructor.

### COMP 7800 Graduate Workterm II 0 cr

Work assignment in business, industry, or government for students registered in the Computer Science Graduate Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. Graded Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 7600.

### COMP 7810 Computer Networks 3 cr

A selection of current research topics in computer networks, including advanced network architectures, protocols, and systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### COMP 7850 Advances in Parallel Computing 3 cr

This course introduces advanced research topics in parallel architectures, parallel programming, parallelizing compilers, runtime systems, and parallel I/O.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### COMP 7860 Advanced Topics in Computer Systems 3 cr

Topics of current research interest in database and operating systems. Possible topics include: operating systems, parallel systems, real-time systems, networks, and database systems; subject to the interests and availability of faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### COMP 7890 Advanced Topics in Languages and Software 3 cr

Topics of current research interest in software engineering. Possible topics include requirement analysis, software architecture, software evolution, and software verification and validation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### COMP 7900 Graduate Workterm III 0 cr

Work assignment in business, industry, or government for students registered in the Computer Science Graduate Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. Graded Pass/ Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 7800.

### COMP 7910 Advanced Graphics 3 cr

Advanced topics in computer graphics. Possible topics include advanced lighting models and radiosity, ray tracing, computational photography, graphics architectures, procedural graphics, model and mesh processing, splines and curves, and advanced rendering techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: written consent of instructor.

### COMP 7920 Advanced Topics in Graphics and Human Interfaces 3 cr

Topics of interest in advanced Human-Computer Interaction (HCI).

Possible topics include quantitative and qualitative evaluations, crowdsourcing methods and applications, personal informatics, persuasive technologies, technologies for special populations, and information visualization. COMP 4020 is recommended.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### COMP 7922 Computational Geometry 3 cr

The design and analysis of efficient algorithms for geometric problems. Possible topics include convex hull algorithms; Voronoi diagrams and Delaunay triangulations; point location; range searching; geometric data structures; geometric intersection algorithms; guarding and visibility graphs; geometric packing, covering, and partitioning; geometric duality; arrangements of lines and circles; unit disc graphs and proximity graphs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: written consent of instructor.

**COMP 7924 Graph Drawing 3 cr**

The design and analysis of efficient algorithms for drawing a given graph in the plane subject to given constraints and optimization criteria. Possible topics include drawing rooted trees, planarity testing, drawing planar graphs, straight-line drawings, point-set embeddings, visibility graphs, and contact graph representations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7926 Computational Finance 3 cr**

Application of Computer Science to the field of Computational Finance. Possible topics include an overview of equity, fixed income, derivative markets; stochastic calculus, Black-Scholes model; volatility, risk and value-at-risk; binomial tree, Monte-Carlo, finite-difference, and other numerical methods, complex financial instruments such as swaps, collateral debt obligations; derivatives mishaps.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7928 Probabilistic Graphical Models 3 cr**

Probabilistic graphical models and their applications in advanced machine learning. Possible topics include directed model (Bayesian networks), undirected models (Markov random fields), inference, and learning in various application domains, e.g., computer vision, natural language processing, bioinformatics, and speech processing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7932 Advanced Intelligent Interactive Systems 3 cr**

Topics of interest at the intersection of Human-Computer Interaction (HCI) and applied Artificial Intelligence (AI). Possible topics include recommender systems, information extraction and summarization, intelligent learning environments, usability concerns, evaluation, and reasoning under uncertainty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: written consent of instructor.

**COMP 7934 Topics in Bioinformatics 3 cr**

Topics of interest in Bioinformatics. Possible topics include genome assembly, protein structure prediction and sequence feature prediction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7936 Advanced Human-Robot Interaction 3 cr**

A survey of fundamentals and current topics in Human-Robot Interaction, including tele-operation, collocated work, and social human-robot interaction. Students will read a range of research publications on Human-Robot Interaction, and develop an original research project relating to interaction with robots.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7938 Software Testing and Quality Assurance 3 cr**

Fundamental techniques and state-of-the-art research in software quality assurance. The primary focus is on software testing techniques, but other quality assurance approaches are also discussed, such as static analysis, code review, defect prediction, and fault localization.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7942 Real-Time Embedded Systems 3 cr**

Topics of interest in embedded systems, especially systems for real-time control and sensing. Extensions to distributed embedded systems are also discussed. Possible topics include scheduling, schedulability, servo motors, constraints in embedded systems, advanced real-time scheduling, control theory, distributed systems, and related programming languages.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7944 Advanced Data Mining 3 cr**

Topics of interest in data mining, include advanced data mining concepts and their applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7946 Wireless Sensor Networks 3 cr**

Topics of interest in wireless sensor networks, including architectures, protocols, and applications. Case studies of previous work and open areas of research will also be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7948 Combinatorial Optimization 3 cr**

Classical and current techniques in combinatorial optimization. Topics include linear and integer programming, matching algorithms, graph algorithms, networks and flows, and matroids.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7950 Advanced Topics in Artificial Intelligence 3 cr**

Topics of current research interest in artificial intelligence chosen from such areas as: expert systems, knowledge representation, intelligent systems, planning systems, multi-agent systems, symbolic logic, knowledge engineering, and automated reasoning; subject to the interests and availability of faculty.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: COMP 3190 or equivalent or written consent of instructor.

**COMP 7952 Grid and Cloud Computing 3 cr**

Distributed computing systems; commercial grid services; working with real grid networks; applications on grid networks; virtualization and cloud computing; grid and cloud architecture and execution models; MapReduce; resource management (brokering, allocation, scheduling); quality of service guarantee; pricing cloud resources; economic and finance models; case studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**COMP 7960 Image Processing 3 cr**

A detailed study of methods used in image processing. Major topics include image transformations, image enhancement, feature extraction, image analysis, and filtering.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

## Dental Diagnostic and Surgical (DDSS)

**DDSS 7010 Biology and Pathology of the Periodontium 6 cr**

Selected topics in cell biology precedes a comprehensive and detailed survey of the periodontium, its constituent tissues and its function; the cell dynamics of inflammation and wound healing and the histopathology of the early and advanced periodontal lesion.

**DDSS 7030 Advanced Oral Radiology 1 cr**

This course is proposed to accommodate the accreditation requirements of the Graduate Periodontal residency program, and to include other graduate level residents, due to the emerging three dimensional imaging being more utilized in the fields of dentistry.

**DDSS 7050 Oral Medicine and Oral Diagnosis 3 cr**

This course provides the student, through clinical rotations, with the opportunity to enhance diagnostic and non-surgical management of oral pathologic conditions including mucosal and intrabony lesions, temporomandibular joint disorders, and oral manifestations of systemic disease in both otherwise healthy and medically compromised patients.

**DDSS 7120 Advanced Clinical Periodontics 4 cr**

This seminar course will review contemporary clinical periodontics by considering assigned readings in current texts and review articles. This course is intended to assure that students have a comprehensive overview of conventional periodontal therapy early in their education.

**DDSS 7130 Occlusion 3 cr**

A seminar series devoted to the diagnosis, treatment planning and management of patients with craniomandibular disorders.

**DDSS 7160 Basic Clinical Periodontics 2 cr**

This course is given at the onset of the program to provide an opportunity to review the basic aspects of Periodontics. The lab component will review scaling and root planning techniques, instrumentation and oral hygiene aids to familiarize residents with North American armamentarium.

**DDSS 7210 Clinical Practice in Periodontics 18 cr**

Designed to provide the clinical experience which is essential for specialty practice in Periodontics (circa 1600 hours).

**DDSS 7220 Essay/Research Project 0 cr**

An essay/research project is required for each student. It is selected in consultation with, and approved by the department head. This course is graded pass/fail.

**DDSS 7230 Advanced Oral Pathology 6 cr**

Common and/or significant oral and paraoral disorders, relevant to various dental specialties, are discussed using a seminar format. Recognition, description, etiopathogenesis, clinical and/or radiographic features, histopathologic findings, biologic behavior and management of such conditions are emphasized.

**DDSS 7240 Advanced Oral and Maxillofacial Surgery Seminar 1 3 cr**

This course includes a thorough review of the applied scientific basis for the practice of oral and maxillofacial surgery and emphasizes surgical anatomy and pathology, diagnosis and technique. Instruction will be given by means of lectures, seminars, case presentations and a critical review of current literature. Year I.

**DDSS 7250 Clinical Advanced Oral and Maxillofacial Surgery 1 6 cr**

The first year of hospital residency includes training in history taking and physical diagnosis; hospital protocols and ward procedure; minor oral surgery procedures and pain control techniques; operating room procedures and general in-patient care. Year I.

**DDSS 7260 Advanced Oral and Maxillofacial Surgery Seminar 2 3 cr**

Lectures, seminars, case presentations and reviews of current literature will emphasize the state of current knowledge regarding the clinical practice of advanced oral and maxillofacial surgery. Year 2.

**DDSS 7270 Clinical Advanced Oral and Maxillofacial Surgery 2 6 cr**

The second year of the hospital residency training program includes training in minor oral surgery, including dento-alveolar, pre-prosthetic surgery and implantology. It also provides an introduction to advanced oral and maxillofacial surgery and maxillofacial imaging. A rotation to Internal Medicine is included. Year II.

**DDSS 7280 Clinical Advanced Oral and Maxillofacial Surgery 3 6 cr**

The third year of the hospital residency training program includes rotations in Anaesthesia, Internal Medicine, General and Plastic Surgery, Surgical Intensive Care and Emergency Room. It also includes training in advanced oral and maxillofacial surgery. An elective rotation may also be arranged. Year III.

**DDSS 7290 Clinical Advanced Oral and Maxillofacial Surgery 4 6 cr**

The fourth year of the hospital residency training program is devoted to advanced oral and maxillofacial surgery. The student is designated chief resident and assumes a greater degree of responsibility in patient care and administrative activities. Year IV.

**DDSS 7300 Dental Implantology 3 cr**

A seminar course devoted to providing an in-depth understanding of the basic and applied aspects of the placement of dental root form implants in humans. This course is a prerequisite to the actual surgical placement of implants undertaken in DDSS 7210.

## Disability Studies (Grad St.) (DS)

**DS 7010 Disability Studies 6 cr**

Explores the key concepts and issues in disability studies. Includes a critical examination of models and theories of disability, Canadian and other national laws and international standards, social and economic policy, and professional and service responses.

**DS 7020 History of Disability 3 cr**

Traces the historical development of responses to disability, by the medical/rehabilitation community, the governments, advocacy organizations and others. Canadian history will be the initial framework and the historical developments in other countries (including the UK, France, the USA, the Caribbean) will be used as a comparison.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: DS 7010.

**DS 7030 Evaluation and Application of Research Methods in Disability Studies 3 cr**

Provides a critical evaluation of quantitative and qualitative research methodologies used in disability studies. Methods to address disability used in different disciplines as well as transformative and empowerment methodologies such as participatory action and feminist disability research will be examined.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: DS 7010.

**DS 7040 Selected Topics in Disability Studies 3 cr**

One key theme will be chosen for each year from the interests and availability of faculty. Topics could include women with disabilities, international dimensions of disability, disability policy and practice, disability organizing and other topics developed over time.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: DS 7010.

## Economics (ECON)

### **ECON 6040 Survey of Mathematical Topics for Economists 3 cr**

A review of mathematical concepts used in economics, particularly at the graduate level. Topics include linear economic systems and matrix algebra, differentiation and optimisation, integration, economic dynamics and optimisation through time, and difference and differential equations. This course cannot be counted toward the minimum degree requirements for M.A. and Ph.D. degrees. This course is graded pass/fail.

### **ECON 7000 M.A. Research Workshop 3 cr**

An examination of research methodology to assist students in understanding the process of research in Economics. Students will complete a research project under direct supervision. This is a required course for students in the M.A. by course work. This course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of department head.

### **ECON 7010 Econometrics I 3 cr**

An advanced course in estimation and hypothesis testing in various regression models. Topics may include: asymptotic distribution theory; ordinary least squares estimation; maximum likelihood estimation; generalized least squares estimation; generalized method of moment estimation; and seemingly unrelated regressions estimation.

### **ECON 7020 Econometrics II 3 cr**

An advanced applied course in cross-section and panel data econometrics. Topics may include logit, probit, heckman selection, and poisson; instrumental variables, difference-in-differences, regression discontinuity; fixed and random effects; dynamic panel models; quantile regression, nonparametric estimation; bootstrapping.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 7010.

### **ECON 7032 Econometrics III 3 cr**

Theory and applications of time-series analysis. Topics may include stationary univariate process; maximum likelihood estimation; Markov-switching models; state-space models; unit root process; vector autoregressive models; spurious regression; cointegration; and vector error correction models. Prerequisite ECON 7010.

### **ECON 7040 Topics in Applied Microeconomics I 3 cr**

Advanced study in a selected topic in applied microeconomics. Topics covered in rotation include, but are not limited to labour economics, health economics, public finance, industrial organization, international trade, environmental economics, evaluation of public policy, production economics and applied game theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A grade of C+ or better in ECON 7722 or former ECON 7720.

### **ECON 7050 Topics in Applied Microeconomics II 3 cr**

Advanced study in a selected topic in applied microeconomics. Topics to be covered in rotation include, but are not limited to labour economics, health economics, public finance, industrial organization, international trade, environmental economics, evaluation of public policy, production economics and applied game theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 7722 or former ECON 7720.

### **ECON 7060 Advanced Heterodox Theory 3 cr**

This course is a review and examination of heterodox economic theory. Core topics include the theory of capitalist production, effective demand and economic fluctuations, growth and accumulation, crisis theory, and the state and economic policy.

### **ECON 7130 Advanced Development Economics 3 cr**

Introduction to development economics at the graduate level. A core objective is to provide breadth in terms of the coverage of salient topics in economic development and rigor in terms of the level of analysis. The course presumes a substantive background in the basic tools of economic analysis. This is a required course for doctoral students who intend to make development economics one of their field specializations.

### **ECON 7140 Topics in Development Economics 3 cr**

A generic course title intended to accommodate various topics in development economics. The specific topic will be chosen by the instructor.

### **ECON 7150 Evaluation of Public Policy and Programs 3 cr**

This course will provide students with an advanced and critical understanding of the foundations and assumptions of modern program evaluation using cost-benefit, cost-effectiveness, public decision/choice theory and economic analysis. Case examples are drawn from government and non-government programs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

### **ECON 7170 Topics in Heterodox Economics I 3 cr**

Selected study of advanced work in a selected field of heterodox economics.

### **ECON 7180 Topics in Heterodox Economics II 3 cr**

Selected study of advanced work in a selected field of heterodox economics.

### **ECON 7202 Industrial Organization 3 cr**

The emphasis will be on market structures and strategic interaction among firms. Topics such as oligopoly pricing, price discrimination, strategic entry deterrence, product differentiation, advertisement, research and development, auction design, regulation, and anti-competitive behavior will be covered. Students may not hold credit for both ECON 7202 and the former ECON 7200.

**Mutually Exclusive:** ECON 7200

### **ECON 7300 Directed Special Studies in Economics 3 cr**

Intensive study of advanced work in a selected field of economics. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

### **ECON 7430 Advanced Theory of Resource Economics 3 cr**

Economic theory of the development and management of natural resources. Application of capital theory, investment theory, the theory of externalities and decision-making theory to resource utilization and management. A strong background in microeconomics is required. Also offered as ABIZ 7430 by the Department of Agribusiness and Agricultural Economics.

**Equiv To:** ABIZ 7430

### **ECON 7510 Advanced Monetary Macroeconomics 3 cr**

Mainstream and other theories of how money matters to macroeconomics, theory and practice of policy rules for both monetary and other stabilization policy tools.

### **ECON 7540 Advanced History of Economic Thought 3 cr**

Detailed study of a selected topic, or a selection of related topics, in the history of economic thought. Topic(s) vary from year to year, and are normally related to the research interests of the instructor(s) and/or students.

### **ECON 7610 Approaches, Methodologies and Techniques in Economic History 3 cr**

A review of methodologies, approaches, techniques, and contemporary controversies in economic history.

**ECON 7630 Theory of International Trade 3 cr**

Theories of trade flow; trade and income distribution; economic growth and changes in trade flows; instruments of trade intervention; international labour and capital movements; and economic integration.

**ECON 7640 International Money and Finance 3 cr**

Analysis of the theory of international money and finance. Assessment of existing international institutions dealing with money and finance. Theory, rationale and evaluation of structural adjustment policies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 7630, or both the former ECON 7500 and ECON 7510, or permission of instructor.

**ECON 7650 Advanced Macroeconomic Theory 1 3 cr**

A review of contemporary macroeconomic theories and their applications; analysis of static equilibrium and disequilibrium models; exploration of such models' implications for cyclical behaviour and for policymaking.

**ECON 7660 Advanced Macroeconomic Theory 2 3 cr**

Analysis of cyclical models and of equilibrium growth models, and a review of contemporary theories of stabilization policy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 7650.

**ECON 7670 Advanced Macroeconomic Topics 3 cr**

Not currently offered.

**ECON 7690 Structuralist Theories of Development 3 cr**

Study of structuralist classical Marxist and Neo-Marxist theories of development and underdevelopment. Appraisal of the development strategies which follow from the various theories.

**ECON 7722 Advanced Microeconomic Theory I 3 cr**

This course will cover topics in theories of consumer demand, production and cost, distribution, market equilibrium, market organization, general equilibrium and welfare. Students may not hold credit for both ECON 7722 and the former ECON 7720.

**Equiv To:** ECON 7720

**ECON 7732 Advanced Microeconomic Theory II 3 cr**

This course will cover topics in game theory. Static and dynamic games with complete or incomplete information will be studied. Topics such as market failure arising from asymmetric information, firm behavior in oligopolistic markets, auctions, signaling, free riding, externalities, and public goods will be discussed. Students may not hold credit for both ECON 7732 and the former ECON 7730.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECON 7722.

**Equiv To:** ECON 7730

**ECON 7790 Advanced Labour Economics 3 cr**

A review of the theoretical and empirical foundations of modern labour economics.

**ECON 7940 Production Economics 3 cr**

Development of static microeconomic theories of the firm, functional forms, aggregation issues, productivity analysis, risk and uncertainty and in introduction to dynamics. The following are emphasized: a rigorous treatment of the models using duality; a critical understanding of the limitations and possibilities for generalizing the models; and relevance of the models for empirical research, especially in agriculture. Also offered as ABIZ 7940 by the Department of Agribusiness and Agricultural Economics. May not be held with ABIZ 7940 or ABIZ 7130.

**Equiv To:** ABIZ 7940

**ECON 7950 Advanced Agricultural Demand Analysis 3 cr**

Critical evaluation of economic theory as applied to agricultural demand. Topics include demand systems; equilibrium; product transformation over time, place and form; and price analysis. Also offered as ABIZ 7950 in the Department of Agribusiness and Agricultural Economics. Students may not hold credit for ECON 7950 and any of: ABIZ 7950 or the former ECON 7900 or the former ABIZ 7100.

**Equiv To:** ABIZ 7100, ABIZ 7950, ECON 7900

## Education Admin, Fndns & Psych (EDUA)

**EDUA 7010 Educational Administration as a Field of Study and Practice 3 cr**

An overview of educational administration, focusing on a review of some of the main intellectual traditions in the study of educational administration and on an analysis of some of the forces which shape administrative practice. Not to be held with EDUA 7011.

**Equiv To:** EDUA 7011

**EDUA 7020 Politics of Education 3 cr**

A review of the political features of educational organizations, with emphasis on value systems, community power structures, local government, and political change. Not to be held with EDUA 7021.

**Equiv To:** EDUA 7021

**EDUA 7030 Educational Finance 3 cr**

Study of economic and financial aspects of education, with emphasis on costs and analysis of expenditures; sources and types of revenue; productivity and efficiency, planning and budgeting. Not to be held with EDUA 7031.

**Equiv To:** EDUA 7031

**EDUA 7040 Legal Aspects of Education 3 cr**

Studies of legal issues in education. Not to be held with EDUA 7041.

**Equiv To:** EDUA 7041

**EDUA 7050 Theoretical Perspectives on Educational Administration 3 cr**

A study of the main currents of organization theory and administrative thought and their implications for the study and administration of educational organizations. Not to be held with EDUA 7051.

**Equiv To:** EDUA 7051

**EDUA 7060 Organizational Planning and Development in Education 3 cr**

A review of approaches to planning and development in education. Major emphasis is placed on the systematic development of educational organizations. Not to be held with EDUA 7061.

**Equiv To:** EDUA 7061

**EDUA 7070 The Analysis of Educational Organizations 3 cr**

The application of methods of organizational analysis to educational institutions. Not to be held with EDUA 7071.

**Equiv To:** EDUA 7071

**EDUA 7090 Seminar in Administrative Problems in Education 3 cr**

Application of theoretical concepts in field situations. Not to be held with EDUA 7091.

**Equiv To:** EDUA 7091

**EDUA 7100 Topics in Educational Administration (Readings) 1 3 cr**

A readings course in topics of significance to educational administration.

**EDUA 7110 Topics in Educational Administration (Field) 2 3 cr**

A projects and field study course in topics of significance to educational administration.



**EDUA 7113 Éducation pour un avenir viable 3 cr**

Exploration en profondeur de la pédagogie et de l'apprentissage dans le domaine de l'éducation pour un avenir viable. Étude de la théorie et des pratiques reliées à ce domaine. Expérimentation de stratégies innovatrices qui ont pour but d'intégrer l'éducation à l'environnement dans les contextes éducatifs et communautaires.

**EDUA 7200 Philosophy of Education 3 cr**

A study of the philosophic foundations of education. Emphasis will be given to various schools of philosophic inquiry as they relate to education and to contemporary philosophy of education issues.

**EDUA 7210 Educational Sociology 3 cr**

An examination of the relationship between education and society, with particular attention to ethnicity, family, and socio-economic status and to the role of the school in the socialization process in the Canadian context. Not to be held with EDUA 7211.

**Equiv To:** EDUA 7211

**EDUA 7230 Social Criticism in Education 3 cr**

A critical examination of education, giving special attention to various perspectives which challenge conventional interpretation of education and schooling.

**EDUA 7240 Values in Education 3 cr**

Examines the place of values in education. It explores the notion of values, its pervasiveness in education, the approaches to values in education, and the trends and issues related to values in education. Not to be held with EDUA 7241.

**Equiv To:** EDUA 7241

**EDUA 7250 Comparative Education 3 cr**

An analysis of educational systems and problems in selected environments in terms of social, political, economic, cultural and other contexts.

**EDUA 7270 Seminar in Cross-Cultural Education 1 3 cr**

A critical analysis of the social theories and research which form the basis of cross-cultural education. Not to be held with EDUA 7271.

**Equiv To:** EDUA 7271

**EDUA 7280 Seminar in Cross-Cultural Education 2 3 cr**

A critical analysis of the approaches and research in cross-cultural education. Not to be held with EDUA 7281.

**Equiv To:** EDUA 7281

**EDUA 7300 History of Canadian Education from 1867 3 cr**

A study of the historical development of education in Canada from 1867 to the present.

**EDUA 7330 Topics in Educational Foundations (Readings) 1 3 cr**

A reading and research course in topics of significance to educational foundations.

**EDUA 7340 Seminar in Educational Thought 3 cr**

Intensive studies of the works of selected educational theorists.

**EDUA 7402 Development of Adult Education and Post-Secondary Education 3 cr**

A survey structures, theory, philosophies, and curricula of educational systems for adults, as affected by cultural, political, religious, theological and institutional contexts both national and internationally. Not to be held with the former EDUA 7400 or the former EDUA 5400.

**Equiv To:** EDUA 5400, EDUA 7400

**EDUA 7404 Lifelong Learning in Educational Settings 3 cr**

Explores recent issues, research, and theories about learning across the lifespan, with emphasis on adulthood, as learning is affected by cultural, political, and interpersonal contexts.

**EDUA 7406 Topics in Adult and Post-Secondary Education 3 cr**

This course provides an opportunity for students to investigate methodologically, in depth, significant trends and topics from both the scholarly literature of adult and post-secondary education and internet resources.

**EDUA 7408 Seminar in Adult and Post-Secondary Education 3 cr**

This course entails an examination of topical issues in adult education and post-secondary education with particular focus on scholarly developments in Canada and Manitoba, based on student interests and thesis or comprehensive examination foci, with learning process instructor facilitated.

**EDUA 7412 Governance of Post-Secondary Education 3 cr**

This course examines the history of the governance of post-secondary institutions, the roles of stakeholders in governance, and factors influencing governance in post-secondary institutions today.

**EDUA 7414 Seminar in the Administration of Post-Secondary Education 3 cr**

This course has as its focus the application of theoretical concepts of field situations. It will explore administrative skills and their application to selected issues of post-secondary education.

**EDUA 7420 Program Planning in Adult Education 3 cr**

Introduction to factors affecting the planning of programs for adults. Examination of various planning models in relation to principles of adult education. A consideration of theory with major emphasis on directions for planning a program for adults. Local examples will be used.

**EDUA 7510 Seminar in Current Issues in Counselling 3 cr**

Focus on research, theoretical and professional developments; critical contemporary issues; and specific social problems in counselling. Not to be held with EDUA 7511.

**Equiv To:** EDUA 7511

**EDUA 7520 Practicum Seminar in Counselling 6 cr**

Supervised experience in individual and/or group counselling. Attention is given to analysis of case studies using audio- and video-tapes. A minimum of 180 hours of counselling experience in placement situations is required. This course is evaluated on a pass/fail basis. May not be held with EDUA 7521.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUA 5480 (P) (or EDUA 5481 (P)) and EDUA 5520 (C+) and EDUA 7550 (C+) (or EDUA 7551 (C+)), and permission of the instructor.

**Equiv To:** EDUA 7521

**EDUA 7530 Group Counselling: Theory and Practice 6 cr**

Study of theories, rationale, objectives, and research. Acquisition of an experiential understanding of group work through participation in class activities. Development of leadership skills in group counselling by conducting counselling groups under supervision. Not to be held with EDUA 7531.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUA 5540 or EDUA 5541 (C+) and EDUA 5480 or EDUA 5481 (P).

**Equiv To:** EDUA 7531

**EDUA 7540 Programs in Career Development 3 cr**

A practical course designed for helpers wishing a wider knowledge of career development programs. Participants will investigate and evaluate a wide variety of career counselling techniques and programs and will develop specific, innovative programs to meet the needs of their future counsellors. Not to be held with EDUA 7541.

**Equiv To:** EDUA 7541

**EDUA 7550 Theories of Counselling 3 cr**

The objectives of counselling, assessment of counselling outcomes, theories of personality and counselling. Not to be held with EDUA 7551.

**Equiv To:** EDUA 7551

**EDUA 7560 Cross-Cultural and Diversity Counselling 3 cr**

A study of the influences of multiculturalism and diversity on counselling as a professional activity, addressing counsellor self-awareness, identity, beliefs and skills. Not to be held with EDUA 7740 titled Cross-Cultural Counselling or EDUA 7561.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: EDUA 5500 and EDUA 5480.

**Equiv To:** EDUA 7561, EDUA 7740

**EDUA 7602 Seminar in Inclusive Education 6 cr**

A forum for the discussion of topics related to inclusive educational issues. The overall goal of the course is to challenge students thinking about inclusive education, reflect on their own practices in light of the topics covered in class, and to encourage growth in their inclusive pedagogic practices. Opportunities will be provided for students to examine issues related to their particular professional and scholarly needs. May not be held with the former EDUA 7600 or EDUA 7601.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or corequisite: 18 credit hours in Inclusive Education at the 5000 level or equivalent (C+).

**Mutually Exclusive:** EDUA 7600, EDUA 7601

**EDUA 7610 Behavioural Issues in Educational Settings 3 cr**

This course is designed to give teachers and school counsellors the necessary theoretical background as well as the practical tools to implement programs for children in conflict. May not be held with EDUA 7611.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: EDUA 5602 (or the former EDUA 5600) or EDUA 5601 or EDUA 5680 or EDUA 5681 (C+).

**Equiv To:** EDUA 7611

**EDUA 7630 Advanced Assessment and Instruction in Inclusive Education 3 cr**

This advanced-level course addresses diagnostic/prescriptive techniques used to ameliorate learning and behavioural problems in inclusive education. Emphasis is on the development and analysis of related instructional delivery systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: EDUA 5632 (or the former EDUA 5630) or EDUA 5631 (C+).

**EDUA 7652 Field Experience in Inclusive Education 6 cr**

A minimum of 200 hours of supervised placement in an inclusive education setting. Scheduled seminars facilitate directed study and discussion. This course is evaluated on a pass/fail basis. May not be held with the former EDUA 7650 or EDUA 7651.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: 18 credit hours at the 5000 level in Inclusive Education or its equivalent (C+).

**Mutually Exclusive:** EDUA 7600, EDUA 7601

**EDUA 7710 Development in Learning Environments 3 cr**

Explores recent advances in developmental psychology as they apply to learning in classrooms and other education-related settings. Emphasis will be given to cognitive change, but motivation and social skill development will also be considered as they relate to cognitive development. Not to be held with EDUA 7710.

**EDUA 7712 Working with Family, School and Community Systems 3 cr**

Examining the effective development and implementation of support teams in school settings to establish collaborative and respectful partnerships between families, schools, and specialists. Not to be held with EDUA 7740 titled Working with Family, School, & Community Systems.

**Equiv To:** EDUA 7740

**EDUA 7720 Psychology of Classroom Learning 3 cr**

Explores recent advances in cognitive research as they apply to classroom learning and to other education-related settings. Emphasis will be given to information processing theory, situated cognition, and the development of expertise, as they relate to educational processes, especially in classrooms. Not to be held with EDUA 7721.

**Equiv To:** EDUA 7721

**EDUA 7740 Topics in Educational Psychology 1 3 cr**

A reading and research course in topics of significance to educational psychology.

**EDUA 7743 La pédagogie universelle 3 cr**

Nature et fondements de la pédagogie universelle. Thématiques de la gestion de la diversité en éducation et inclusion scolaire. Approfondissement du concept de la pédagogie universelle: fondements, principes de flexibilité, lignes directrices, modèles de planification de l'enseignement et modalités d'évaluation.

**EDUA 7750 Topics in Educational Psychology 2 3 cr**

A reading and research course in topics of significance to educational psychology.

**EDUA 7751 Sujets particuliers en psychologie de l'éducation 2 3 cr**

Lecture et recherche sur des sujets d'importance en psychologie de l'éducation.

**EDUA 7760 Interview Techniques with Children and Adolescents 3 cr**

Focuses on the principles/processes of interviewing and counselling children, adolescents, parents, and school personnel by integrating theory and practice. Pre or co-requisites can be one of the following: EDUA 7550, PSYC 7030, PSYC 7070, PSYC 7022, PSYC 7080, SWRK 6050, SWRK 7290, SWRK 7310.

**Equiv To:** EDUA 7761

**EDUA 7800 Methods of Educational Research 3 cr**

A study of design and data collection techniques for educational research in field settings. Topics covered include quasi-experimentation, survey and observational techniques, simulation, content analysis, and sociometry. Not to be held with EDUA 7801.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUA 5800 or EDUA 5801 (C+) or consent of instructor.

**Equiv To:** EDUA 7801

**EDUA 7810 Evaluating Educational Programs 3 cr**

An introduction to current approaches to evaluating educational programs. A review of various evaluation methods/approaches, along with consideration of specific design, ethical, consulting and political issues will be the main focus of this course. Specific skills to be developed are the implementation of educational evaluations, data collection and analysis, and final report writing.

**EDUA 7840 Qualitative Research Methods in Education 3 cr**

An introduction to qualitative research methods. While the theoretical underpinnings of qualitative research will be discussed, emphasis is placed on learning to conduct a study including design, collecting and analyzing data, and research ethics. May not be held with EDUA 7841.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUA 5800 or EDUA 5801 or equivalent (C+).

**Equiv To:** EDUA 7841

**EDUA 7850 Design and Analysis of Educational Research (Quantitative) 3 cr**

A study of the use of quantitative methods of analyzing educational research data. Descriptive and inferential procedures commonly used in educational research will be discussed and students will learn to use statistical packages. The course will also address when it is appropriate to employ quantitative designs and present common designs and their associated analyses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUA 5800 or 5801 (C+).

**EDUA 7860 Advanced Topics in Educational Research 3 cr**

An advanced study of special topics in educational research with an in-depth study of specific topics which will change from year to year.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUA 5800 or EDUA 5801 (C+).

**EDUA 7870 Measurement and Evaluation in Schools 3 cr**

An advanced study of the principles of measurement and evaluation and their application to teaching and learning in schools. Current issues in measurement and evaluation, including alternative forms of classroom assessment and standard setting, will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUA 5810 or EDUA 5811 (C+) or equivalent, or consent of instructor.

## Education Curric, Tchg, & Lrng (EDUB)

**EDUB 7010 Seminar in Art Education 1 3 cr**

An examination of the major historical, philosophical, psychological and socio-cultural foundations of art education. The study of major developments in each of these areas will form a basis for understanding current theory and practice.

**EDUB 7020 Seminar in Art Education 2 3 cr**

The study of the methodology, content and problems of art education research, curriculum development and practice. Students will explore research methodology and curriculum design through individualized projects related to classroom practice.

**EDUB 7030 The Arts in Education 3 cr**

An examination of the role of the arts in general education. Emphasis will be placed on knowledge of the role of perception, aesthetic valuing and cognition in arts education, and application of this understanding and knowledge to educational practice.

**EDUB 7040 Seminar in Educational Drama 3 cr**

A critical examination of the literature and current research in educational drama. Consideration will be given to the philosophy, theory, and practice of drama in the classroom, and the evaluation of programs.

**EDUB 7050 Seminar in Educational Theatre 3 cr**

A critical examination of the literature and current research in educational theatre. Consideration will be given to the philosophy, theory, and practice of theatre in the school setting, and to the evaluation of programs.

**EDUB 7060 Seminar and Practicum in Clinical Diagnosis and Remediation 6 cr**

A thorough study of the etiology, diagnosis, and treatment of complex reading disabilities; practical experience under supervision in diagnosing reading problems and in prescribing, treating, interpreting, and reporting findings.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 5400 (C+).

**EDUB 7070 Classical Research in Reading 3 cr**

A critical review, analysis, and synthesis of classical research studies in the psychology, psycholinguistics, sociology, and pedagogy of reading. Students may not hold credit for EDUB 7071.

**Equiv To:** EDUB 7071

**EDUB 7090 Seminar in Reading Processes 3 cr**

A critical examination of theories and models of reading; a thorough study of the reading processes in relation to language, vision, hearing, neurological development, cognition and motivation.

**EDUB 7100 Language and Literacy Curriculum Inquiry in the Early Years 3 cr**

A study of language and literacy curriculum in the early years of schooling. Participants will identify and examine issues and problems arising out of theory, research, and curriculum practices in early years classrooms. Participants will have the opportunity to develop and pursue a curriculum project in accordance with their professional research interests.

**EDUB 7110 Research in Language and Literacy Development 3 cr**

An exploration of language and literacy development issues of professional interest to teachers. Participants will critically analyze language/literacy development theories, published research, and classroom observations. Opportunities will be created for participants to conduct their own language/literacy development inquiry in an educational setting. May not be held with EDUB 7111.

**Equiv To:** EDUB 7111

**EDUB 7120 Curricular Issues in English Language Arts Education 3 cr**

This course will address a number of problematic issues in the development and implementation of school-based instruction in English language arts through critically considering the relationship of current theory, research and pedagogy.

**EDUB 7130 Becoming Writers: Power, Place and Pedagogy in Teaching Writing 6 cr**

This course invites participants to engage in becoming stronger writers and more effective teachers, advocates, and researchers of writing. The course is designed with the premise that to become better teachers of writing (at any level), teachers must become writers themselves. This is an intensive and experiential course that affords opportunities to write; participate in writing groups; delve into professional literature in writing craft, research, theory and pedagogy; interact with guest speakers; explore thematic and social justice inquiries in writing, and design and lead a teaching demonstration. The course is open to all, regardless of prior writing experience. May not be held with EDUB 7142 or EDUB 7340 when titled "Writing Workshop: Writing for/as Human Rights" or EDUB 7350 when titled "Curriculum Development: Writing for/as Human Rights".

**Mutually Exclusive:** EDUB 7142, EDUB 7340, EDUB 7350

**EDUB 7142 Topics in Curriculum, Teaching, and Learning 3 cr**

An advanced study of practices, ideas, and theories in curriculum, teaching and/or learning. The specific topics will vary to reflect changing priorities, trends, and interests in the field of curriculum studies. Students can earn multiple credits for this course only when the topic subtitle is different.

**EDUB 7150 Seminar in Reading and Response to Literature 3 cr**

This course is designed to familiarize students with the historical and philosophical trends in reading and response to literature; it will survey major developmental reading and literary response trends, examine the epistemological assumptions associated with those developments and explore the developing thought in how students process written texts, in particular, literary texts. The course will also examine curricular implications in reading and literary response.

**EDUB 7160 Language Teacher as Researcher 3 cr**

The purpose of this course is to investigate the characteristic parameters of teachers as researchers in the context of their own classroom. Three fundamental principles provide a curricular perspective to guide the participants: voice, conversation, and community. With this perspective, the language teacher engages in classroom inquiry with the goal of understanding language and teaching through the learners as curricular informants. May not be held with EDUB 7161.

**Equiv To:** EDUB 7161

**EDUB 7180 Research in Written Composition 3 cr**

A critical analysis of research and research methods in written composition process and pedagogy. Consideration will be given to classic studies, historical development, current trends and research, and evaluation procedures as they apply to the study and teaching of writing. May not be held with EDUB 7181.

**Equiv To:** EDUB 7181

**EDUB 7190 Research in Language for Learning 3 cr**

A critical study of the research literature in how language can support learning in all areas of schooling. The course will focus on the role of language in supporting learning in all subject areas and will specifically investigate the research about the role of talking, reading, and writing as tools for learning. May not be held with EDUB 7191.

**Equiv To:** EDUB 7191

**EDUB 7210 Seminar in E.S.L. Theory and Practice 3 cr**

Opportunity will be given to examine critically the major theories and methodologies used in E.S.L. instruction and research.

**EDUB 7212 Critical Applied Linguistics in a Global Context 3 cr**

We will examine the role of English comparatively and internationally in a variety of educational systems and regimes, relating the micro-relations of applied linguistics to the macro relations of society, exploring the roles of critical theory in language teaching and learning, and developing self-reflexivity as scholars in second language education.

**EDUB 7220 Research Issues and Application in TESL (Teaching English as a Second Language) 3 cr**

This course focuses on a survey of ESL and language development research issues, procedures, and findings. This research review will serve as the basis for students to plan individual research and conduct a pilot study.

**EDUB 7250 Theoretical Foundations of the Social Studies 3 cr**

An examination of the development of social studies education, including the theories, research, ideas and ideologies that have and continue to shape social studies curriculum and pedagogy.

**EDUB 7260 Seminar in Social Science Education 3 cr**

An examination of current trends and developments in social science education as they affect the school curriculum at all grade levels, K-12. Particular attention will be paid to questions of curriculum contents, teaching strategies and student evaluation.

**EDUB 7270 Culture, Citizenship and Curriculum 3 cr**

An examination of the role of school curricula in preserving, transmitting and transforming conceptions and practices of culture and citizenship, with particular reference to social and political education in schools.

**EDUB 7280 Early Years Curriculum: Philosophical Traditions and Future Directions 3 cr**

An exploration and evaluation of models, issues, and priorities in Early Years curriculum (K-4). Participants will design curriculum which realizes and particularizes the theories, models, concepts and engagements being examined in the course. May not be held with EDUB 7281.

**Equiv To:** EDUB 7281

**EDUB 7290 Curriculum Research in Early Years: Young Children and Social Semiotics 3 cr**

An investigation of the social nature of learning and children's use of semiotic systems (language, art, music, dance, drama, and mathematics) as ways of knowing in the Early Years (K-4) classroom. Participants will conceive, organize, and conduct a research project that allows them to develop an understanding of children's use of one or more semiotic systems within a curriculum context.

**EDUB 7330 Inquiry in Curriculum and Instruction 3 cr**

An examination of the issues involved in critiquing and synthesizing inquiry in curriculum and instruction studies in the humanities and social sciences. The course will also introduce students to the variety of ways in which inquiry may be conducted in instructional settings and will focus on how the research on curriculum and instruction can be validly synthesized across studies.

**EDUB 7350 Independent Studies in Curriculum: Humanities and Social Sciences 3 cr**

Independent study of selected issues related to curriculum and instruction in the humanities and social sciences. This course may be used for field studies.

**Mutually Exclusive:** EDUB 7130

**EDUB 7390 Curriculum in Vocational Education 3 cr**

A review of the major curriculum changes in vocational education with reference to the public school, the community college and post-compulsory institutions. Emphasis will be on models, supportive research and curricular design strategies.

**EDUB 7416 Teaching and Learning in Post-Secondary Education 3 cr**

An in-depth study of teaching and learning in post-secondary education contexts grounded in current theoretical, research and pedagogical literatures.

**EDUB 7420 Study of Teaching 3 cr**

Views of teaching, paradigms, and methodologies for studying teaching and carrying out inquiries into teaching. May not be held with EDUB 7421.

**Equiv To:** EDUB 7421

**EDUB 7430 Trends in Vocational Education 3 cr**

An examination of the historical trends in vocational education as influenced by a changing society. Special emphasis will be placed on the contributions of individuals on the impact of federal and provincial legislation as it affects vocational education.

**EDUB 7440 Seminar in Home Economics Education 3 cr**

An application of current research to the design, implementation and evaluation of programs in home economics education.

**EDUB 7450 Seminar in Educational Technology 3 cr**

A review of current research in educational technology and a critical appraisal of recent technology in instructional development.

**EDUB 7460 Information Technology and Education 3 cr**

A theoretic study of information media and environments, their educational and societal impact, and their educational application.

**EDUB 7470 Seminar in Mathematics Education 3 cr**

An analysis of methods and materials in mathematics education, a review of research, and a critical appraisal of current curriculum development.

**EDUB 7480 Advanced Seminar in Mathematical Diagnosis and Remedy 3 cr**

A close examination of the theory and practice of mathematical diagnosis and remedy across the school curriculum.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**EDUB 7490 Theories of Teaching Mathematics (Secondary) 3 cr**

An examination of the objectives of secondary school mathematics, mathematics curriculum organization and development, theories of learning and teaching secondary school mathematics, and mathematics assessment programs.

**EDUB 7500 Seminar in Science Education 3 cr**

A review of current research in science education, and a critical appraisal of current curriculum, pedagogy, and learning developments in science education.

**EDUB 7510 Educational Problems and Advanced Methods in Health and/or Physical Education 3 cr**

An examination of the relationship of research to educational practice in the teaching of health and/or physical education.

**EDUB 7520 Contemporary Curricula in Health and/or Physical Education 3 cr**

An examination of principles and content of health and/or physical education curricula and programs. Logistical and social-political factors associated with implementation will be examined.

**EDUB 7530 Curriculum Development and Implementation in Language and Literacy 3 cr**

A study of historical antecedents - issues, theory and research - in relation to both the reading and writing curriculum contrasted with current structuralist, poststructuralist and deconstructivist views of knowledge construction with emphasis on discourse synthesis, individual cognitive processes and social influences on literacy learning. Not to be held with EDUB 7531.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A minimum of 3 credit hours of reading courses (C+).

**Equiv To:** EDUB 7531

**EDUB 7540 Final Seminar in Curriculum, Teaching and Learning 3 cr**

Seminar and workshop on processes and products in writing and defending an M.Ed. final inquiry paper. Both qualitative and quantitative research models will be acknowledged. Not to be held with EDUB 7541.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Minimum 24 credit hours completed in a comprehensive M.Ed. Program (C+).

**Equiv To:** EDUB 7541

**EDUB 7550 Historical and Contemporary Approaches to Curriculum 3 cr**

Historical Developments of curriculum as a field of study and inquiry, including the philosophical, social, political, and cultural contexts of curriculum.

**EDUB 7560 Theory and Practice of Curriculum Design and Development 3 cr**

An examination of the theory and practice of the design, development, implementation and evaluation of curricula for K-12 and adult/post-secondary levels.

**EDUB 7570 Contemporary Perspectives and Practices in Music Education 3 cr**

A study of current and emerging perspectives and practices in music education with emphasis on recent theory and research as it relates to music teaching and learning at all levels.

**EDUB 7580 Social, Cultural, and Political Theories in Second Language Acquisition 3 cr**

Examination of historical and contemporary theories, research, and issues regarding social, cultural, and political approaches to the study of additional language learning and teaching.

**EDUB 7590 Internationalization of Technical and Vocational Education and Training 3 cr**

An exploration and critical evaluation of basic assumptions underlying the theories and values of globalization and the internationalization of technical and vocational education and training (TVET). Emphasis will be placed on the examination of how these theories and values influence institutions, programs, policies and practices in TVET.

**EDUB 7600 Action Research in Education 3 cr**

The study of the theory and practice of action and participatory action research in education including models, principles and practices, criteria for assessing quality, ethics, and modes of representation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUA 5800 or EDUA 5801 (C+).

**EDUB 7990 Seminar in Environmental Education 3 cr**

Designed for students wishing to concentrate on science teaching and learning within the context of environmental education. Existing and projected programs and approaches to environmental education will be subjected to critical analysis.

## Education Ph.D. Courses (EDUC)

**EDUC 7030 Doctoral Tutorial in Education 3 cr**

A course of directed independent study relevant to a student's area of doctoral specialization.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GRAD 8010 Candidacy Examination (P).

**EDUC 7040 Current Issues in Mathematics Education 6 cr**

An investigation of topics of current theoretical and practical significance in mathematics education. Students will be required to complete a series of explorations, typically involving observation or experimentation in the field, which will be the focus of discussion.

**EDUC 7050 Doctoral Study in Education 3 cr**

Directed study of contemporary research and theory in selected areas within the field of education. The content of this course will vary from year to year and will depend upon students' research interests.

**EDUC 7060 Advanced Seminar in Educational Administration 1 3 cr**

A study of alternative conceptions of educational administration, from its origins as a field to the present. Attention will be given both to historical and contemporary theories of administration. Limited to Ph.D. students and compulsory for Ph.D. students with a focus in educational administration.

**EDUC 7070 Advanced Seminar in Educational Administration 2 3 cr**

A consideration of some of the central problems of contemporary social theory and their relationship to the study and practice of educational administration. The course is limited to Ph.D. students and is compulsory for Ph.D. students with a focus in educational administration.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: EDUC 7060 (C+).

**EDUC 7080 Language and Rhetoric Education 3 cr**

Current theories of language with a particular emphasis on concepts of education as discourse and instruction as a rhetorical activity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission into the Ph.D. program in Language and Literacy Education.

**EDUC 7090 Language Arts Curriculum 3 cr**

How current research, scholarship and theorizing in the areas of language, literature and curriculum studies can assist in developing fresh approaches to reconceiving the nature and purpose of the language arts curriculum as a linguistic, political and cultural enterprise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission into the Ph.D. program in Language and Literacy Education.

**EDUC 7100 Reading Education 3 cr**

Current trends, curricular issues and new concerns in reading education including the continuing tension between traditional and progressive ideologies. Identifies, from an historical perspective, what has changed, what has not and why; reflects on what is known and what to study; and sets a research agenda for the study of literacy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission into the Ph.D. program in Language and Literacy Education.

**EDUC 7110 Doctoral Seminar in Science Education 3 cr**

An exploration of current research, scholarship and thinking in science education as exemplified by key themes and current issues related to science and science education.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission into the Ph.D. program in Science Education.

**EDUC 7120 Current Issues in Science Education 3 cr**

An examination of current issues in science education by way of selected topics tailored to individual students' programs and interests.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission into the Ph.D. program in Science Education.

**EDUC 7130 Language and Identity in Second Language Contexts 3 cr**

An exploration of linguistic and cultural issues arising from the internationalization of English as a second language (ESL) teaching and learning, including current research of linguistic imperialism, linguistic human rights, cultural hybridization, sexual politics, and the feminization of speech.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDUB 7210 (C+) or permission of instructor.

## Electr. and Computer Engin. (ECE)

**ECE 7010 High Voltage Techniques and Insulation Design Criteria 3 cr**

Laboratory generation and measurement techniques related to ac and dc high voltages, conventional and steep front high voltage pulses, composite voltages and pulsed currents. Charge measurements. Test techniques for assessing insulation quality and life.

**ECE 7020 Power Transmission Lines: Phenomenon and Insulation Design 3 cr**

High voltage dc, ac and hybrid transmission line corona modes, electrostatic and ionized field calculations, field effects of overhead transmission lines. Surge propagation including corona effect. Transmission line insulation design to withstand normal/abnormal voltages and conditions. Modern and conventional arrestors. Principles and practice of insulation coordination.

**ECE 7030 Advanced Electrical Machines 3 cr**

Magnetically-coupled circuits, energy conversion principles, field generation in ac machines, windings and inductances, reference frame theory, dc machine and dc drives, scalar control of induction machines, vector control of induction machines, drives for special machines.

**ECE 7040 Signal and Data Compression 3 cr**

The course presents the theory of signal and data compression with their applications in engineering, including lossless compression (Shannon-Fano, Huffman, arithmetic and dictionary) and lossy compression, including scalar and vector quantization. References to sub-band and transform coding (wavelets and fractal) and analysis-synthesis coding will be made.

**ECE 7050 Switching and Automata Theory 3 cr**

The course presents basic material in discrete mathematics and the theory of switching circuits. It provides electrical and computer engineering students with a firm basis in the modern theory of logic design, and illustrates some applications through formal characterization of combinational functions and sequential machines, using contemporary techniques for the automatic synthesis and diagnosis of digital systems.

**ECE 7060 Power system Protection 3 cr**

Philosophy of power system protection; Typical protection schemes; Instrument transformers; Protection hardware and application; Protection relay testing techniques; Software models of relays and their use in simulation studies.

**ECE 7070 Power System Analysis 3 cr**

Power system operation; load flow analysis; transient stability modeling and simulation using the classical model; detailed machine models for transient stability analysis, modeling of exciters, governors, and FACTS devices for transient stability analysis; methods of transient stability analysis; voltage stability concepts and assessment.

**ECE 7072 Advanced Power Electronics 30 cr**

AC/DC and DC/DC converters, switching functions, voltage source converters, advanced PWM techniques, analytical modeling and simulation, control system design, applications of power electronics in motor drives and power systems, additional topics of current interest.

**ECE 7076 Advanced Electric Machines and Drives 3 cr**

Magnetically-coupled circuits, energy conversion principles, field generation in ac machines, windings and inductances, reference frame theory, dc machine and dc drives, scalar control of induction machines, vector control of induction machines, drives for special machines.

**ECE 7170 Queuing Systems for Telecommunications 3 cr**

Applied stochastic models for queuing systems; analysis of queuing models using matrix-analytic methods and also traditional transform based approaches. Course will focus on applications; how to develop models that represent real communication network problems and how to analyze them.

**ECE 7180 Embedded Systems Engineering 3 cr**

A Structured approach to the design of modern digital systems is presented with specific emphasis on embedding computer applications. Topics will include the formal methodology of digital design together with selected topics from the current research literature

**ECE 7190 Micromachining and MEMS Technology 3 cr**

The course focuses on micromachining and micro-electro-mechanical systems (MEMS). Topics include microfabrication technologies, microactuators, and microsensors. Applications to optical, electrical, mechanical, chemical, and biological systems are discussed.

**ECE 7200 Advanced Wireless Communication 3 cr**

The course covers several advanced issues in wireless communication networks. Topics of study will include trends and future of mobile computing, advanced wireless technologies, multimedia wireless LANs, wireless ad hoc networks, energy mgmt, channel coding, privacy issues in wireless networking.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Either ECE 4250 or ECE 4700.

**ECE 7202 Cognitive Wireless Networks 3 cr**

The course will address both the theoretical concepts and system-level implementation issues for cognitive wireless networks. The topics covered will include information-theoretic analysis of cognitive radio systems, challenges and issues in designing cognitive radio systems, architectures and protocols for cognitive wireless networks, distributed adaptation and optimization methods, channel allocation cognitive machine learning techniques, interoperability issues, cross-layer optimization of cognitive radio systems, and applications of cognitive radio networks.

**ECE 7204 Queueing Systems for Telecommunications 3 cr**

Applied stochastic models for queueing systems; analysis of queueing models using matrix-analytic methods and also traditional transform-based approaches. Course will focus on applications; how to develop models that represent real communication network problems and how to analyze them.

**ECE 7210 Fractal and Chaos Engineering 3 cr**

This course presents the general theory of fractals and their applications in engineering, including fractal modelling of complex phenomena, such as dielectric discharges, and fractal image compression. It also relates fractals to chaos and dynamics.

**ECE 7220 Topics in VLSI Test and Fault Tolerance 3 cr**

Faults and fault models for VLSI. Test generation algorithms. Design for testability: scan design for sequential circuits; built-in test; testable PLA design. Totally self-checking logic. Fault tolerance in VLSI: yield and performance enhancement through redundancy. System level diagnosis: applications to VLSI processor arrays.

**ECE 7230 Artificial Neural Circuits and Networks 3 cr**

Examination of electronic neural networks and related computational systems, both from a circuit theory and from a system-theory perspective. Digital and analog VLSI implementations of neural systems are presented and compared. Connections with other systems from physics, biology and computer science are made.

**ECE 7240 Signal Theory 3 cr**

Representation and analysis of deterministic signals: Continuous and Discrete; Random processes and spectral analysis; Bandlimited signals and systems.

**ECE 7250 Information Theory and Applications 3 cr**

Development of information theory and the engineering implications for the design of communication systems and other information handling systems.

**ECE 7260 Broadband Communication Networks 3 cr**

This course provides fundamentals for designing and analyzing broadband communication networks. The major content includes: structure and organization of broadband communication networks, typical protocols and technologies applied in broadband communication networks mathematical network modeling, and performance analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Undergraduate level Probability Theory & Random Processes.

**ECE 7270 Scattering and Diffraction of Electromagnetic Waves 6 cr**

Formulation and analysis of scattering problems by classical methods. Radar cross section of smooth bodies by geometrical and physical optics. Diffraction by edges. Impedance and Leontovitch boundary conditions.

**ECE 7280 Static Compensation in Power Systems 3 cr**

Requirements for Static Compensation in Power Systems. The thyristor controlled reactor (TCR) and thyristor switched capacitor (TSC). Advanced GTO thyristor compensators. Operation and control of compensators. Load Compensation, filter design and specifications.

**ECE 7310 Power System Transient Simulation 3 cr**

Methods of Network Equation Formulation; Modeling of network nonlinearities and transmission lines; Modeling of electrical machines and controls.

**ECE 7320 Sampled-Data Control Systems 3 cr**

Analysis and design of discrete-time systems, compensation to improve stability and performance, introduction to digital logic control.

**ECE 7330 Experimental Methods for Electronic Materials 3 cr**

Methods for growing and analyzing electronic materials. Growth will include chemical vapour deposition, diffusion, and plasma processing. Analysis will include capacitance, voltage and current voltage techniques.

**ECE 7370 Memory Devices and Systems 3 cr**

Review of computing system architectures. Memory structures and implementations: static, dynamic, synchronous, asynchronous, single and multiport. Testability of memories. Smart memories. Memories for VLSI: configurable and reconfigurable. Case study of a CMOS self-synchronizing RAM.

**ECE 7400 Neural Nets and Neurocomputing 3 cr**

Foundations of neural networks. Basic architecture and different structures. Associative networks. Mapping networks. Spatio-temporal networks. Learning and adaptability. Supervised and unsupervised learning. Stability. Adaptive resonance networks. Self-organization. Examples of existing systems. Applications.

**ECE 7410 Phased Array Antennas 3 cr**

Linear and Planar Arrays Theory; Pattern Synthesis Techniques, Analysis and Design of Radiating elements, Phase Shifters and Beam-Forming Network; Scanning Techniques; Effect of phase, amplitude and mechanical errors on Array Performance.

**ECE 7430 Experimental Methods of Microwave Engineering 3 cr**

Methods for determining: scattering parameters; insertion, mismatch and return loss; cavity parameters. Detector and mixer performance characteristics. Power measurement. System noise determination. Antenna radiation pattern and gain measurements.

**ECE 7440 Current Research Issues in Electrical Engineering 3 cr**

Presentation of important research developments in the area of Electrical Engineering, selected to complement other established graduate courses. Approval of the head of the department is required to register for this course.

**ECE 7450 High Frequency Integrated Circuit Design and Analysis 3 cr**

Monolithic microwave integrated circuit fabrication and circuit design techniques. Analysis and modeling of microwave passive components and GaAs active devices. High frequency circuit simulation techniques. Basic circuit examples.

**ECE 7460 Real time Process Engineering 3 cr**

Identification, description, and analysis of the behaviour of systems of real-time communicating processes, and the application of real-time process algebras in the design of hardware and software systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: COMP 3430.

**ECE 7540 Selected Topics of Solid State Electronics 3 cr**

Homojunction and heterojunction phenomena; Gunn effect, organic semiconductors, properties of thin films, quantum electronic devices, space charge limited current devices, and newly developed solid state electronic devices.

**ECE 7560 Principles of Signal Compression and Coding 3 cr**

This course covers the fundamental principles underlying lossy coding of information signals for communication and storage: scalar and vector quantization; introduction to rate-distortion theory and high-rate theory; entropy-coded quantization; principles of predictive coding; transform coding and bit-allocation; trellis coding; channel-optimized quantization; applications.

**ECE 7590 Telecommunication Networking 3 cr**

This course will cover issues in the design and analysis of telecommunication networks and systems in terms of physical implementation, protocols, routing algorithms, management, software interfaces, and applications. Focus will be on high speed LAN, WAN and Telecommunication networks using a systems engineering perspective.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: although no prerequisites are required, either course ECE 4250 or COMP 4300 would be recommended.

**ECE 7650 Current Research in Computer Engineering 3 cr**

Presentation of important research developments in the area of Computer Engineering, selected to complement other established graduate courses in this area.

**ECE 7660 Logic Problem Solving 3 cr**

Introduction to declarative techniques in symbolic problem solving with emphasis on relational representations, query construction, and recursive formulations of knowledge structures in engineering.

**ECE 7670 Optimization Methods for Computer-aided Design 3 cr**

Constrained optimization of functions of several variables. Optimization methods suitable for the solution of engineering problems by modern digital computers. Both gradient and direct search methods are included.

**ECE 7680 Dielectric Properties and Phenomena 3 cr**

Elementary structure of matter, polarization, response of dielectrics to static and periodic fields, ionization and decay processes, electrical breakdown of gases, liquids, and solids.

**ECE 7700 Nonlinear Systems Analysis 1 3 cr**

Introduction to nonlinear phenomena; linearization; state-space methods - quantitative and qualitative; introduction to the principal methods of determining stability.

**ECE 7720 Optimal Control 1 3 cr**

Introduction to optimal control systems; topics will include statement of the control problem, controllability, calculus of variations, Pontryagin's Maximum Principle, and design of optimal controls.

**ECE 7740 Physical Electronics 1 3 cr**

Fundamental principles. Wave mechanics, statistical mechanics, structure of matter, free electron theory and electron emission, band theory of solids, electrical conduction, and transport phenomena.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3600 or equivalent.

**ECE 7750 Physical Electronics 2 3 cr**

Properties of materials. Semiconductors, junction phenomena; ferroelectrics, magnetic materials, superconductivity, optical processes, effects of radiation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3600 and ECE 4190 or equivalent.

**ECE 7780 Microwave Circuits 3 cr**

Circuit properties of microwave transmission systems. Matrix representation and analysis of microwave networks, microwave junctions, resonators, and impedance matching networks.

**ECE 7810 Solution of Fields by Numerical Methods 1 3 cr**

Numerical integration, differentiation. Finite-difference solutions of the Poisson, Laplace and Helmholtz equations. Initial-value problems. The eigen problem. Examples chosen from electromagnetic, thermal, fluid-flow, stress, and other fields.

**ECE 7880 Distributed Energy Generation 3 cr**

Rationale for distributed generations (DG); Distributed electricity generation technologies (thermal and renewable); Availability of renewable energy resources; Technical and economic evaluation of DG projects; DG grid integration issues and interconnection standards; Microgrids.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Energy Systems I or equivalent course.

**ECE 7890 Power System Control 3 cr**

The application of modern systems engineering methods to power system problems.

**ECE 7920 Human Physiology for Engineers 3 cr**

The analysis and measurements of human physiological systems. Anatomical descriptions are limited to those required to support the functional analysis. Mathematical modeling is reinforced by analog and digital computer models.

**ECE 7990 HVDC Transmission 1 3 cr**

Rectifier-inverter fundamentals. Compounding and regulation. Grid firing control systems. Reactive power requirements. Ground return and electrode design. Transmission lines. Economics and efficiency.

**ECE 8000 HVDC Transmission 2 3 cr**

Protection. Harmonics: telephone interference. Corona: radio and television interference. Analytical methods. Conversion equipment, the use of solid devices. Selected topics from current literature.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 7990.

**ECE 8010 Advanced Network Synthesis 3 cr**

Mathematical treatment of various approximation techniques, matrix transformation methods applied to equivalent networks of minimum sensitivity or other criteria, theory of multivariable functions, lumped-distributed network synthesis.



**ECE 8050 Topics in Microelectronics 3 cr**

Equilibrium and non-equilibrium processes in semiconductors, properties of junctions and thin films, carrier transport phenomena, effects of traps, and selected topics pertinent to recent literature in microelectronics.

**ECE 8110 Digital Systems Design 3 cr**

Fixed-instruction-set microprocessor design; microprogramming, bit-slice based design; parallel processing and multiprocessing; applications to data acquisition, data logging, and data communications.

**ECE 8130 Statistical Communication Theory 3 cr**

Representations of random processes; signal detection and estimation techniques.

**ECE 8140 Digital Communications and Coding 3 cr**

Fundamentals of information theory; source and channel coding; digital modulation techniques.

**ECE 8150 Digital Signal Processing 3 cr**

Discrete-time linear system theory, digital filter design techniques, discrete Fourier transforms including FFT, discrete Hilbert transform, Walsh-Hadamard transforms high-speed convolution and correlation - techniques.

**ECE 8190 Topics in Antenna Theory and Design 3 cr**

Antennas as a boundary value problem, antenna parameters, analysis and synthesis methods, antenna measurements.

**ECE 8200 Advanced Engineering Electromagnetics 3 cr**

Solution of wave equation; special theorems and concepts, computer aided analysis.

**ECE 8210 Power Electronic Circuits 3 cr**

Thyristor properties, ac controllers, controlled rectifiers, dc to dc converters (choppers), and inverters. Permission of instructor required. Credit not to be held with ECE 4370.

**ECE 8220 Digital Image Processing 3 cr**

Digital representation of images. Two-dimensional operations and transforms. Image enhancement, restoration, and coding. Reconstruction from projections.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 3580 or equivalent desirable.

**ECE 8230 Pattern Recognition and Scene Analysis 3 cr**

Supervised and unsupervised learning techniques. Linear discriminant analysis. Scene analysis methods.

**ECE 8270 Computer Communication Networks 3 cr**

Overview of existing computer networks. Elements of queueing theory. Error, delay, cost and capacity analysis. Fixed assignment schemes. Packet and switched networks. Random access. Satellite networks. Hybrid protocols.

**ECE 8280 Electromagnetic Field Modelling 3 cr**

Coulombian and amperian models for polarized media and magnetized media; uniqueness theorems, formulation and classical methods of analysis of static, stationary and quasistationary field problems; modelling of electromagnetic fields in the presence of moving solid conductors; elements of relativistic electrodynamics.

**ECE 8300 Computer Vision 3 cr**

This course is an extension of ECE 8220 "Digital Image Processing." Techniques of image modelling, segmentation, texture analysis, matching and inference will be studied.

**ECE 8310 Computer-Aided Design in Biomedical Engineering 3 cr**

Representation of surfaces in space. 3D display methods and hardware. 3D boundary tracing and texture. Biosterometry and stereophotogrammetry in biomedicine. Some aspects of computer-aided manufacturing of prostheses and other topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: an introductory course in computing or equivalent experience and one year of any physical, engineering or biological science.

**ECE 8320 Advanced Topics in Power Systems 3 cr**

Study of selected topics of recent advances in electrical power systems.

**ECE 8360 VLSI Design Methodology 3 cr**

Design of custom and semi- custom Very Large Scale Integrated (VLSI) circuits and systems including design for testability. Static and dynamic VLSI circuits; software design tools, layout, logic and timing simulation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: ECE 2220 and ECE 4240 or equivalent.

**ECE 8370 Topics in Biomedical Engineering 3 cr**

A discussion of current topics in biomedical engineering. The latest in instrumentation, procedures and practices relevant both to clinical engineering and ongoing research are covered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 4400 or consent of instructor.

**ECE 8380 Reflector Antennas 3 cr**

Mathematical analysis of common reflector antennas including effects of various types of feed structures.

**ECE 8400 Intelligent Systems 3 cr**

Continuation of ECE 7660 "Resolution Problem Solving," plan formation, default and temporal reasoning as applicable to engineering.

## Engineering (ENG)

**ENG 7010 The Engineering Design Process 3 cr**

Consideration of the Engineering Design process and the logic upon which it is based. Explores both the history and possible future directions of the process from technical, social and environmental points of view.

**ENG 7020 Topics in Engineering Practice 3 cr**

This course will cover topics relating to the practice of professional engineering. The specific topics and a detailed outline will be available prior to the start of the registration period for the session in which the course will be offered. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the Director of the Centre for Engineering Professional Practice and Engineering Education.

**ENG 7030 The Discipline of Engineering Education 3 cr**

An in-depth examination of the discipline of engineering education, including its evolution, its characteristics, application, and theoretical developments.

**ENG 7040 Foundations of Engineering Education Research 3 cr**

Engineering education research conceptual and theoretical frameworks, methodologies and methods in both qualitative and quantitative paradigms, and the scholarship of teaching & learning in engineering education.

**ENG 7510 Operational Excellence 3 cr**

This course will provide students with a solid understanding of the fundamentals of operational excellence through the methodical application of engineering principles and theory to address real industry problems, grounded in the Plan-Do-Study-Act system. May not be held with either MCEG 7600 or MECH 4342 where the topic was Operational Excellence. Good knowledge of Statistics is recommended.

**Mutually Exclusive:** MCEG 7600, MECH 4342

## English (ENGL)

**ENGL 7030 Studies in American Literature 3 cr**

A detailed study of an aspect of American Literature. Topics will vary from year to year. Not to be held with the former ENGL 7020. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7020

**ENGL 7050 Studies in Canadian Literature 3 cr**

A detailed study of an aspect of Canadian Literature. Topics will vary from year to year. Not to be held with the former ENGL 7040. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7040

**ENGL 7070 Studies in British Literature since 1900 3 cr**

A detailed study of an aspect of post-1900 British Literature. Topics will vary from year to year. Not to be held with the former ENGL 7060. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Equiv To:** ENGL 7060

**ENGL 7090 Studies in Contemporary Literature 3 cr**

A detailed study of an aspect of contemporary literature in English. Topics will vary from year to year. Not to be held with the former ENGL 7080. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7080

**ENGL 7140 Studies in International Literature 3 cr**

A detailed study of an aspect of international literature in English. Topics will vary from year to year. Not to be held with the former ENGL 7100. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ENGL 7160 Studies in Modernism 3 cr**

A detailed study of an aspect of Modernism. Topics will vary from year to year. Not to be held with the former ENGL 7150. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7150

**ENGL 7170 Studies in Media 3 cr**

A detailed study of an aspect of media and literature. Topics will vary from year to year. Not to be held with the former ENGL 7250. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7250

**ENGL 7180 Studies in Old English Poetry 6 cr**

Studies in Old English poetry. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ENGL 7190 Special Topics in Literary Figures 3 cr**

Focuses on the works of an individual author. Subjects will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ENGL 7300 Creative Writing 3 cr**

This seminar will foster advanced craft in a variety of literary genres and will include an analytic and a workshop component. Admission will be at the instructor's discretion, based on the submission of a creative portfolio.

**ENGL 7590 Teaching Literature at University 0 cr**

Description not available for this course.

**ENGL 7600 Bibliography 3 cr**

Description not available for this course.

**ENGL 7690 Special Topics in Literary Periods 1 3 cr**

Description not available for this course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ENGL 7710 Special Topics in Literary Genres 1 3 cr**

No description available. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ENGL 7750 Directed Reading 1 3 cr**

Directed Reading 1. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**ENGL 7800 Studies in Drama/Theatre 3 cr**

Focuses on drama possibly using some consideration of theatrical practice and performance. Topics will vary from year to year. Not to be held with the former ENGL 7790. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7790

**ENGL 7840 Studies in Critical Theory 3 cr**

Explores literary theory. Topics will vary from year to year. Not to be held with the former ENGL 7830. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7830

**ENGL 7860 Topics in Cultural Studies 3 cr**

Provides an overview of the theory and practice of cultural studies. Topics will vary from year to year. Not to be held with the former ENGL 7850. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7850

**ENGL 7880 Studies in Literature and Film 3 cr**

Brings together literature and film. Topics will vary from year to year. Not to be held with the former ENGL 7870. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7870

**ENGL 7900 Studies in Medieval Literature 3 cr**

A detailed study of an aspect of Middle English literature. Topics will vary from year to year. Not to be held with the former ENGL 7890. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7890

**ENGL 7920 Studies in Early Modern Literature 3 cr**

A detailed study of an aspect of Early Modern literature. Topics will vary from year to year. Not to be held with the former ENGL 7910. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7910

**ENGL 7940 Studies in Eighteenth-Century Literature 3 cr**

A detailed study of an aspect of eighteenth-century literature. Topics will vary from year to year. Not to be held with the former ENGL 7930. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7930

**ENGL 7960 Studies in Romanticism 3 cr**

A detailed study of an aspect of romanticism. Topics will vary from year to year. Not to be held with the former ENGL 7950. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7950

**ENGL 7980 Studies in Nineteenth-Century British Literature 3 cr**

A detailed study of an aspect of Nineteenth-Century British Literature. Topics will vary from year to year. Not to be held with the former ENGL 7970. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**Mutually Exclusive:** ENGL 7970

## Entomology (ENTM)

**ENTM 7120 Insect Population Management 3 cr**

Term papers, tutorials and workshops to study systems of managing populations of injurious and useful insects based upon models of the processes of insect population dynamics. Not all courses are offered every year. Please contact the department regarding course availability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**ENTM 7150 Advanced Entomology 1 3 cr**

A required course for M.Sc. students in Entomology. Students must submit essays and seminars in areas chosen to fit the requirements of their program. They are required to prepare for and participate actively in discussion sessions and other class meetings. Not available for credit in a Ph.D. program.

**ENTM 7200 Advanced Insect Taxonomy 3 cr**

Tutorials, laboratory periods and discussion of classification and evolution of insects. Offered 2005-2006. Not all courses are offered every year. Please contact the department regarding course availability.

**ENTM 7210 Special Topics in Entomology 3 cr**

The content of this course will deal with specific topics of entomology at the advanced level.

**ENTM 7220 Advanced Entomology 3 cr**

A required course for Ph.D. students in Entomology. Students must submit essays and present seminars in areas chosen to fit the requirements of their program. They are required to prepare for and participate actively in discussion sessions and other class meetings. Not available for credit in a M.Sc. program.

**ENTM 7230 Advanced Pollination Biology 3 cr**

Tutorials, assignments and discussion periods of current topics relating to the physiology and life history of insect pollinators and their ecological interactions with entomophilous plants. Subjects studied may be selected to fit the interests of individual students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of instructor.

**ENTM 7240 Advances in Physiological Ecology of Insects 3 cr**

The effect of environmental factors such as temperature, moisture, light and other organisms on the physiology and ecology of insects. Not all courses are offered every year. Please contact the department regarding course availability. Not to be held for credit with ENTM 4520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ENTM 2050 or consent of instructor.

## Entrepreneurship/Small Bus. (ENTR)

**ENTR 7240 Entrepreneurship and New Venture Formation 1.5 cr**

Entrepreneurship and enterprising behaviour with an emphasis on the identification and evaluation of viable new venture concepts and their development into successful enterprises.

## Finance (FIN)

**FIN 7000 Managerial Economics 1.5 cr**

Supply, demand, elasticity, perfect competition, monopoly, revenue and cost functions, and determinants of competitive advantage are considered in this course. Economic profit, accounting profit and value creation are compared so they are used properly in the context of optimal business strategy. Not to be held with either IDM 7720 or FIN 7120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MSCI 5110 and MIS 5120 (or the former MIS 5110).

**Equiv To:** FIN 7120, IDM 7720

**FIN 7010 Professional Financial Ethics 3 cr**

This course focuses on the required code of ethics handbook of practice for the Chartered Financial Analyst Program within a broader ethics in finance perspective, and compliance with the legal and regulatory frameworks governing financial markets in both Canada and the United States. Not to be held with FIN 7240 when the subtitle is equivalent.

**Mutually Exclusive:** FIN 7240

**FIN 7020 Corporate Finance 3 cr**

The financial management of businesses including agency problems, valuation, capital budgeting, risk/return relationships, the term structure of interest rates, market efficiency, long-term financing, capital structure, and the use of options and futures for risk management. Not to be held with either of FIN 6070 or FIN 6072.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: MSCI 5110, FIN 7000 and MIS 5120 (or the former MIS 5110).

**Equiv To:** FIN 6070, FIN 6072

**FIN 7080 International Finance 3 cr**

The theory and practice of financial management in an international context. Includes foreign currency markets, exchange rates, measurement and management of foreign currency risk, international financing, and foreign direct investment.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 7020 (or FIN 6070 or FIN 6072).

**FIN 7130 Alternative Markets and Instruments 1.5 cr**

This course will provide an overview of alternative investments pricing and roles in portfolio construction. Topics will include real estate, private equity, commodities, managed futures, hedge funds, and distressed debt.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 7020 (or former FIN 6072).

**FIN 7140 Financial Modeling 3 cr**

This course will cover spreadsheet implementation of practitioner-oriented financial models. May not be held with FIN 4240 (cross listed undergrad course).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 7152.

**Equiv To:** FIN 4240

**FIN 7152 Investment Policy 3 cr**

The theory and practice of investment management. Topics include: portfolio theory and management, market efficiency, options and futures. This course cannot be held with FIN 7150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 7020 (or FIN 6070 or FIN 6072).

**Equiv To:** FIN 7150

**FIN 7180 Behavioural Finance 3 cr**

This course will explore how human biases impact the financial decisions of market participants and their practical implications. Topics will include prospect theory, heuristics, market anomalies, and behavioural corporate finance. May not be held with FIN 4250 (cross listed undergrad course).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 7020 (or former FIN 6072).

**Equiv To:** FIN 4250

**FIN 7190 Fixed Income Securities 3 cr**

This course introduces students to a wide variety of fixed income securities and their markets, and prepares students for the fixed income area in CFA examinations. Topics covered include: debt securities, risks or investing in bonds, the pricing of fixed income securities, the measurement of interest rate risk, the term structure and volatility of interest rates, mortgage-backed and asset-backed securities, the valuation of mortgage-backed and asset-backed securities, credit analysis and interest rate derivatives, among other topics. Prerequisite FIN 7020.

**Mutually Exclusive:** FIN 7260

**FIN 7192 Portfolio Management 3 cr**

This course explores the theory and practice of portfolio management: Topics include asset allocation, currency management, fixed income portfolio management, equity portfolio management, risk management and application of derivatives, execution of portfolio decisions, monitoring and rebalancing, and performance evaluation. Students targeting the professional asset management career or planning to take the CFA exam may find this course useful. Prerequisite FIN 7020.

**Mutually Exclusive:** FIN 7260

**FIN 7220 Advanced Seminar in Finance 3 cr**

A case-oriented course that will require extensive preparation and presentation of selected cases in corporate financial management; emphasis on the application of theoretical models of finance to real problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 7020 (or FIN 6070 or FIN 6072) or consent of instructor.

**FIN 7232 Financial Intermediaries and Capital Markets 3 cr**

Topics include: the major participants in the capital markets and their functions, the demand and supply of money and the structure of interest rates, non-money financial instruments, recent developments and international factors in the capital markets and capital market risk issues. This course cannot be held with FIN 7230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: FIN 7020 (or FIN 6070 or FIN 6072).

**Equiv To:** FIN 7230

**FIN 7240 Readings in Accounting and Finance 3 cr**

Supervised readings in one of the areas of accounting and finance.

**Mutually Exclusive:** FIN 7010

**FIN 7260 Selected Topics in Finance 3 cr**

A study of selected topics in finance relating to advanced issues in theory and practice. Topics considered will depend on the interests and needs of the participants.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: FIN 7020 (or FIN 6070 or FIN 6072) plus others if specified by the professor.

**Mutually Exclusive:** FIN 7190, FIN 7192

**FIN 7700 Financial Economics 3 cr**

Course provides students with a broad theoretical understanding of financial economics required for advanced study of theoretical finance. It covers a variety of topics and discusses the application in different areas of finance. Good knowledge of microeconomics, probability and statistics, and calculus is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance), or approval by instructor. Cannot be held with the former FIN 7100.

**Equiv To:** FIN 7100

**FIN 7710 Empirical Asset Pricing 3 cr**

Critical evaluation of latest empirical research in finance with focus on equity and bond markets. Tests of intertemporal, multifactor, conditional, and unconditional asset pricing models. Special emphasis on developing econometric skills for the analysis of financial data.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance) and FIN 7700, or approval by instructor. Cannot be held with FIN 7110.

**Equiv To:** FIN 7110

**FIN 7712 Seminar in Corporate Finance 3 cr**

This is an advanced course in corporate finance. It provides a theoretical and empirical overview of major topics in corporate finance. The course will survey classic theoretical papers, empirical papers, as well as papers that represent some of the most recent developments in the field.

The objective is to prepare students to critically evaluate and conduct research in corporate finance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance) and FIN 7700, or approval by instructor. Cannot be held with the former FIN 7520.

**Equiv To:** FIN 7520

**FIN 7714 Advanced Financial Theory 3 cr**

Seminar emphasizing the mathematical tools necessary for financial decision making including no-arbitrage-based asset pricing, optimal consumption and portfolio choice, general equilibrium/asset pricing theory, and dynamic corporate finance theory. Applications in derivative markets, investment theory, and corporate finance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance) and FIN 7700, or approval by instructor. Cannot be held with FIN 7530.

**Equiv To:** FIN 7530

**FIN 7716 Selected Topics in Finance Research 3 cr**

An examination of timely issues in finance research.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance) and FIN 7700, or approval by instructor. Students can earn multiple credits for this course only when the topic subtitle is different.

## Fine Art, Studio Courses (STDO)

**STDO 7010 Studio Concentration 1 3 cr**

Advanced individual instruction and critique in the student's chosen studio area by faculty and visiting artists.

**STDO 7020 Studio Concentration 2 3 cr**

A continuation of Studio Concentration 1. Advanced individual instruction and critique in the student's chosen studio area by faculty and visiting artists.

**STDO 7030 Studio Concentration 3 3 cr**

A continuation of Studio Concentration 2. Advanced individual instruction and critique in the student's chosen studio area by faculty and visiting artists.

**STDO 7040 Studio Concentration 4 3 cr**

A continuation of Studio Concentration 3. Advanced individual instruction in the student's chosen studio area, culminating in the thesis exhibition.

**STDO 7110 Graduate Seminar 1 3 cr**

An investigation of contemporary art concepts in the context of the studio program of work.

**STDO 7120 Graduate Seminar 2 3 cr**

A continuation of Graduate Seminar 1. An investigation of contemporary art concepts in the context of the studio program of work.

**STDO 7130 Graduate Seminar 3 3 cr**

A continuation of Graduate Seminar 2. A further investigation of contemporary art concepts in the context of the studio program of work.

**STDO 7210 Themes in Contemporary Art Studio 3 cr**

Individual pursuit of studio investigations under a specific theme.

**STDO 7230 Contemporary Art Theory 3 cr**

An examination of art theory from structuralism, post-structuralism, semiotic, sociological and psychoanalytic methods.

**STDO 7300 Special Topics in Fine Art 3 cr**

Varying from offering to offering, this course will cover significant topics in Fine Art.

## Food Science (FOOD)

**FOOD 7090 Unit Process Operations 3 cr**

A study of unit operations which are commonly utilized in the food industry with emphasis on separation processes, particle size reduction and heat transfers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: BIOE 3530 or equivalent.

**FOOD 7130 Food Science Seminar 3 cr**

Verbal and written presentation of selected topics in Food Science. This is a required course for all M.Sc. candidates in the Food Science Department.

**FOOD 7150 Food Proteins 3 cr**

An examination of the structural and functional properties of proteins in foods. Laboratory sessions will emphasize experimental approaches to study proteins in foods, including topics such as surface characterization, thermal properties, rheological behaviour, and chemical modification.

**FOOD 7160 Food Carbohydrates 3 cr**

A study of the physico-chemical properties and functionality of food carbohydrates. Laboratory sessions will focus on quantitation, structural characterization, thermal properties and rheological behaviour of carbohydrates.

**FOOD 7180 Food Science of Cereal Grains 3 cr**

The course deals with cereal grains used for human food, the structure of constituents, and the relationship of constituent structure to functionality in the processing of the grains into food products. Emphasis will be on constituents and properties that contribute to optimum processing of wheat.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHEM 2360 or CHEM 2770 or MBIO 2360 or MBIO 2770, or permission of instructor.

**FOOD 7200 Advanced Food Microbiology 3 cr**

Detection and quantitation of foodborne microorganisms and related toxins using developing methodology, including rapid microbiological assays with a comprehensive account of basic principles and advanced techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MBIO 2100, FOOD 4150 or consent of instructor.

**FOOD 7240 Topics in Food Science 3 cr**

An in-depth study of selected topics of current relevance in Food Science. Available to students in the M.Sc. programs and in the Interdepartmental Ph.D. in Food and Nutritional Sciences.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of Department Head.

**FOOD 7260 Advanced Meat Science 3 cr**

Builds on fundamental aspects of muscle biochemistry and function to explain how pre- and post-harvest technology affect meat quality and safety. Issues of current concern, their resolution as well as recent advances will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of instructor.

**FOOD 7270 Food Rheology 3 cr**

Evaluation of the textural properties of foods provides critical information in the development of quality food products. This course deals with the principles and methodologies in food rheology and includes an examination of the rheological properties of selected food systems.

## Foods and Nutr Grad Studies (FDNT)

**FDNT 7120 Advanced Seminar in Food and Nutritional Sciences 3 cr**  
A critical review of selected topics in food and nutritional sciences presented in both verbal and written forms. This is a required course for all Ph.D. students in the interdepartmental food and nutritional sciences program.

## French (FREN)

**FREN 6000 French Reading Knowledge 0 cr**  
For graduate students in other departments which require a reading knowledge of French. This course is graded pass/fail.

**FREN 6010 Spanish Reading Test 0 cr**  
No description available.

**FREN 6030 Italian Reading Test 0 cr**  
No description available.

**FREN 7520 Topics in Literary Periods 1 3 cr**  
Topics in Literary Periods 1. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**FREN 7540 Topics in Literary Genres 1 3 cr**  
Topics in Literary Genres 1. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**FREN 7560 Topics in Critical Theory and Practice 1 3 cr**  
The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**FREN 7580 Special Topics 1 3 cr**  
Special Topics 1. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**FREN 7660 Études sur Diderot 3 cr**  
Ce cours comprendra une étude d'aspects choisis de l'oeuvre et de la pensée de Diderot.

**FREN 7740 Études sur Beauvoir 3 cr**  
Une sélection d'oeuvres de Simone de Beauvoir étudiées selon la perspective de la critique féministe contemporaine.

**FREN 7760 La Critique littéraire féministe 3 cr**  
Une sélection de textes littéraires et théoriques analysés selon la perspective de la critique féministe contemporaine.

**FREN 7770 Tendances nouvelles du roman 3 cr**  
Une étude de romans publiés depuis vingt ans selon la perspective de la critique contemporaine.

## General Management (GMGT)

**GMGT 7060 Readings in Business Administration 3 cr**  
Supervised readings in one of the areas of business administration including human resource management, industrial relations, organizational behaviour, policy and environment.

**GMGT 7070 Administrative Studies Research Project 6 cr**  
Research in any one of the areas of administrative studies.

**GMGT 7080 Research Methods 3 cr**  
Principles of research design and data collection with examples drawn across the areas of marketing management, industrial relations, policy analysis, etc. Both cases and computer-based exercises are used.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: MSCI 5100.

**GMGT 7090 Organizational Decision-Making 3 cr**  
A study of the goal-setting and decision-making processes in organizations and the implications for the growth and survival of such organizations.

**GMGT 7100 Interpersonal Processes 3 cr**  
An examination of theories of interpersonal behaviour and processes as they apply to managerial situations. Emphasis upon individual behaviour and change, group dynamics, leadership behaviour, and communications.

**GMGT 7110 Business and Its Environment 3 cr**  
Analysis of the environmental factors within which a business operates.

**GMGT 7120 Organizational Power and Politics 3 cr**  
An examination of personal, interpersonal and organizational power in the context of organizational politics. Topics covered include rational versus political models of organizations, the accumulation and management of personal power, the politics of decision-making, the politics of managerial succession, the politics of budgets, authority, intergroup conflict, and bargaining and negotiation processes.

**GMGT 7200 Critical and Creative Thinking 1.5 cr**  
This course introduces students to different ways of thinking about cognitive dimensions of organizational leadership. Approaches include the creative (divergent perspective), the critical (convergent perspective) and the holistic (systems-perspective) with special emphasis on understanding the nature and appropriateness of different forms of cognition in organizational leadership.

**GMGT 7210 Strategy 3 cr**  
Students will integrate and apply concepts from various functional areas in analyzing organizational resources and capabilities, and environmental opportunities and threats. Students will study evolving strategic management problems and practices, and examine issues of formulation and implementation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: ACC 7010 (or ACC 6050), FIN 7020 (or FIN 6072), GMGT 7200, GMGT 7220 (or one of HRIR 7450 and GMGT 6030), MKT 7010 (or MKT 6080), and OPM 7120 (or OPM 6090). Pre- or Co-requisites: FIN 7000 (FIN 7120 or IDM 7720), ACC 7020 (or ACC 6060), MIS 7120 (or MIS 6150), IDM 7120 (or IDM 7060), IDM 7130, and IDM 7510.

**GMGT 7220 Managing People in Organizations 3 cr**  
This course examines strategies and methods for the management of people in organizations, their implications for organizational effectiveness, and both the challenges and opportunities they present to managers within the Canadian context and beyond.

**GMGT 7350 Administration: Selected Topics 3 cr**  
Topics in one of the areas of business administration including human resource management, industrial relations, organizational theory and behaviour, and business policy and strategic management.

**GMGT 7360 Organizational Behaviour and Self Development 3 cr**

This course will operate in a seminar format with two goals. The first goal is to provide an environment in which the student can develop and manage to successful conclusion a project in which they have significant intrinsic interest. The second goal is to improve the student's understanding of the inner life of an organization by increasing his/her ability to discriminate between the organizational "ropes to skip and the ropes to know."

**GMGT 7370 Managing Innovation 3 cr**

An examination of organizational design characteristics in the context of a competitive international perspective. Emphasis is on an organizational and technological innovation to facilitate the development of new products or processes or to implement change in existing products or processes. Topics covered include Canadian experience and policy, facilitators and inhibitors in the creative process, diffusion of innovations, and the aims of the patent process.

**GMGT 7400 Readings in Organizational Behaviour (Ph.D.) 3 cr**

An examination of theory and research from the social and administrative sciences that focuses on the interaction between organizations and their environments. The evaluation and synthesis of theoretical and empirical work in this area will be emphasized.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the Ph.D. program in Management (Organizational Behaviour) or approval by instructor.

**GMGT 7410 Doctoral Seminar in Organizational Behaviour (Ph.D.) 3 cr**

An examination of theory and research from the social and administrative sciences that is relevant to the behaviour of individuals and groups within organizations. Emphasis will be placed on evaluation and synthesis of theoretical and empirical work in this area.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the Ph.D. program in Management (Organizational Behaviour) or approval by instructor.

**GMGT 7440 Doctoral Seminar in Organizational Theory (Ph.D.) 3 cr**

The major goal of this course is to familiarize students with central schools of thought within organization theory. As with other theories in the social sciences, these schools of thought tend to be based on differing assumptions about the nature of the organizational world, the operation of causality, epistemology, and the role of human actors.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the Ph.D. program in Management (Organizational Behaviour) or approval by instructor.

**GMGT 7510 Strategic Leadership and Managing Change 1.5 cr**

An examination of the role of the manager as a change agent and processes associated with strategic vision and change. Analysis of factors affecting strategic decisions and how organizations adapt to their environment. Emphasis is upon the role of leaders: transformational leadership, charisma, organizational design and managing organizational culture change.

**GMGT 7520 Issues in Managerial Communication 3 cr**

An examination of strategies and development of skills for effective oral, written, non-verbal, interpersonal, group, cross-cultural, and ethical communication in management.

**GMGT 7530 Selected Topics 3 cr**

An examination of current issues in areas which could, for example, include: organizational behaviour, organizational theory, strategy, human resource management, and industrial relations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**GMGT 7540 Doctoral Seminar in Research Methods (Ph.D.) 3 cr**

Principles of research design and data collection appropriate for the areas of marketing, management, industrial relations, policy analysis, finance, management science, etc. Research problems and issues will be discussed from a number of perspectives. Conceptual material, statistical analyses, theoretical material and the utilization of statistical application software are used as the bases for seminar discussion.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the Ph.D. program in Management or approval by instructor.

**GMGT 7710 Managerial Communication 1.5 cr**

Focus is on the interpersonal, intergroup, and intra-organizational communication skills required for effective leadership, and the objectives are to assist the participants in the following: increasing the clarity, correctness, and effectiveness of written and oral communication; recognizing and analysing communication dynamics at work in personal, group, and organizational interactions; increasing combination flexibility and proficiency in times of corporate challenge, change, and crisis.

**GMGT 7720 Business Conditions Analysis 1.5 cr**

To provide an awareness of key components of the economic/business environment. Identifies critical indicators that affect decision-making and suggests strategies for forecasting future conditions. Topics covered include critical demographic trends, the change technological frontier, international trade, finance, and investment trends, and trends in interest rates and exchange rates. A theoretical overview will precede the discussion of business conditions indicators.

**GMGT 7740 Business/Government Relations 1.5 cr**

Focuses on the logic of political-economic-business relations. The point of view is that of the manager. Specific tools of analysis are discussed that assist managers in understanding and working with aspects of public policy which interface with their private sector decisions.

## Geography (GEOG)

**GEOG 7010 Selected Topics in Geography 3 cr**

Advanced study of a selected topic from any one of the department's fields of specialization.

**GEOG 7030 Regional Analysis 3 cr**

A seminar course reviewing theories of regional development which have planning applications. Further, it assesses government policy aimed at regional intervention and notes procedures of evaluation.

**GEOG 7080 Quantitative Methods 3 cr**

A discussion of analysis and model construction in the study of urban and rural systems; analysis of socioeconomic and demographic data, construction of measures, and testing of models.

**GEOG 7180 Methodology of Agricultural Geography 3 cr**

The course first provides an understanding of social and economic concepts in agricultural geography, and then examines methods of data collection, sampling techniques, and analysis with relevance to specific research topics.

**GEOG 7200 Environment, Resources, and Population 3 cr**

This course discusses the contemporary imbalance between population and resources. The consequences of resource exploitation upon the natural environment are also examined.

**GEOG 7260 Selected Regional Issues in Geography 3 cr**

Advanced study of specific issues and problems in selected world regions.

**GEOG 7290 Energy Analysis 3 cr**

A survey of origins, methods and applications of energy analysis, a new technique of system energetics designed to provide information for a more efficient use of scarce natural resources.

**GEOG 7310 Geographic Theory and Methodology 3 cr**

A discussion of the meaning of explanation in human geography, the status of geography as a science and the construction of theory.

**GEOG 7332 Concepts in Atmospheric Modelling 3 cr**

This course will primarily focus on numerical modelling applications and techniques of the Earth's atmosphere with an emphasis on weather prediction. This includes understanding basic modelling terminology, numerical schemes, structure of models, types of models, what is required to run a model, and an introduction to data assimilation and ensemble techniques to weather prediction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of instructor.

**GEOG 7360 Interdisciplinary Perspectives on Issues in the Environment 3 cr**

An intensive examination of research relating to various issues in the environment, this course will challenge students to consider crosscutting themes found in the literature and from their own learning experiences, and apply them to environmental problems.

**GEOG 7380 Advanced Ecotoxicology: Understanding Stress Ecology 3 cr**

Ecotoxicology characterizes how organisms interact with anthropogenic and natural stressors in an ecological context. This course is an examination of the fundamental science, approaches and issues being addressed in the field. Students should have a four-year science-based undergraduate degree and be registered in a graduate program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of instructor.

**GEOG 7400 Field Topics in Arctic Systems 3 cr**

Field and practical experience in selected topics of multidisciplinary research in Arctic System Science from science theory to field sampling, to modeling and remote measurements. Focuses on the ocean-sea ice-atmosphere interface and its relationship with the biological and geochemical processes operating in the cryosphere.

**GEOG 7420 Synoptic Meteorology and Weather Analysis 3 cr**

The course covers applied aspects of meteorology in terms of weather analysis and forecasting techniques for synoptic-scales and meso-scales using various meteorological tools. An introduction to severe weather forecasting techniques will also be described. Familiarity with computers is essential.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of instructor.

**GEOG 7440 Climate Change 3 cr**

The course will provide an overview of General Circulation Models (GCMs) and how these models are used to study various aspects of global climate change. More specifically the course will deal with the coupling between the atmosphere, hydrosphere, lithosphere and biosphere from the perspective of Earth System Science.

**GEOG 7450 Boundary-Layer Climatology and Micrometeorology 3 cr**

A seminar-based course devoted to the study of advanced topics in microclimatology and micrometeorology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of instructor.

**GEOG 7470 Techniques in Climatology 3 cr**

This course overviews the theoretical basis that underpins the measurement and application of climate elements in micrometeorological and microclimatological research.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of instructor.

**GEOG 7480 Advanced Methods in Remote Sensing 3 cr**

This course provides instruction in the current theory and application of remote sensing technology to Earth System Science. Emphasis will be placed on the processing and interpretation of remote sensing imagery and the integration of remote sensing data with other spatial data.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOG 3200 (C), or permission of instructor .

**GEOG 7500 Biogeography 3 cr**

The course will emphasize principles and approaches to understanding biogeography on a worldwide scale with specific examples from Canadian and Manitoban research. Topics discussed include the physical environment and biological interactions, effects of disturbance and climate change, the geography of biological diversity, evolution and extinction.

**GEOG 7580 Gender and the Human Environment 3 cr**

From criticalsocial science theoretical positions, this course asks student to examine what we can learn about how humans live on the earth if we see them as gendered. Just as we may also understand humans and their interactions in and with spaces, places and environments through the lenses of race, ethnicity, class,age and /or combinations of these categories with gender. Cannot be held for credit with GEOG 4280.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**Equiv To:** GEOG 4280

**GEOG 7610 Graduate Seminar in E&G (Masters) 3 cr**

The course allowed students to develop research and communication skills and provides a greater understanding of research within geography, environmental science and environmental studies; it is organized around presentations given by the students on their area of expertise; course graded pass/fail.

**GEOG 7620 Graduate Seminar in E&G (PhD 1) 1.5 cr**

The course allowed students to develop research and communication skills and provides a greater understanding of research within geography, environmental science and environmental studies; it is organized around presentations given by the students on their area of expertise; course graded pass/fail.

**GEOG 7630 Graduate Seminar in E&G (PhD 2) 1.5 cr**

The course allowed students to develop research and communication skills and provides a greater understanding of research within geography, environmental science and environmental studies; it is organized around presentations given by the students on their area of expertise; course graded pass/fail.

**GEOG 7780 Storms-Mesoscale 3 cr**

This course focuses on a range of storms, and mesoscale phenomena in the summer and winter. These include thunderstorms, tornadoes, squall lines, lightning, low level jets, gust fronts, blizzards, freezing rain, orographic storm, and polar lows. The emphasis in on the physical mechanisms leading to these events and it also examines how they may change in our warming climate. This course cannot be held for credit with GEOG 4780.

**Equiv To:** GEOG 4780



**GEOG 7872 Advanced Methods in Geomatics 3 cr**

This course focuses on advanced theory and application of geomatic methods and technologies in spatial problem solving. Laboratories provide practical experience in the application of spatial multivariate methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of instructor.

**GEOG 7910 Contemporary Issues in Arctic Science 3 cr**

The course will deal with the coupling between the ocean-sea ice-atmosphere (OSA) interface and examine the role of these processes in physical-biological coupling. Seminars will be presented on both scientific and methodological principles required to understand how climate change affects the Arctic system.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of Department Head.

**GEOG 7930 Oceanography: Chemical 3 cr**

This course deals with the sources, distribution, and transformation of chemical constituents of the oceans, and the processes that control them. The emphasis will be given to biologically or climatically significant elements such as carbon, nitrogen, phosphorus, iron and mercury in the Arctic Ocean. Not to be held with GEOG 4930.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of the Department Head.

**Equiv To:** GEOG 4930

**GEOG 7940 Sea Ice in Arctic Marine System 3 cr**

This course will provide a general background on the importance and current knowledge of sea ice with a focus on the Arctic marine system. The material will be provided in a highly disciplinary manner, touching on fields of geophysics, physical geography, biology and chemistry. Not to be held with GEOG 4940.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of Instructor.

**Equiv To:** GEOG 4940

**GEOG 7960 Oceanography: Biological II High Trophic Levels 3 cr**

This course will examine the oceanographic-biological coupling occurring in the Arctic region, focusing on environmental conditions related to higher trophic levels and impacts of climate change. The aim of this course will extend the learning of the 3000-level course that examines the biological oceanography, which focus on the environmental factors that control primary production and lower trophic levels in the world's oceans. Not to be held with GEOG 4960.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: Permission of Department head.

**Equiv To:** GEOG 4960

## Geological Sciences (GEOL)

**GEOL 7200 Earth Systems of Central Canada 3 cr**

An overview of the Earth structure, bedrock geology, surficial geology and hydrology of Manitoba and adjacent regions from an Earth systems perspective; and the occurrence and development of mineral, petroleum and water resources.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: enrolment in a M.Sc. or Ph.D. program, and permission of department.

**GEOL 7230 Geophysics of the Earth's Crust and Mantle 3 cr**

Processes in crust-mantle evolution and geophysical methods used to study this region of the earth.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: (GEOL 4320), and (GEOL 4330).

**GEOL 7310 Quaternary Geology 3 cr**

Seminars and lectures on sedimentary aspects of the Quaternary Epoch with emphasis on glaciation. The glacial and interglacial stratigraphic record on the continents and in the ocean basins. Three-day field trip in mid-September.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: (GEOL 3490), and (GEOL 3900).

**GEOL 7350 Remote Sensing in the Earth and Planetary Sciences 3 cr**

Selected topics in remote sensing with emphasis on geophysical and geologic problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: B.Sc. (Honours Geology, Geophysics, or Geological Engineering), or permission of instructor for graduates of other disciplines.

**GEOL 7470 Advanced Petroleum Geology and Geochemistry 3 cr**

Lectures and seminars examining the four major components of petroleum geology: source and migration, reservoir, trap, and economics. Major emphasis on the origin and generation of petroleum and source rock geology. Field trip and core logging required.

**GEOL 7480 Advanced Seismology 1 3 cr**

Theory of wave propagation; source mechanisms; other selected topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: GEOL 7260.

**GEOL 7490 Advanced Seismology 2 3 cr**

Seismic surface waves and normal modes of Earth, Earth tides and dynamic evolution.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: GEOL 7480 or equivalent.

**GEOL 7540 Isotope Geology and Geochronology 3 cr**

The principles and methods of isotopic age determination and the measurement of geological rate processes using certain radioactive nuclides and the variations of the isotopic compositions of their daughter products. The evolution of the earth's mantle, continental and oceanic crust. The application of light, stable isotope fractionation to understanding geological processes.

**GEOL 7550 Hydrothermal Petrochemistry 3 cr**

The chemistry, mineralogy, and petrology of mineral deposits and alteration zones of the hydrothermal type, and their association with igneous and tectonic events. Theory and experimental data on metasomatic processes.

**GEOL 7590 Advanced Paleontology 1 3 cr**

Topics in paleobiology of the invertebrates, and principles of paleontology. Upon request, course may be adapted to individual requirements of students in other disciplines (for example, specific groups of invertebrates, paleoecology, trace fossils, etc.).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisites: (GEOL 3310), and (GEOL 4310), or permission of instructor.

**GEOL 7600 Advanced Paleontology 2 3 cr**

Topics in paleobiology of the invertebrates, and principles of paleontology. Upon request, course may be adapted to individual requirements of students in other disciplines (for example, specific groups of invertebrates, paleoecology, trace fossils, etc.).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: GEOL 3310, or GEOL 4310, or permission of instructor.

**GEOL 7700 Advanced Clastic Sedimentology 3 cr**

Lectures and seminars on clastic depositional environments. Critical evaluation of accepted facies models followed in each case by examination of the ancient record. One week field trip and core logging required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 3900, or permission of instructor.

**GEOL 7720 Geophysical Imaging and Data Processing 3 cr**

Advanced frequency filter design; deconvolution methods for seismogram; velocity and wavefield stacking; various digital methods for potential field data; principles of tomography and geophysical imaging techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: (GEOL 3740), and GEOL 7260, or permission of instructor.

**GEOL 7740 Workshop in the Geological Sciences 1 3 cr**

Critical, in-depth group study of problems and new concepts in the geological sciences; discussion of current research by staff and visiting scientists; students will pursue individual research interests and will work with staff on specific topics.

**GEOL 7750 Workshop in the Geological Sciences 2 3 cr**

Critical, in-depth group study of problems and new concepts in the geological sciences; discussion of current research by staff and visiting scientists; students will pursue individual research interests and will work with staff on specific topics.

**GEOL 7760 Seminar in Geological Sciences 3 cr**

A discussion of topics of current interest from the whole spectrum of geological sciences to inform students on research work outside their specialty. Required of all graduate students. For ancillary credit only. Geological Sciences Colloquium. Weekly discussion of topics of current interest. Presentation of recent research from geological literature, the department, and visitors. Required of all graduate students who have received credit for GEOL 7760.

**GEOL 7780 Advanced Carbonate Sedimentology 3 cr**

Lectures and seminars on selected topics of carbonate sedimentology, including depositional environments, lithofacies sequences and diagenesis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: GEOL 3900, or permission of instructor.

**GEOL 7790 Advanced Instrumental Techniques in Geology 3 cr**

Lectures and laboratory course covering the application of microbeam, mass spectrometer, diffraction and wet geochemical analytical techniques in mineralogy and geochemistry. Includes coverage of ICP, PIXE, powder and single crystal diffraction and electron microprobe analysis.

**GEOL 7810 Electromagnetic Methods in Geophysics 3 cr**

Examination of the theory and application of electromagnetic methods in geophysics. Topics include: electrical properties of earth materials, review of EM methods, EM theory for layered media, EM responses of simple structures and case studies.

**GEOL 7820 Environmental Geophysics 3 cr**

Examination of the application of geophysics to environmental targets. Topics will vary according to student interest and may include aspects of new-surface geophysics, engineering geophysics, geophysics of global climate change and geophysical risk assessment.

## German (GRMN)

**GRMN 6000 Reading Language Test 0 cr**

No description available.

**GRMN 7200 Literary and Cultural Theory 3 cr**

A survey of the major theoretical approaches to German and Slavic literature and cultures. Discusses the aesthetics of Enlightenment and Idealism, Nietzsche, Freud, Russian Formalism, Prague Structuralism, hermeneutics, semiotics, dialogism (Bakhtin), the Frankfurt School, collective memory, gender studies, post-colonialism, and multiculturalism.

**GRMN 7210 Introduction to Second Language Acquisition and Methods of Language Teaching 3 cr**

This course provides a general introduction to theories and approaches in second language acquisition (SLA) and methods of language teaching specifically designed for MA students of German and Slavic languages.

**GRMN 7240 Colloquium in German Studies 1 3 cr**

A detailed study of theoretical and methodological questions in German literature and culture. Course contents will vary from year to year depending on the needs and interests of students and staff.

**GRMN 7242 Colloquium in German Studies 2 3 cr**

A detailed study of German stylistics, German as a Second Language, or the structure of the German language. Course contents will vary from year to year depending on the needs and interests of students and staff.

**GRMN 7300 Special Topics in German Literature and Culture 1750-1945 1 3 cr**

Topics dealing with German literature and culture focusing on an author, a systematic topic or period between 1750 and 1945. Contents will vary from year to year depending on the needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**GRMN 7330 Seminar in Contemporary German Literature and Culture 3 cr**

Topics dealing with German literature and culture in the second half of the 20th and in the 21st century. Contents will vary from year to year depending on the needs of students and staff.

**GRMN 7340 Seminar in German Film and Media Studies 3 cr**

Studies a variety of German media theories and sources, including newspaper, television and film in the 20th and in the 21st centuries.

**GRMN 7350 Seminar in German and European Literature and Culture 3 cr**

Topics dealing with German literature and culture within a European comparative context. Contents will vary from year to year depending on the needs of students and staff.

**GRMN 7360 Independent Studies in German 3 cr**

Each student will work with an instructor to prepare a reading program in an appropriate area, depending on the needs of students and staff. The student will present written assignments as required. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

## Graduate Studies (GRAD)

**GRAD 6000 Summer Research 0 cr**

Research

**GRAD 6100 Visiting Canadian Student Research Course 0 cr**

Registration in GRAD 6100 is to formalize the status of visiting Canadian Graduate Student Researchers. Students must meet the terms of the Canadian Graduate Student Research Mobility Agreement (CGSRMA), and submit the Visiting Graduate Student Research Authorization form to be eligible to register.

**GRAD 7000 Master's Thesis 0 cr**

Should show in general, that the student has mastery of the field and is fully conversant with relevant literature. The process, schedule, format, and style must meet the requirements of the Faculty of Graduate Studies. After approval of the thesis by the thesis examining committee and the completion of any revisions required by that committee, two copies of the thesis must be submitted to the Graduate Studies general office. Thesis students must pass an oral examination on the subject of the thesis and matters relating thereto as prescribed by the department. This course is graded pass/fail.

**GRAD 7010 Comprehensive Examination 0 cr**

Takes the form of an exercise in the practical application of knowledge and skills, involving the careful definition of a problem and a report on the results in a manner suitable for evaluation by an examining committee. The comprehensive examination is an independent work, for an architectural project selected to demonstrate professional knowledge and skills, culminating in a public presentation. A faculty member serves as an advisor. Consultation, advice, and criticism will be provided by other members of the Faculty and specialized professionals in the various technical and related fields. This course is graded pass/fail.

**GRAD 7020 Master's Re-registration 0 cr**

Masters re-registration

**GRAD 7022 Master's Re-registration 0 cr**

MBA and MPA students who are not registering for any courses in Fall and/or Winter terms must register for GRAD 7022 in order to retain status.

**GRAD 7030 Master's Practicum 0 cr**

Takes the form of an exercise in the practical application of knowledge and skills, involving the careful definition of a problem and a report on the results in a manner suitable for evaluation by an examining committee. This course is graded pass/fail.

**GRAD 7050 M.Eng. Project and Report 6 cr**

Project and Report

**GRAD 7060 Diploma Re-registration 0 cr**

Diploma re-registration

**GRAD 7090 Design Thesis 0 cr**

The Design Thesis is an independently driven creative work developed within a focused subject of inquiry and directed by architectural questions. It is carried out through intensive research, study, and design explorations that culminate in a thoroughly developed architectural proposition. It is to be fully recorded in a final document.

**GRAD 7200 MFA Thesis/Studio Exhibition 0 cr**

The MFA Thesis is comprised of a written statement and visual thesis that must show that the student has developed an original contribution to knowledge in visual art. The process, schedule, format, and style must meet the requirements of the Faculty of Graduate Studies. Thesis students must pass an oral examination on the subject of the written statement and visual thesis. This course is graded pass/fail.

**GRAD 7300 Research Integrity Tutorial 0 cr**

In a highly interactive environment, participants will be exposed to practical advice on how to deal with challenging situations that may arise while doing research within their own area of expertise. The course also addresses the latest standards, codes, and policies in the responsible conduct of research both locally and globally. Online tutorial delivered through UM Learn with no pre- or co-requisites. This course graded on a pass/fail basis.

**GRAD 7500 Academic Integrity Tutorial 0 cr**

New and continuing Masters and Doctoral students will learn about academic integrity by participating in online tutorials. A brief learning-check will be written after the tutorials have been viewed. Students newly admitted to a graduate program must successfully complete this course within the first term of registration. The course grade is a pass/fail.

**GRAD 8000 Doctoral Thesis 0 cr**

Doctoral Thesis

**GRAD 8010 Doctoral Candidacy Examination 0 cr**

Doctoral Candidacy Examination

**GRAD 8020 Doctoral Re-registration 0 cr**

Doctoral re-registration

## Greek (GRK)

**GRK 7100 Greek Literature 3 cr**

A reading course involving a selected Greek author or authors, or a set of related works. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**GRK 7110 Topics in Greek History 3 cr**

This course will investigate aspects of Greek history, emphasizing different topics, sources, and theoretical approaches. Possible focuses for the course include a period of Greek history, or a particular region of the Greek world. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

## History (HIST)

**HIST 7110 Advanced Historical Methodologies 6 cr**

This course provides advanced training in key methodologies for historical research and knowledge mobilization. The goal of the course is to familiarize students with the protocols, ethics, procedures, and best practices for historical research in a variety of settings. Students will have opportunities to apply this training to specific projects and to develop a range of skills for historical research, alongside building critical understanding of various historical methodologies. Students will also complete certification in key areas such as oral history and research ethics.

**HIST 7190 Studies in United States History since 1877 6 cr**

An examination of United States history from the close of the Reconstruction era to the present. Students will gain exposure to the political, economic, social, and/or cultural history of the United States. Course content may vary according to the instructor.

**HIST 7220 Selected Topics in British History 6 cr**

A detailed examination of selected topics and problems in British history. Topics and content will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**HIST 7230 Nineteenth-Century Britain 6 cr**

A study of British culture, politics, and diplomacy, 1830-1900.

**HIST 7240 State and Society in Latin American History 6 cr**

Readings focused on state/society relations in the history of Latin America since colonial times. After considering different theoretical approaches, the course will analyze recent works that cover different historical periods, countries, issues, and social factors.

**HIST 7270 Special Studies in Social History 6 cr**

A seminar course, the content of which will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**HIST 7290 Reading Seminar in Canadian History 6 cr**

The student will perform advanced health assessments to create differential diagnoses for well clients of all ages in the context of primary care. Emphasis is on diagnostic reasoning and clinical judgment within the Nurse Practitioner scope of practice. Not to be held with NURS 7410 and NURS 7420.

**HIST 7330 History of Western Canada 6 cr**

A research course in the history of Western Canadian. The course will explore recent historical approaches to western Canada and introduce students to archival and primary research.

**HIST 7372 History of Archiving and Archival Records 6 cr**

An examination of aspects of the history of archival thought, activities, and records from antiquity to the present. Canadian and international examples since the nineteenth century are emphasized. Students may not hold credit for both HIST 7372 and the former HIST 7370.

**Equiv To:** HIST 7370

**HIST 7382 Archiving in the Digital Age 6 cr**

An examination of selected contemporary issues in archival theory and activities in Canada and internationally, with emphasis on the impact of computerization on archiving. The issues are studied in relation to the history of archiving and archival records. Students may not hold credit for both HIST 7382 and the former HIST 7380.

**Equiv To:** HIST 7380

**HIST 7392 Selected Topics in Archival Studies 3 cr**

A detailed examination of selected topics and problems in Archival Studies. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**HIST 7394 Internship in Archival Studies 0 cr**

The internship provides a work experience in a working archive in government, non-profit, business, industry, or similar professional setting to students admitted to the JMP Archival Studies Stream who have successfully completed HIST 7372 and HIST 7382. Required submission of a written report covering the work completed during the internship. This course is evaluated on a pass/fail basis.

**HIST 7470 The Later Middle Ages 6 cr**

Selected topics in economics, social, cultural, art and religious history of the later medieval world.

**HIST 7500 Jewish and European History and Historiography 6 cr**

This seminar examines issues relating to Jewish history and historiography in the context of European history and historiography.

**HIST 7510 Early Modern European History 6 cr**

A seminar which studies early modern Europe from the perspective of new approaches to historiography.

**HIST 7520 The Age of Enlightenment 6 cr**

Emphasis on 18th century French intellectual history and its relationship to the origins and course of the French Revolution. Some reading knowledge of French is almost essential.

**HIST 7560 The Russian Revolution 6 cr**

The events constituting the Revolution proper (1917-21) will be studied in relation to their historical background and in the light of their subsequent impact both nationally and globally.

**HIST 7600 Northern Historical Studies 6 cr**

This course is based upon a number of studies of various aspects of the North. Particular emphasis is given to the North in relation to the fur trade, exploration, and Canadian development.

**HIST 7630 History of Health and Disease 6 cr**

An introduction to principal issues and approaches in the history of health and disease. It is not meant to be a strictly chronological survey. Topics and themes may include the development of nursing and medical professions; the transformation of the hospital; mental health; alternative therapies; colonization, infectious disease and aboriginal health; and health and the state.

**HIST 7640 Social History of Health and Disease in Modern Canada 6 cr**

This course explores the history of health and health care in Canada, with a focus on the late 19th and 20th century. Topics will include colonization, infectious disease, and Aboriginal health; the evolution of medical and nursing professions and the modern hospital; mental health; cancer; alternative therapies; childbirth; and old age. Analytical categories of gender, race, ethnicity, class, and sexuality will run throughout the material.

**HIST 7672 Studies in Canadian History 6 cr**

This course will focus on social, intellectual, political, and economic themes with emphasis on the western Canadian experience. Specific topics will vary from year to year depending upon the interests of the instructor. Students may not hold credit for both HIST 7672 and the former HIST 7670.

**Equiv To:** HIST 7670

**HIST 7700 Historical Method 6 cr**

A seminar and workshop in historical method. The topics covered will encompass conventional research, analysis and writing, as well as the application of social science techniques to the analysis of historical problems, the fundamentals of data processing, and computer applications.

**HIST 7710 History and Cultural Studies 6 cr**

A working guide to interdisciplinary approaches of the new field of Cultural Studies, examining its principal theoretical bases and existing and potential applications for the historian.

**HIST 7730 Modern Latin America 6 cr**

An examination of selected themes such as economic and social change, political modernization, and external influences and intervention in Latin America during the 19th and 20th centuries.

**HIST 7740 England in the Long Eighteenth Century 6 cr**

Selected themes in the history of England's long eighteenth century from 1660-1840. Specific topics will vary from year to year but will generally include the transformation of political culture, the consequences of war, the question of national identities, the emergence of commercial society and the changes to social structure.

**HIST 7750 Gender History in Canada 6 cr**

Explores the roles, images and experiences of masculinity and femininity in the past. Will familiarize students with the changing theoretical and historiographical terrain of gender history. It will draw on the international literature but focus on the history of gender in Canada, examining how historians analyse masculinity, femininity, the family, sexuality, politics, race/ethnicity, moral regulation, class, nation, and colonialism.

**HIST 7760 History of Aboriginal Rights 6 cr**

A study of Aboriginal rights from early contact to the present with a particular emphasis on treaties, the courts, and Aboriginal efforts to enforce specific forms of rights.

**HIST 7770 Selected Topics 6 cr**

A program of independent reading and/or research on selected topics, undertaken and arranged by a student in consultation with his prospective instructor, upon the approval of the Graduate Chair. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**HIST 7772 Selected Topics 3 cr**

The content of this course varies. Courses offered under this number will be advanced graduate seminars investigating topics that are not part of an existing seminar course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**HIST 7774 Independent Study/Reading 3 cr**

The content of this course will vary. It will be an advanced, independent reading/study course for graduate students, on a topic of particular interest to the student. Normally the topic will be one that the student cannot study in an existing seminar course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**HIST 7776 Major Research Paper 0 cr**

The Major Research Paper (MRP) is a piece of original writing based on primary research, submitted in fulfillment of the JMP in History, Major Research Project stream. It is of roughly 34-40 pages (8,500-12,000 words). The student consults the Chair of the Joint Discipline Committee in History to select an Advisor. The student meets with the Advisor to develop a topic for the paper. After the MRP is submitted, it is circulated to a second reader. The MRP is graded pass/fail.

**HIST 7820 Issues in Modern Asian History: Selected Topics 3 cr**

Content will vary. Emphasis will be on the analyses of important issues and recent developments in the history and historiography of modern Asia. Consult the History Department for particulars. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**HIST 7910 Studies in Modern World History 6 cr**

Advanced historical study of topics in world and global history. Course examines historiographical debates in the field and may include opportunities for original primary research. Specific thematic, methodological, and theoretical approaches may vary by instructor.

**HIST 7920 Popular Radicalism in the Modern World 6 cr**

Selected topics in the history of popular movements of social and political protest in the modern world. The course considers problems such as the conditions and motivations that give rise to social movements, the development of radical theory and political practice, and the culture of dissent.

**HIST 7930 Imperialism, Decolonization and Neo-Colonialism 1700-Present 6 cr**

An exploration of theoretically informed literature that has attempted to engage with and understand Imperialism and Colonialism, Anti-colonial nationalism, National liberation movements and Neo-Colonialism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**HIST 9090 UW GHIST-7507 Gender History in Canada 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9130 UW GHIST-7002 Independent Study/Reading 3 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9312 UW HIST 4212 Topics in Modern European History 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9322 UW HIST-4902 Selected Topics in the History of Science 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9420 UW GHIST-7210 Early Modern European History 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9540 UW GHIST-7608 Studies in American History to 1877 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9570 UW HIST 4610 The Origins of the Civil War in the United States 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9580 UW HIST 4910 Themes in the History of Medicine 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9610 UW GHIST-7517 Studies in Canadian History 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9612 UW HIST 4103 Colonization and the Age of Modernity in Latin America 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9620 UW HIST 4213 Topics in Early Modern Women's History 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9632 UW GHIST-7903 History of Health and Disease 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9640 UW HIST-4130 History and Memory 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9642 UW GHIST-7007 History and Memory 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9646 UW GHIST-7108 Studies on Modern World History 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9648 UW GHIST-7001 Selected Topics 3 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9650 UW HIST-4112 History of the Atlantic World, 1450-1825 3 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9670 UW HIST 4830 The History of Museums and Collecting 6 cr**

Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9672 UW Advanced Studies in Canadian Social History 3 cr**  
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9674 UW HIST 7512 Indigenous History: Advanced Studies 6 cr**  
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

**HIST 9676 Indigenous History: Advanced Studies 3 cr**

## Human Anat. and Cell Science (ANAT)

**ANAT 7012 Advanced Brain Imaging Methods 1.5 cr**  
Basic concepts and theories behind advanced brain imaging methods will be introduced, which includes multivariate pattern analysis and machine learning. Then, students will run the learned analyses using sample data in class and in homework.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: IMED 7004.

**ANAT 7014 Functional Human Anatomy 2 cr**  
This course is an overview of human anatomy from a functional perspective. The students will be introduced to the structure and function of neuromuscular system. The course is specifically designed for students enrolled in programs in which a background in biology and /or anatomy is not a prerequisite (e.g. biomedical engineering). May not be held with the former BME 7014.

**Equiv To:** BME 7014

**ANAT 7060 Advanced Human Macroscopic (Gross) Anatomy 6 cr**  
Dissection, with special emphasis on regions relative to the research projects and interests of students concerned. Both terms.

**ANAT 7250 Experimental Teratology 3 cr**  
Basic principles of experimental teratology in lectures, seminars, and practical work. The causes, embryological basis, and mechanisms of developmental defects will be covered.

**ANAT 7320 Introduction to Scanning and Transmission Electron Microscopy 3 cr**  
Designed to provide general theoretical aspects of electron microscopy and practical knowledge of electron microscopic laboratory procedures. 3 hours lecture/lab per week, one term. Minimum enrollment: 5 students.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
Prerequisite: written consent of instructors.

**ANAT 7330 Readings in Anatomy 3 cr**  
Regular tutorials on selected topics in Anatomy and research related to student's research work. The tutorials will be incorporated into the Department's seminar program.

**ANAT 7380 Human Developmental Anatomy (Embryology) 3 cr**  
Human development as it is of practical application to medical subjects.

**ANAT 7392 Human Neuroanatomy 3 cr**  
(Laboratory required). The objective of this course is to provide an introduction to the structure and function of the nervous system from an anatomical perspective. It is intended primarily for graduate students registered in the Department of Human Anatomy and Cell Science. The course consists of a combination of lectures and laboratory sessions. The lectures will provide an introduction to the basic structure and function of the nervous system. Disorders of the nervous system will be discussed to highlight the function of different components of the nervous system. Laboratory sessions will be scheduled at regular intervals to provide students the opportunity to examine the three-dimensional structure of the nervous system.

**ANAT 7400 Morphological Techniques 3 cr**  
Designed to develop advanced morphological techniques such as immunohistochemistry and cell culture.

**ANAT 7460 Human Histology: Basic Tissues 1.5 cr**  
A lecture and lab course that examines the histological features of the 4 basic tissue types found within the human body. The microscopic structure will be correlated to function in each of the basic tissues of the human body. The clinical significance of structural and functional changes at the histological level will also be presented. May not be held with ANAT 7360.

**Mutually Exclusive:** ANAT 7360

**ANAT 7462 Human Histology: Blood, Immune, and Cardiopulmonary Systems 1.5 cr**  
A lecture, lab, and student presentation course that examines the histological features of the blood, immune system, cardiovascular, and respiratory systems within the human body. The microscopic structure will be correlated to function in each of these systems. The clinical significance of structural and functional changes at the histological level will also be presented. May not be held with ANAT 7360.

**Mutually Exclusive:** ANAT 7360

**ANAT 7464 Human Histology: Gastrointestinal System and Endocrine Glands 1.5 cr**  
A lecture, lab, and student presentation course that examines the histological features of the gastrointestinal system (including associated glands) and endocrine glands within the human body. The microscopic structure will be correlated to function in each of these systems.

The clinical significance of structural and functional changes at the histological level will also be presented. May not be held with ANAT 7360.  
**Mutually Exclusive:** ANAT 7360

**ANAT 7466 Human Histology: Reproductive and Urinary Systems, Skin, and Special Senses 1.5 cr**  
A lecture, lab, and student presentation course that examines the histological features of the reproductive system, urinary system, skin and special senses within the human body. The microscopic structure will be correlated to function in each of these systems. The clinical significance of structural and functional changes at the histological level will also be presented. May not be held with ANAT 7360.

**Mutually Exclusive:** ANAT 7360

**ANAT 7472 Human Gross Anatomy: Musculoskeletal 2 cr**  
This dissection-based human gross anatomy course will provide a detailed understanding of the musculoskeletal (MSK) system of the human body. Students will learn about the anatomical complexities of bones, joints, ligaments, tendons, muscles, nerves and blood vessels of the upper extremity, lower extremity, and spine regions. Common MSK disorders will also be discussed using clinical cases to highlight the relation between anatomical structures and normal human function. Cannot be held with the former ANAT 7470.

**ANAT 7474 Human Gross Anatomy: Thorax 2 cr**  
This course will provide an introduction to the structure and function of the trunk (thorax, abdomen, and pelvis) from an anatomical perspective. Using a combination of lectures, seminars, and dissection-based gross anatomy laboratory sessions, students will learn about thoracic wall anatomy and thoracic cavity contents including the heart and lung; abdominal wall anatomy and abdominal cavity contents including intestines and accessory digestive organs (liver, pancreas, and gallbladder), and spleen; and the pelvic wall and cavity anatomy in both males and females. Cannot be held with the former ANAT 7470.

**ANAT 7476 Human Gross Anatomy: Head and Neck 2 cr**

This course will provide an introduction to the structure and function of the Head and Neck region from an anatomical perspective. Using a combination of lectures, seminars, and dissection-based gross anatomy laboratory sessions, students will learn about the skull and cranial cavity, muscles of mastication and facial expressions, general aspects of the brain and cranial nerves, eyes and ears, nasal and oral cavities, glands, and blood vessels. Cannot be held with the former ANAT 7470.

## Human Nutritional Sciences (HNSC)

**HNSC 7070 Advanced Problems in Foods 3 cr**

Selected topics related to consumer acceptability of foods.

**HNSC 7110 Advanced Problems in Nutrition 3 cr**

Studies of selected problems and programs in community nutrition emphasizing program planning and evaluation.

**HNSC 7200 Seminar in Food and Nutrition Research 3 cr**

A critical study of selected topics in food and nutrition research involving oral presentations and discussions. This is a required course for all M.Sc. students in the department of Foods and Nutrition.

**HNSC 7440 Protein Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the fields of protein nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7440 by the Department of Animal Science.

**Equiv To:** ANSC 7440

**HNSC 7450 Energy and Carbohydrate Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of energy/carbohydrate nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7450 by the Department of Animal Science.

**Equiv To:** ANSC 7450

**HNSC 7460 Lipid Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of lipid nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7460 by the Department of Animal Science.

**Equiv To:** ANSC 7460

**HNSC 7470 Vitamin Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of vitamin nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7470 by the Department of Animal Science.

**Equiv To:** ANSC 7470

**HNSC 7480 Mineral and Trace Element Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of mineral nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7480 by the Department of Animal Science.

**Equiv To:** ANSC 7480

**HNSC 7490 Phytochemical Nutrition and Metabolism 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of phytochemical nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7490 by the Department of Animal Science.

**Equiv To:** ANSC 7490

**HNSC 7500 Chemistry and Function of Food Lipids 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of food lipid development, processing, analysis and function.

**HNSC 7510 Flavour Chemistry and Sensory Properties of Foods 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of food flavour and off-flavour chemistry and in the mechanics of sensory assessment.

**HNSC 7520 Nutraceuticals in Human Health 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in the field of nutraceuticals and the impact of food and raw materials on nutrition and human health.

**HNSC 7530 Nutrition in Public Policy 1.5 cr**

Focus on public policy related to the nutrition and health status of Canadians, including food and nutrition policies, health public policy, influence of trade regulations, context of health systems, social and economic environments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor

**HNSC 7540 Nutritional Epidemiology 1.5 cr**

Focus on epidemiology principles and survey techniques for assessing and predicting individual nutritional status, assessing relevant community resources and reporting results to granting agencies and decision makers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor

**HNSC 7560 Current Topics in Human Nutrition 1.5 cr**

Lectures and critical reviews will be used to discuss recent/significant research advances in nutrition and foods research.

**HNSC 7570 Theoretical Approaches to Dietary Change Intervention 1.5 cr**

Theoretical approaches to dietary behaviour change and critical analysis of their application in nutrition intervention programs for individuals and populations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor

## Human Res. Mgmt/Indus Relat. (HRIR)

**HRIR 7140 Topics in Industrial Relations/Human Resource Management 3 cr**

An in-depth analysis of various topics in industrial relations and human resource management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: GMGT 7220.

**HRIR 7162 Staffing 3 cr**

This graduate seminar provides an understanding of the staffing function of HRM. It focuses on how recruitment, selection, performance and retention management, function within an organization to gain a competitive advantage through the management of work and people.

Pre-or

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

co-requisite: GMGT 7220.

**HRIR 7164 Training and Development 3 cr**

This graduate seminar provides an understanding of the training and development functions of HRM. The course focuses on how to design, implement, and evaluate a training program, and employee development and career management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite or co-requisite: GMGT 7220.

**HRIR 7166 Compensation 3 cr**

A review of the major concepts and design of compensation systems such as: strategy, external competitiveness, rewarding individual contributions, performance incentives, employee benefits, government regulations, union role in compensation, budgets and administration. Pre- or

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

co-requisite: GMGT 7220.

**HRIR 7168 The Management of Labour and Employee Relations 3 cr**

An examination of the systems of labour and employee relations in Canada as it compares with the systems of other countries. Emphasis upon understanding and managing labour and employee relations in a changing economy. Not to be held with HRIR 7500. Pre-or

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

co-requisite: GMGT 7220.

**Equiv To:** HRIR 7500

**HRIR 7460 Collective Bargaining 3 cr**

The labour management relations in the negotiation and administration of the collective agreement. The analysis of conflict and the application of bargaining theories.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: GMGT 7220.

## Human Rights (HMRT)

**HMRT 7100 Theory and Practice of Human Rights: Critical Perspectives 3 cr**

This course critically analyzes, from an interdisciplinary perspective, the theory and practice of human rights as a framework for social justice. The course examines historical and current human rights struggles to better understand the potential, politics, challenges and limitations of the international human rights framework.

**HMRT 7200 Selected Topics in Human Rights Research and Methods 3 cr**

This seminar course will explore multidisciplinary approaches to qualitative, quantitative, legal, and/or community-based research methods, as applicable to academic human rights research and projects overseen by governmental and non-governmental organizations. particular attention will be paid to the intricacies of ethically, politically and culturally sensitive research.

**HMRT 7300 Human Rights Law 3 cr**

Critical and constructive study, at an advanced level, of a significant major subject or set of topics in Human Rights Law. Restrictions: Must be enrolled in one of the following programs: Faculty of Law, Master of Human Rights. This course is cross-listed with LAW 3018. Students may not hold credit for both LAW 3018 and HMRT 7300.

**Equiv To:** LAW 3018

**HMRT 7510 Special Topics in Human Rights 3 cr**

Critical and constructive study, at an advanced level, of a significant major subject or set of topics in Human Rights. Students may earn multiple credits for this course only when the topic subtitle is different.

**HMRT 7800 Research paper in Human Rights 3 cr**

An independent reading and/or research course on a selected topic in human rights, undertaken and arranged in consultation with the prospective instructor, upon the approval of the program director, the course content may vary. Students may earn multiple credits for this course only when the topic subtitle is different.

## Icelandic (ICEL)

**ICEL 7040 Advanced Icelandic 6 cr**

Advanced modern Icelandic usage through translation (English-Icelandic/Icelandic-English), practical exercises, and free composition. Study of fictional and non-fictional texts.

**ICEL 7050 Individual Modern Authors 6 cr**

Icelandic literature in the 20th century. Study of modern and contemporary Icelandic literature focusing on a major author.

**ICEL 7060 Old Icelandic Prose: Seminar 6 cr**

Study of Old Norse-Icelandic sagas focusing on a specific genre or theme.

**ICEL 7070 Old Icelandic Poetry: Seminar 6 cr**

Study of Old Norse-Icelandic poetry focusing on a specific genre or theme.

## Immunology (IMMU)

**IMMU 7020 Immunobiology 6 cr**

This course provides a broad perspective of the evolving concepts of the mechanisms underlying the regulation of the immune response. Students admitted to this course will be expected to have sufficient background knowledge of general biology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: IMMU 7070 plus cognate courses in molecular biology, or by consent of instructors.

**IMMU 7030 Seminars in Immunology 3 cr**

Presented by senior graduate students on advanced research topics not directly related to the student's thesis subject. The purpose of this course is to test the student's ability to evaluate critically a specialized topic both orally and in an essay form. This course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: IMMU 7110 or IMMU 7020 or by consent of instructors.

**IMMU 7040 Immunological Methodology 3 cr**

This lecture course is designed to provide an understanding of modern methods used for basic research in Immunology or other biomedical disciplines utilizing immunological techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: IMMU 7070 or by consent of instructors.

**IMMU 7070 Introductory Immunology 3 cr**

This course provides a broad survey of modern immunology, covering such topics as molecular concepts of antigenic specificity, chemistry of antibodies and their interactions with antigens and cells, regulation of the immune response, transplantation and tumor immunology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: general courses in chemistry, biochemistry and biology, or by consent of instructors.



**IMMU 7090 Selected Topics in Immunology 3 cr**

Assigned reading and written literature review on topics not normally covered in other IMMU courses. Course content will vary depending on the advances in the field and interests of the students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: IMMU 7070 or IMMU 7100 or consent of instructors.

**IMMU 7100 Advanced Topics in Immunology 3 cr**

Lectures and assigned reading providing an advanced level understanding of the molecular and cellular mechanisms governing the immune response. The course will build on basic knowledge learned in IMMU 7070 and emphasize recent advances and recently-developing concepts in the field of Immunology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: IMMU 7070 or by consent of instructors.

**IMMU 7110 Molecular Immunology 6 cr**

This course covers in depth the structure, molecular biology and function of immunoglobulins, histocompatibility antigens, regulatory factors receptors and adhesion molecules on cells of the immune system; mechanisms of immunochemical reactions and the immunogenicity of antigens.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: IMMU 7070 plus undergraduate courses in organic chemistry, physical chemistry and biochemistry, or by consent of instructors.

## Indigenous Studies (INDG)

**INDG 7100 Seminar in Advanced Anishinaabemowin 3 cr**

This course will further investigate Anishinaabemowin grammar. Various types of stories in different dialects will be used to illustrate the complexities of Anishinaabemowin. The students will translate English stories into Anishinaabemowin and will also learn to transcribe oral stories in Anishinaabemowin and translate them. Students will also be introduced to historical orthographies used in materials at HBC archives, the Manitoba Museum, and other repositories for transcribing Anishinaabemowin language in the past.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NATV 3190 or permission of the Instructor or Department Head.

**INDG 7110 Major Research Paper 0 cr**

Students will complete a research project under direct supervision. This is a required course for students in the MA by major research paper. This course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of Department Head.

**INDG 7112 Indigenous Community Organization Placement 3 cr**

Students will examine an Indigenous community organization as a means to attaining healthy, resilient communities. Many organizations were formed by Indigenous peoples to address local, regional and national issues to address barriers to well-being. B grade or better to pass. Course graded pass/fail.

**INDG 7220 Selected Topics in Indigenous Studies 3 cr**

A critical examination of issues in selected areas of Indigenous Studies designed to meet the special needs of graduate students interested in exploring interdisciplinary perspectives in Indigenous Studies. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**INDG 7230 Methodology and Research Issues in Indigenous Studies 3 cr**

A review of research methods, such as oral histories, and research issues, such as ethics and intellectual property rights, within the context of Indigenous Studies.

**INDG 7240 Issues in Colonization 3 cr**

An examination of the factors influencing colonization, assimilation and indigenization. Explores the colonization and decolonization processes, theories of colonization and ways of promoting indigenization without assimilation

**INDG 7250 Culture: Theory and Praxis 3 cr**

A study of selected material in Métis, Aboriginal, or Inuit studies, designed to meet the special needs of graduate students interested in exploring interdisciplinary perspectives in Indigenous Studies.

**INDG 7280 Indigenous Studies Colloquia 1 cr**

Theoretical, methodological, ethical and contextual issues in Indigenous Studies are explored from the perspectives of formally and informally trained experts using a colloquia format. Students are required to attend regularly. This course is taken more than once to fulfill program requirements. Time slots to be determined the first week of September. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Course graded pass/fail.

**INDG 7290 Seminar in Indigenous Economies 3 cr**

This seminar deals with a variety of specific topics in Indigenous Economy. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**INDG 7310 Critical Theory and Indigenous Studies 3 cr**

This course will assess the relevance of the concepts produced by recent social theory to the situation of Indigenous peoples and the contribution made by "fourth world" contexts to social theory. Marxism, feminism, post-structuralism, post-colonial theory, and cultural theory will be among the perspectives examined.

**INDG 7320 Trauma Theory in Indigenous Writing in Canada and Australia 3 cr**

This course will compare selected texts by Indigenous authors from Canada and Australia and examine them through the lens of trauma theories – those developed by Holocaust scholars but also those which draw on Indigenous worldviews.

**INDG 7330 Advanced Seminar in Indigenous Research 3 cr**

A team-taught seminar that provides an in-depth study of the major theoretical, methodological, and ethical issues in Indigenous research with an emphasis on the interdisciplinary scholarship of Indigenous Studies faculty.

## Interdisciplinary Management (IDM)

**IDM 7010 Industry Project 3 cr**

Supervised study and research of a problem opportunity in business or management. Specific course requirements determined by the faculty member assigned to be the course coordinator. In addition, each project will be supervised by a faculty member expert in the area. Projects consist of written report(s) containing substantive, practical evidence and analytically structured comments, academic materials, and bibliographical references. Pass/Fail basis only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: completion of all 600-level MBA courses (or equivalent experience) and consent of MBA program director.

**IDM 7020 Managing for Sustainable Development 1.5 cr**

Strategic issues related to the manager's role in sustainable development, including enterprises in the renewable and non-renewable resource sectors, life-cycle analysis, and full cost accounting. Emphasis is placed on environmental management control systems, environmental performance measurement, reporting, and the impact of environmental management on strategic management decisions.

**IDM 7030 Social and Community Awareness Project 0 cr**

An experiential project examining issues related to economically and/or socially disadvantaged individuals and groups with emphasis on corporate social responsibility. This course is graded pass/fail.

**IDM 7040 Leadership and Personal Development Seminar 0 cr**

Preparation in computer, technical, interpersonal, and team-building skills for MBA MANITOBA program. This course is graded pass/fail.

**IDM 7050 International Study Trip 3 cr**

A supervised international experience to examine the relationship between corporations, senior managers, and social institutions in selected countries. Examination of the interplay between culture, economic development, management systems and strategies in other countries. Emphasis upon establishment of business networks on an international basis.

**IDM 7070 Fundamental Professional & Leadership Seminar 1.5 cr**

Series of seminars covering fundamental topics essential for modern management including business ethics and managing diversity.

**IDM 7080 Professional and Leadership Seminar 1.5 cr**

Series of seminars covering fundamental topics essential for modern management including such topics as: aboriginal business, managerial law, situational leadership, creating shareholder value, developing a business plan, and career management.

**IDM 7090 Interdisciplinary Management Topics 3 cr**

This is a graduate-level MBA course on a very specialized topic and is offered on an infrequent basis. Course content will be an examination of specialized topics or issues which may cross-pollinate with other business related areas. The overall aim of the course is to provide solid practical knowledge about a developing subject, to understand both implications and potential applications for organizations and their leadership today and in the future. Some topics could, for example, include Global Social Enterprise, Global Sales Distribution, Channel Management, Big Data and the Corporation, Infrastructure and Real Estate, and Coaching International Teams. Students may not hold credit for IDM 709 and IDM 7092 with the same topic title.

**Equiv To:** IDM 7092

**IDM 7092 Interdisciplinary Management Topics 1.5 cr**

This is a graduate-level MBA course on a very specialized topic and is offered on an infrequent basis. Course content will be an examination of specialized topics or issues which may cross-pollinate with other business related areas. The overall aim of the course is to provide solid practical knowledge about a developing subject, to understand both implications and potential applications for organizations and their leadership today and in the future. Some topics could, for example, include Global Social Enterprise, Global Sales Distribution, Channel Management, Big Data and the Corporation, Infrastructure and Real Estate, and Coaching International Teams. Students may not hold credit for IDM 709 and IDM 7092 with the same topic title.

**Equiv To:** IDM 7090

**IDM 7120 Executive Leadership and Responsibilities 3 cr**

This course explores the nature of the challenges inherent in senior leadership. After contemplating the generic challenge of responsible executive leadership, students engage in extended dialogues with several executives concerning their experience in leading organizations with special attention to selected program themes. Not to be held with IDM 7060.

**Mutually Exclusive:** IDM 7060

**IDM 7130 Contemporary Themes in Business 1.5 cr**

This course exposes students to salient themes found in the modern business environment. Students will develop a broad appreciation for the challenges and opportunities presented by these contemporary themes (e.g. International and Emerging Markets: Sustainability: Entrepreneurship and Innovation).

**IDM 7140 Co-op for Professional Graduate Programs 3 cr**

Work assignment in business, industry, or government for students registered in an Asper School of Business Professional Graduate Co-operative Education Program. For Asper Professional Graduate students only.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Written permission from the Asper School of Business Professional Graduate Co-operative Education Program, IDM 5120, a current degree GPA of 3.00 or higher, and completion of at least 27 credit hours in the current degree program.

**IDM 7510 Strategic Leadership and Managing Change 1.5 cr**

An examination of the role of the manager as a change agent and processes associated with strategic vision and change. Analysis of factors affecting strategic decisions and how organizations adapt to their environment. Emphasis is upon the role of leaders: transformational leadership, charisma, organizational design and managing organizational culture change.

## Interdisciplinary Medicine (IMED)

**IMED 7004 Human Brain Imaging Methods 1.5 cr**

The role of in vivo brain imaging (e.g., CT, MRI, PET, SPECT) have been rapidly increasing in the multiple disciplines that investigate the human brain in both clinical and nonclinical domains. The basic concepts, mechanisms and analytical techniques will be introduced for different imaging methods. Students will gain knowledge about what can be done and what cannot be done with each modality.

**IMED 7092 Cell Biology A Introductory 3 cr**

Lecture, seminar, tutorial and/or demonstration course devoted to basic structure and molecular functions of the different parts of the cell, beginning with the nucleus and concluding with the cell membrane. Topics include basic genetic inheritance principles, chromosomes and gene regulation, protein synthesis and sorting, mitochondrial functions and genetics, biochemical and electrical properties of cell membrane functions.

**IMED 7094 Cell Biology B Special Topics 3 cr**

Lecture, seminar, tutorial and/or demonstration course devoted to the coordination and integration of cellular functions in complex multicellular organisms. Topics include functional interactions between extracellular matrix, cytoskeletons and membranes, cell and extracellular matrix interactions, cell-to-cell communication including signal transduction mechanisms, concepts in the regulation of cell growth and cell death and pluripotent stem cells, and their relevance to normal organ/body development and malignancy.

**IMED 7096 Stem Cell Biology: Introduction to the Principles of Regenerative Medicine 1.5 cr**

"Stem Cell Biology" focuses on current knowledge of stem cell biology and regenerative medicine. We will discuss different conceptual aspects of stem cell properties and potency with a solid coverage of fundamental concepts including stem cell niches and microenvironment. We will further highlight the importance of stem cells in relation to human diseases including cancer (cancer stem cells), spinal cord injury, stem cell modeling of neurological disorders, and transplantation. Finally, this course will have an informative session on important ethical issues surrounding embryonic stem cells. This course is suitable for a broad range of graduate students with relevant research interests in stem cell biology and regenerative medicine.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A basic course in Biology or consent of the instructor(s).

**IMED 7098 Cancer Stem Cell Concepts and Therapeutic Applications 1.5 cr**

This course will introduce normal and cancer stem cell concepts, with an emphasis on the hierarchical of tumours and the diverse roles of tissue microenvironment in sculpting tumour cell phenotypes. Also, targeting of putative cancer stem cells will be discussed in the context of developing novel treatment strategies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Undergraduate course in cell biology or consent of instructor(s).

**IMED 7100 Fundamentals of Neuroscience 6 cr**

An interdepartmental multidisciplinary course providing a comprehensive overview of cellular, molecular, developmental and systems neuroscience, as well as the neurobiology of disease. Emphasis will be placed on the application of the fundamental principles of neuroscience to contemporary lab research. ANAT 7270 will provide instruction in neuroanatomy and structure-function in the nervous system.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of instructor.

**IMED 7104 Neural Stem Cells: Biology and Regenerative Medicine Applications 1.5 cr**

This course will discuss current concepts in Neural Stem Cells from basic neurobiology (development, fate specification and maintenance) to their potential clinical applications in treating a broad range of neurological disorders through cell transplantation as well as gene and drug delivery. Neural stem cells play critical roles in the nervous system and the course is developed to build the necessary knowledge for graduate students and residents within all disciplines in neurosciences.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: By instructor approval only.

**IMED 7106 Stem Cell Therapy and Tissue Engineering 1.5 cr**

Stem cell therapy opens up new avenues and has the potential to provide permanent solutions to many irreversible disorders in the body. This course will discuss different aspects of stem cell mediated repair and challenges involved in taking stem cells to the clinical applications. This course will further discuss the use of biomaterials based approaches to enhance homing and engraftment of transplanted stem cells in different organs. The course will also provide an overview of current status of stem based clinical trials, regulatory requirements in clinical practice, and ethical issues that arise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: by instructor approval only.

**IMED 7110 Foundations of Scientific Teaching in Bioscience Education 1.5 cr**

This course has been designed to provide doctoral students with an overview of evidence-based principles of learning and teaching, and to enable them to incorporate these principles into the scientific teaching theory, within the context of Bioscience education. The course also prepares the students, as future faculty, to think about learning and teaching as a scholarly endeavor.

**IMED 7112 Fundamental Cellular Neurobiology 1.5 cr**

This lecture-based course covers the fundamentals of cellular/molecular neurobiology of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

**IMED 7114 Fundamental Neural Development and Plasticity 1.5 cr**

This lecture-based course covers the fundamentals of development and plasticity of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

**IMED 7116 Fundamental Systems Neuroscience 1.5 cr**

This lecture-based course covers the fundamentals of systems based neuroscience. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

**IMED 7118 Fundamental Neurobiology of Disease 1.5 cr**

This lecture-based course covers the fundamental neurobiology of diseases of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

**IMED 7120 Medical Biochemistry 3 cr**

Biochemistry of carbohydrates, lipids, proteins and nucleic acids focused on those areas relevant to structure and function of the human body and disease processes. All students are expected to have completed an introductory biochemistry course. The course will consist of lectures, tutorials, and assigned studies.

**IMED 7130 Foundations in Human Population and Evolutionary Genetics 1.5 cr**

This course will examine how human evolutionary history and sociogenetic processes have shaped contemporary patterns of genetic variation, how we can use these patterns to understand the histories and relationships of contemporary human populations, and appropriate methods to assay and interpret these genetic variation patterns.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Incoming students must have passed the graduate Medical Genetics (IMED 7170) course or its undergraduate equivalent, Introduction to Human Genetics (BGEN 3020), or equivalent course prior to taking this course.

**IMED 7140 Advanced Topics in Human Population and Evolutionary Genetics 1.5 cr**

This course will examine the latest genetic evidence on the origins and evolution of anatomically modern humans and their peopling of the world, the coevolution of genes and culture, and the emergence and dispersal of genetic risk factors for Mendelian and complex diseases and traits that afflict contemporary human populations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Incoming students must have passed the Foundations in Human Population and Evolutionary Genetics (IMED 7130) or an equivalent course prior to taking this course.

**IMED 7170 Medical Genetics 3 cr**

Designed to introduce graduate students to the field of human genetics. Both basic science and clinical issues will be discussed in this course.

**IMED 7180 Molecular Approaches in Medical Research 3 cr**

For students who wish to understand advances made in medicine/biology through molecular and developmental approaches. Topics for discussion will be selected from the recent literature in consultation with participating students. The course will consist of lectures and discussions as well as written and oral presentation of papers by the students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**IMED 7190 Medical Immunology 3 cr**

This interdisciplinary courses deals with the molecular and cellular mechanisms underlying immunologically mediated human diseases.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: IMMU 7070 plus cognate courses in human biology or by consent of instructors.

**IMED 7200 Cancer Biology 3 cr**

Biology of cancer including genetics, biochemistry, diagnostics and therapeutics with a focus on fundamental, translational and clinical application.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: All students are expected to have completed an introductory biochemistry, cell biology or genetics course and will require consent of instructor.

**IMED 7210 Epigenetics in Development and Human Diseases 1.5 cr**

Emphasis on current understanding about the dynamic mechanisms that instruct when and where genomic DNA is turned on or off. We will discuss the epigenetic mechanisms that control differentiation of specialized cell types during development. Additionally, this course will highlight recent advancements on the impact of epigenetics in neurodevelopmental diseases with regards to the etiology, progression, diagnosis and treatment. In this respect, application of stem cell biology in regenerative medicine, genome-wide genetic-epigenetic strategies and gene therapy approaches will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A basic course in biology, or consent of instructor.

**IMED 7212 Introduction to the Mechanisms of Disease 3 cr**

(Formerly: PATH 7020) This course introduces the student to the basic principles of disease processes, with use of case models to illustrate mechanisms. An assigned review, in conjunction with an essay and power point presentation will form part of the course. There are no course prerequisites.

**IMED 7242 Nucleic Acids: Structure and Function in Normal Development and Diseases 1.5 cr**

This course is designed to provide students with a basic knowledge on nucleic acids structure and function. It will highlight how DNA and RNA contribute to the mechanisms and underlying normal development as well as pathologies including cancer and genetic diseases. To be fully beneficial for the student, it is highly recommended that this course be taken together with IMED 7244.

**IMED 7244 Nucleic Acids: Manipulation in Biomedical Research 1.5 cr**

This course is designed to provide students with a basic knowledge on nucleic acids manipulation. It will highlight how DNA and PNA can be modified and used in Biomedical Research. To be fully beneficial for the student, it is highly recommended that this course be taken together with IMED 7242.

**IMED 7280 Medical Computational Biology 3 cr**

"Medical Computational Biology" provides the basic knowledge necessary for students to pursue research in the use of computational methods in biomedical research. The course will focus on concepts necessary for applying computation to genomics, transcriptomics and proteomics experimental data and their application to topics relevant to human health. This course is suitable for a broad range of students with interest in large scale biomedical research.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: a basic course in biology and mathematics or the consent of the instructor(s).

**IMED 7290 Developmental Biology 3 cr**

Emphasizes current principles of organ system development and its application to transgenic approaches to gene function in the context of a whole, developing organism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: IMED 7090 or consent of instructor.

**IMED 7300 Microscopy, Optics, Imaging and Analysis in Health Research 3 cr**

Theory and practice of modern microscopy, optics, molecular imaging, and analyses used in health research. Participants will gain in depth knowledge through seminars by local and external experts in the field and by hands-on laboratory work in preparing samples for imaging and analyses. Images will be acquired using equipment at the Genomic Centre for Cancer Research and Diagnosis at the Manitoba Institute of Cell Biology. Students will also participate in interactive tutorials and journal club.

**IMED 7302 Advanced Molecular Imaging 3 cr**

Seminar course in which students will learn about innovative methods and advanced analyses of molecular imaging in biomedical research including 2-dimensional and 3-dimensional fluorescent in situ hybridization, live-cell imaging, spectral imaging, and multi-colour imaging. Students will participate in hands-on laboratory exercises, interactive tutorials and journal club.

**IMED 7304 Functional Genomics and Whole Genome Analyses 3 cr**

Seminar course in which students will learn about functional genomics and approaches to whole genome analyses using array technologies. Course content will be delivered by local and external experts in the field. Students will participate in hands-on laboratory exercises with micro-array platforms and computer-based data analyses, interactive tutorials and journal club.

**IMED 7410 Biomedical Trainee Skills 3 cr**

A course theoretical and practical instruction in scientific investigation, including research ethics, research design, data evaluation and presentation, as well as critical reviewing and preparation of applications for research funding.

## Interior Design (IDES)

**IDES 7000 Graduate Seminar in Interior Design 3 cr**

A seminar course for students registered in thesis or practicum designed to assist in the determination of a relevant topic; formulation of a hypothesis, academic writing sources of information and the appropriate form and content of the thesis practicum.

**IDES 7060 Special Studies 3 cr**

**IDES 7170 Design Research Methods 3 cr**

Building on EVIE 3640 Design Inquiry, this course addresses the role of quantitative and qualitative research methods in interior design. The subject will address the principles of quantitative and qualitative research methodologies; focusing on the relationship between research and interior design. Specifically identifying gaps in existing research; critical analysis and interpretation of existing research; representation of research intentions, methodologies, and results.

**IDES 7180 Theory Seminar 1 - Contemporary Issues in Design 3 cr**

A theoretical exploration of contemporary design issues as they apply to Interior Design, supporting the work of design studio. Historical precedent in relation to human activity, sensory stimulus, technological and social change, ecological awareness, and aesthetic judgment forms the context for discussion and debate.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EVIE 3002 and EVIE 4000 or equivalent.

**IDES 7190 Theory Seminar 2 - Critical Perspectives 3 cr**

An examination of theoretical and philosophical approaches to design. Examines the practice of interior design through a variety of critical and historical perspectives. Different modes of thought and manners of questioning will be used to debate issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: EDES 7180.

**IDES 7200 Masters Studio 1 - Strategic Issues 6 cr**

Master Studio 1 focuses on developing strategic approaches to design, which address complex contextual issues and adaptive reuse of large-scale public space. Studio explorations responding to a range of complex contextual design issues. The studio focuses on methods of strategic analysis such as mapping and scenario planning to inform the configuration and resolution of new interior spatial forms. Large scale public space and the changing nature of contemporary culture will form the basis for the design projects.

**IDES 7210 Masters Studio 2 - Events and Making 6 cr**

Master Studio 2 is focused on the Event: exploring the nature of temporary inhabitation through the creation of a unique place/installation as the site for cultural/community celebration. Design/build studio explorations focused upon issues of temporality, technology, and design intention. Small-scale public places and cultural context will form the basis for design studio projects.

**IDES 7220 Masters Studio 3 6 cr**

Focuses on the creation of specialized interior environments informed by traditional and emerging forms of research. Research into Practice: a research-focused, problem based, studio bridging Studio 3 will examine specialized interior professional design issues and diverse research sources. Master projects in areas such as: work environments, healthcare, education or hospitality, through precedent and research. The studio may be run as a collaborative program and may be delivered as an International studio experience.

**IDES 7230 Sensory Technology 4 3 cr**

Examination of the influences and effects of emerging communication systems and building technologies; building and furniture systems; in the context of human well-being and environmental concerns. The study of the design consequences and environmental impact of interior services and systems; communication technologies; building regulations, codes and infrastructure; detailing and specification of projects drawn from design studio.

**IDES 7240 Sensory Technology 5 3 cr**

A self-directed exploration of new and/or divergent technologies, with significance to the design of interior environments. Students will propose a self-directed design or research project, nominating a full time staff advisor; for the subject instructors' approval. The proposal will clearly establish learning objectives and outcomes, and assessment criteria.

**IDES 7250 Professionalism and Practice 3 cr**

Introduction to the profession and practice of Interior Design; types of practice; regulating bodies; education; career development; professional and social responsibilities; examination and critique of practice, projects and design issues.

**IDES 7270 Travelling Concepts in Photography 3 cr**

This course is a graduate level photography elective that combines the practice, theory and history of photography. The outcome is to stimulate the use of photography as a visionary and hands-on tool. The final outcome will be an exhibition of student work.

**IDES 7280 Advanced Topics in Contemporary Interior Design Seminar 3 cr**

This seminar is a forum for discovering the character of current international design practices. It emphasizes the development of writing skills by exploring models for formulating criticism and applying them through a sequence of written exercises. Discussions focused on the criticism of actual spaces and published architectural environments occur.

**IDES 7290 Work Experience Program 0 cr**

The Work Experience Program provides 175 hours of practical experience over 5 weeks in the interior design profession. Knowledge and skills in job search techniques are developed and applied, while experience in the workplace informs expectations of practice and contributes to successful work transition upon graduation. Course graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Co-requisites: MID Studio 1 IDES 7200 and MID Studio 2 IDES 7210.

## International Business (INTB)

**INTB 7030 Comparative Management 3 cr**

Comparative study and evaluation of management philosophy and practices in cross-cultural setting; the cultural, economic, and political environment which influence management decision-making. Not taught every year.

**INTB 7032 Comparative Industrial Relations and Human Resource Management 3 cr**

**Equiv To:** INTB 7150

**INTB 7040 International Organizational Behaviour 3 cr**

The examination of dilemmas and opportunities that managers face when they work in a cross-cultural setting. The purpose of this course is to develop the necessary understandings and skills to effectively manage problems arising from the interaction of people from different cultures in work settings. Not to be held with INTB 7030.

**Equiv To:** INTB 7030

**INTB 7730 International Business 1.5 cr**

Develop an appreciation of business decision-making in an international/global context. Learning activities are focused towards developing intellectual and interpersonal skills in order for managers to function more effectively in international markets.

## Kinesio, Phys Ed, & Recreation (KPER)

### **KPER 7000 Research in Kinesiology and Recreation Studies 3 cr**

Concepts and issues in designing, implementing, and disseminating research in areas broadly related to kinesiology and leisure. It is recommended that students complete this compulsory course within their first year of enrollment in the Master's program. May not be held with the former PERS 7000.

**Equiv To:** PERS 7000

### **KPER 7002 Qualitative Research Methods 3 cr**

This advanced qualitative research course will expose students to the history, philosophy and epistemological background of the qualitative research tradition, its methods and application to health, physical activity and leisure. May not be held with the former PHED 7160 of the same title.

**Mutually Exclusive:** PHED 7160

### **KPER 7004 Quantitative Research Methods 3 cr**

To extend the student's theoretical understanding of quantitative research designs related to the field of kinesiology and recreation management. Data management and analysis methods will be discussed. Students will gain a theoretical knowledge of common statistical tests. May not be held with the former PHED 7160 of the same title.

**Mutually Exclusive:** PHED 7160

### **KPER 7006 Mixed Methods Research in Kinesiology and Recreation Studies 3 cr**

This course will explore mixed methods research approaches. Specifically, research design, data collection, analysis and interpretation will be explored.

### **KPER 7100 Molecular Mechanisms of Exercise Physiology I 1.5 cr**

Investigating the mechanisms underlying exercise-induced adaptations in health and disease. (Part 1). Advanced level Exercise Physiology, Physiology or Animal Biology or instructor permission is required.

### **KPER 7102 Molecular Mechanisms of Exercise Physiology II 1.5 cr**

Investigating the mechanisms underlying exercise-induced adaptations in health and disease. (Part 2). Advanced level Exercise Physiology, Physiology or Animal Biology or instructor permission required.

### **KPER 7200 Sensorimotor Integration: Fundamental Theories in Motor Control and Learning 3 cr**

Topics covered will introduce students to the historical developments and current thinking around how humans control and learn to perform skilled action. May not be held with the former PHED 7160 "Motor Control". Kinesiology degree or permission by instructor required.

**Mutually Exclusive:** PHED 7160

### **KPER 7202 Instrumentation and Signal Processing in Human Movement Science 3 cr**

Building critical analysis and application of biophysical research methods and analysis, develop numeracy skills in addition to scientific writing and oral presentation skills.

### **KPER 7204 Exercise Adaptations in Whole Body Physiology 3 cr**

This course will cover how exercise training results in adaptations to whole body physiology. Units taught: metabolic systems; cardiovascular-respiratory systems; neuromuscular-skeletal systems; neuroendocrine systems; and immune system. Weekly discussion of topics.

### **KPER 7400 Humanities and Social Sciences in Exercise, Leisure, Physical Education and Sport 3 cr**

This course will include the presentation of current research and scholarship on physical activity, health, and leisure from social science and humanities perspectives.

### **KPER 7402 Community Development: Qualitative Methods 1.5 cr**

Students will be introduced to traditions in the qualitative field, explore theoretical foundations that underpin qualitative inquires and develop capacity to think critically about ethical issues involved in research processes (working with marginalized groups and conducting community-based research).

### **KPER 7404 Indigenous Land-Based Skills 3 cr**

This course brings Indigenous cultural perspectives and practical skills to students in Kinesiology and Recreational Management in Indigenous land based learning.

### **KPER 7406 Social Psychology of Exercise, Leisure, Sport and Tourism 3 cr**

This course will explore social psychological principles and theories and their application to the study of exercise, health, sport, leisure and/or tourism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: REC 3180: Social Psychology of Leisure, or KPER 2540: Psychology of Sport and Exercise, or PSYC 2540: Social Psychology, or discretion of instructor.

### **KPER 7410 Leisure, Recreation, Parks and Tourism: Concepts and Theories 1.5 cr**

Critical analysis of the dominant concepts, theories, and research associated with the development of basic and applied knowledge in fields of leisure, parks and tourism.

### **KPER 7420 Diversity/Disability and Inclusion Studies to Leisure, Sport, Health and Physical Education 1.5 cr**

Overview of the theories/philosophies, current issues, research trends and methodological considerations in the area of diversity/disability and inclusion studies. This course focuses on scholarly approaches that promote equity, access and social inclusion in the contexts of leisure, sport, health and PE.

### **KPER 7430 Critical Race Theory, Indigeneity, in Leisure, Recreation and Sport 1.5 cr**

This course openly discusses issues of race, racism, and settler colonialism. Students will develop an understanding of the role of praxis in CRT and Indigenous scholarship. Students will read, digest, critique, apply, and understand CRT and Indigenous scholarship.

### **KPER 7440 Cultural Studies in Leisure, Recreation and Sport 1.5 cr**

Students will learn to use interdisciplinary critical perspectives to examine the diverse and sometimes contested meanings of cultural objects and processes, establishing a basic knowledge of the theoretical paradigms of Cultural Studies.

### **KPER 7450 Land-Based Education and Outdoor Recreation and Sport 1.5 cr**

Current trends and research related to the social and physical implications of leisure behaviour in the natural environment.

### **KPER 7800 Directed Study in Kinesiology and Recreation 3 cr**

Provides opportunities for in-depth individualized study within a specific area of interest. Can be completed twice (different topics) for maximum of six credits. Only 3 credits may count toward the minimum requirement of 12 credits in the FCRM Graduate Program.

**KPER 7802 Directed Study in Kinesiology and Recreation 1.5 cr**

This course provides in-depth individualized study and exploration within a specific, focused area of interest within a topic area pertaining to Kinesiology or Recreation Management. This course may allow students to study a topic in great detail that may be pertinent and important to their degree.

**KPER 7860 Special Topics 3 cr**

The study of the contemporary research and theory in a selected area. Topics will vary, depending on faculty expertise and student need.

**KPER 7862 Special Topics 1.5 cr**

The study of the contemporary research and theory in a selected area through consideration of relevant literature. The course may also provide opportunities for the application of theories or models within the selected topic.

## Labour Studies (LABR)

**LABR 7110 Advanced Topics in Labour Studies 3 cr**

The course will vary from year to year depending on the needs of students and the interests of the instructor.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of the Labour Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

## Landscape Architecture (LARC)

**LARC 6150 Landscape Architecture Communication 3 cr**

The objectives of this course are to promote an awareness of the diversity of graphic expression and to encourage experimentation. Students are given the opportunity to practice drawing and graphic communication skills and techniques through studio exercises.

**LARC 7002 Land Construction and Professional Practice 3 cr**

Introduction, investigation and fundamental exercises in landscape design and construction documentation, and construction administration for landscape construction projects.

**LARC 7020 Field Studies 3 cr**

A one- or two-week field study block course at the start of winter term or during mid-term break, co-requisite with winter term studios.

**LARC 7040 Design Research 3 cr**

The focus is on critical review of the literature, the formulation of research methods appropriate to securing, analyzing, and interpreting of research in Landscape Architecture, and the examination of approaches to design as a mode of enquiry and research.

**LARC 7110 Landscape Architecture Studio 1 9 cr**

An introductory study of structure and order within nature and the built environment. Instruction in the principles of design, the basic elements of graphic and spatial composition, and the vocabulary and methods of approach to landscape architectural design within a variety of contexts. The course may include an obligatory pre-term drawing workshop and a field studies trip; location and cost to be determined on a yearly basis.

**LARC 7120 Special Topics in Landscape Architecture 3 cr**

An assignment and conference course. A detailed study of some special topics in landscape architecture, including environmental sustainability, urban landscape technology, and housing form.

**LARC 7160 Landscape Architectural Field Ecology 3 cr**

Field study of plant taxonomy and ecology. Approximately two weeks duration immediately prior to the beginning of fall term. For Landscape Architecture students or with consent of department head.

**LARC 7222 Landscape Architecture Studio 2 9 cr**

An exploration of analytical, conceptual, and developmental aspects of urban public places in an experimental studio setting. An emphasis is placed on design as mediation between competing demands. The studio incorporates the application of three-dimensional simulation technologies in design.

**LARC 7250 Landscape Architecture Theory 3 cr**

Investigation of the theoretical foundations of landscape architecture in order to understand the complex nature of its practice, to identify its disciplinary boundaries, understand its multidisciplinary nature and to investigate assumptions and myths that permeate its limited discourse.

**LARC 7310 Landscape Design Seminar 1 3 cr**

A cross-cultural overview of significant discourses with an emphasis on the influence of critical design inquiry upon specific landscape interventions.

**LARC 7320 Landscape Design Seminar 2 3 cr**

An examination of the means by which ideas are expressed in and through design with a focus on modes of communication, representation and engagement.

**LARC 7330 Landscape Architecture Studio 3 9 cr**

The study of design application of highly complex problem domains of the urban, suburban, town site, or rural landscape.

**LARC 7340 Landscape Architecture Studio 4 9 cr**

Comprehensive design studio involving transition between larger scale planning/design proposals for an urban/regional area and site design; includes principles of spatial modeling.

**LARC 7400 Landscape Topics 3 cr**

A critical examination of an individual topical study of relevance to contemporary landscape architecture. This course will lead to the completion of a practicum of thesis proposal. Course graded pass/fail.

## Latin (LATN)

**LATN 6000 Latin Reading Test 0 cr**

(Formerly 003.600) For graduate students in other departments which require a reading knowledge of Latin

**LATN 7200 Latin Literature 3 cr**

A reading course involving a selected Latin author or authors, or a set of related works. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**LATN 7210 Topics in Roman History 3 cr**

This course will investigate aspects of Roman history, emphasizing different topics, sources, and theoretical approaches. Possible focuses for the course include a period of Roman history, or a particular region or province of the Roman Empire. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

## Law (LAW)

**LAW 7110 Graduate Legal Research and Theory 2 cr**

Begins with visits to the Law Library and to the Provincial Archives of Manitoba, Government Records Centre, then epistemological problems are studied to define each student's research questions for the thesis; and thereafter weekly seminars explore doctrinal, interdisciplinary, comparative, and theoretical research perspectives (natural law to legal positivism, critical legal studies and post-modernism).

**LAW 7120 Research Paper in Law 3 cr**

Independent reading and/or research course on selected topic in law undertaken and arranged in consultation with the prospective instructor, upon approval of the Associate Dean (Research & Graduate Studies). Course content may vary. Students may earn multiple credits for this course only when the topic subtitle is different.

**LAW 7130 Topics in Law 3 cr**

An independent reading and/or research course on a selected topic in law undertaken and arranged in consultation with the prospective instructor, upon approval of the Associate Dean Research & Graduate Studies. The course content may vary. Students may earn multiple credits for this course only when the topic subtitle is different.

## Linguistics (LING)

**LING 7500 Linguistic Variation and Change 3 cr**

Focuses on sources, causes and patterns of linguistic change, spread of changes and the resulting relationships among languages.

**LING 7510 Linguistic Typology 3 cr**

Highlights universals and differences in phonological, morphological and/or syntactic structures drawn from data from a wide variety of languages.

**LING 7550 Phonology 3 cr**

Presents a theoretical approach to current issues in phonological analysis, building and testing hypotheses about phonological data.

**LING 7570 Semantic Theory 3 cr**

A theoretical approach to current issues in semantics focusing on formal and logical aspects of meaning.

**LING 7620 Seminar in North American Indian Languages 3 cr**

The linguistic structure of a North American language or group of languages. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**LING 7630 Syntax 3 cr**

Presents a theoretical approach to current issues in syntactic analysis, building and testing hypotheses about syntactic data.

**LING 7650 Field Methods 3 cr**

Provides practical experience in techniques for data collection, analysis and interpretation of original data, through guided work with a speaker of a language unfamiliar to students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**LING 7920 Special Problems in Linguistic Research 3 cr**

Specialized topics in linguistics. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**LING 7940 Graduate Reading and Research 1 3 cr**

Independent reading and/or research on a selected topic. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**LING 7950 Graduate Reading and Research 2 3 cr**

Independent reading and/or research on a selected topic. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

## Management Info. Systems (MIS)

**MIS 7120 Management Information Systems 1.5 cr**

Helps students to develop an understanding of information systems and technology (IST) management as a critical element of organizational competitiveness. The course covers information systems strategy, IST security, sourcing, project management and governance. Not to be held with MIS 6150.

**Mutually Exclusive:** MIS 6150

## Management Ph.D. (PHDM)

**PHDM 7110 Doctoral Seminar in Management (Ph.D.) 3 cr**

Examination of the philosophy of science in management and overview of management research typologies, methods, and the role of research in the practice of management.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the Ph.D. program in Management or approval by instructor.

**PHDM 7140 Management Research Project 1 (Ph.D.) 0 cr**

Examination of research design and preparation of theoretical paper in management. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the Ph.D program in Management or approval by instructor.

**PHDM 7150 Management Research Project 2 (Ph.D.) 0 cr**

Examination of research design and preparation of empirical paper in management. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: admission to the Ph.D program in Management or approval by instructor.

## Management Science (MSCI)

**MSCI 6070 Quantitative Analysis for Management 3 cr**

Introduction to the use of quantitative techniques, and computers to solve management problems. Mathematical optimization models, network analysis, and probability models.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MSCI 5100.

**MSCI 7140 Quantitative Analysis for Management 3 cr**

Introduction to the use of quantitative techniques, and computers to solve management problems. Mathematical optimization models, network analysis, and probability models. Not to be held with MSCI 6070 OR MSCI 2150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MSCI 5110 (or MSCI.5100).

**Equiv To:** MSCI 2150, MSCI 6070

**MSCI 7550 Readings in Management Science (Ph.D.) 3 cr**

A study of recent literature in the Management Sciences and their applications, with emphasis on new developments.

**MSCI 7560 Doctoral Seminar in Management Science (Ph.D.) 3 cr**

Seminars on the selected research topics of recent advances in the field of Management Science covering areas of current interests.



**MSCI 7680 Mathematical Optimization Models 3 cr**

A specialized course in mathematical optimization. Linear programming, integer programming, Fritz John and Kuhn-Tucker theorems, quadratic programming, nonlinear programming, duality, network analysis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OPM 7120 (or OPM 6090).

## Marketing (MKT)

**MKT 7010 Marketing Management 3 cr**

Discussion of the marketing function and its importance to the organization. The course will focus on strategic and tactical issues related to market segmentation, positioning, targeting, product management, pricing, promotion, and distribution, both from a for-profit and not-for-profit perspective.

**MKT 7080 Selected Topics in Marketing 3 cr**

A study of selected areas of recent development in the field of marketing. Topics may include the marketing of services, market research, business to business marketing, marketing channel systems, personal selling or sales management, and physical distribution.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 7010 or MKT 6080.

**MKT 7100 Readings in Marketing (Ph.D.) 3 cr**

A survey of current literature in the major areas of marketing and marketing research. Emphasis upon empirical developments as they affect the application of marketing concepts.

**MKT 7110 Doctoral Seminar in Marketing (Ph.D.) 3 cr**

Advanced study of marketing thought integrating the functional areas of marketing. Seminars on selected research topics and recent developments in the field.

**MKT 7120 Ph.D. Seminar in Buyer Behavior (Ph.D.) 3 cr**

Concepts and literature relating psychological and sociological perspectives to buyer behaviour in Marketing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**MKT 7200 Decisions and Concepts in Marketing 3 cr**

Application of the principles of marketing from a managerial viewpoint; emphasis on marketing planning, strategy, and control; and appraisal of the effectiveness of marketing activities.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 7010 (formerly MKT 6080).

**MKT 7210 Marketing and Competitive Behaviour 3 cr**

Designed to give the student a deeper understanding of the dynamics of marketing behavior. Oriented towards theoretical conceptualizations of the problems and practices in marketing areas.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 7010 (formerly MKT 6080).

**MKT 7220 Seminar in Marketing 3 cr**

Study of selected topics in marketing with emphasis on recent theoretical developments and their application.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MKT 7010 (formerly MKT 6080).

**MKT 7232 Consumer Behaviour 3 cr**

The intensive study of customer psychology associated with the development of effective marketing techniques. An in-depth knowledge of what motivates customers and the manner in which they make purchase decisions helps managers in predicting customer reactions to changes in the marketing mix and to the introduction of new products and services. Course topics first examine customers at the individual-level, and then address the interdependent aspects of consumption behavior by examining its social and cultural context.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre- or co-requisite: MKT 7010 (formerly MKT 6080).

**MKT 7300 International Marketing 3 cr**

A study of problems and opportunities of marketing in foreign environments. It will focus on the cultural, economic and geographical problems encountered in managing the marketing function from a Canadian manager's perspective.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MKT 7010 (formerly MKT 6080).

**MKT 7500 Readings in Marketing 3 cr**

Supervised readings in one of the areas of Marketing.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MKT 7010 (formerly MKT 6080) and at least one other graduate level marketing course.

## Mathematics (MATH)

**MATH 7240 Advanced Group Theory 3 cr**

Representation theory of finite groups, presentations of finite and infinite groups, or other topics. May not be held with MATH 4240.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of department.

**Equiv To:** MATH 4240

**MATH 7260 Abstract Measure Theory 3 cr**

Lebesgue and abstract measures, measurable functions, convergence theorems, absolutely continuous functions, measure spaces, the Radon-Nikodym theorem, Fubini's and Tonelli's theorems. May not be held with MATH 4260 and the former MATH 4750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4260, MATH 4750

**MATH 7270 Algebraic Topology 3 cr**

This course will serve as an introduction to elements of homotopy or homology theory. May not be held with MATH 4270 and the former MATH 4230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4230, MATH 4270

**MATH 7280 Basic Functional Analysis 3 cr**

Banach spaces, Hahn-Banach, open mapping and closed graph theorems, linear operators and functionals, dual space, Hilbert spaces and compact operators. May not be held with MATH 4280 and the former MATH 4750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4280, MATH 4750

**MATH 7290 Complex Analysis 2 3 cr**

Conformal mappings, normal families, harmonic and subharmonic functions, Perron's family, Dirichlet problem and Green's function. May not be held with MATH 4290 and the former MATH 4710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4290, MATH 4710

**MATH 7300 Combinatorial Geometry 3 cr**

Topics in combinatorial geometry, including arrangements of convex bodies, introduction to polytopes, problems in discrete geometry, repeated distances, and geometric graphs. May not be held with MATH 4300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4300

**MATH 7320 Dynamical Systems 3 cr**

Techniques for the qualitative analysis of nonlinear systems of ordinary differential equations and discrete-time systems. May not be held with MATH 4320 and the former MATH 4800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4320, MATH 4800

**MATH 7330 Fundamentals of Approximation Theory 3 cr**

Theoretical aspects of approximation theory: density, existence, uniqueness; direct and inverse theorems for polynomial approximation. May not be held with MATH 4330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4330

**MATH 7340 Introduction to Algebraic Geometry 3 cr**

This course will introduce students to the basics of affine and projective varieties through a combination of basic theoretical tools and elementary examples. May not be held with MATH 4340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4340

**MATH 7360 Introduction to Differential Geometry 3 cr**

Manifolds and submanifolds. One of: exterior calculus and Stokes' theorem, Riemannian or symplectic geometry, and Hamiltonian mechanics. May not be held with MATH 4360 and the former MATH 4730.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4360, MATH 4730

**MATH 7370 Linear Algebra and Matrix Analysis 3 cr**

Norms, matrix factorizations, eigenvalues/eigenvectors, theory of non-negative matrices. Applications to differential equations, math biology, numerical analysis, graph theory, etc. May not be held with MATH 4370 and the former MATH 4310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4310, MATH 4370

**MATH 7380 Mathematical Biology 3 cr**

Formulation, analysis and simulation of models in math biology. Applications will be chosen from population dynamics, epidemiology, ecology, immunology and cellular dynamics. May not be held with MATH 4380 and the former MATH 3530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 3530, MATH 4380

**MATH 7390 Numerical Approximation Theory 3 cr**

Computational aspects of approximation by interpolatory polynomials, convolutions, artificial neural networks, splines and wavelets. May not be held with MATH 4390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the department.

**Equiv To:** MATH 4390

**MATH 7440 Numerical Analysis of Partial Differential Equations 3 cr**

Finite difference method, theory of Elliptic PDEs, finite element method, iterative solution of linear systems. Emphasis will be on the error analysis. May not be held with MATH 4440 and the former MATH 8150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4440, MATH 8150

**MATH 7450 Number Theory 2 3 cr**

Algebraic number theory, arithmetic geometry and analytic number theory, Diophantine equations, examples such as arithmetic of elliptic curves and Dirichlet L- functions. May not be held with MATH 4450 and the former MATH 3450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 3450, MATH 4450

**MATH 7460 Partial Differential Equations 2 3 cr**

Green's function, Poisson, heat, Schrodinger and wave equations, Fourier and Laplace transforms, introduction to functional analytic techniques. May not be held with MATH 4460 and the former MATH 4810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4460, MATH 4810

**MATH 7470 Rings and Modules 3 cr**

The general theory of (non-commutative) rings, modules and algebras. May not be held with MATH 4470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of department.

**Equiv To:** MATH 4470

**MATH 7490 Optimization 3 cr**

This course, cross-listed with MATH 4490, introduces the theory and practice of optimization. Topics include unconstrained optimization (quasi-Newton's, BFGS, nonlinear conjugate gradient methods), linear programming (Simplex method, duality), nonlinear constrained optimization (optimality conditions, duality, saddle point theory, barrier and penalty methods, Slater's condition) and integer programming (branch- and-bound, cutting plane and branch-and-cut methods). Applications to calculus of variations, statistics, data science, optimal control, signal processing and neural networks are given. Some computer programming will be required. This course is especially useful for students studying Data Science. Students cannot obtain credit for both MATH 4490 and MATH 7490.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**MATH 8010 Advanced Matrix Computations 3 cr**

Matrix computation, decomposition of matrices, iterative methods, sparse matrices, eigenvalue problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: linear algebra, computing, numerical analysis, and consent of instructor.

**MATH 8110 Applied Finite Element Analysis 3 cr**

Theory and practice of the finite element method of the solution of partial differential equations and its application to engineering and scientific problems. It includes the h, p and h-p versions, a priori and a posteriori error estimates, adaptability and the structure of finite element software.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: numerical analysis and partial differential equations or consent of the instructor.

**MATH 8140 Advanced Numerical Analysis of Differential & Integral Equations 3 cr**

Continuation of MATH 4440/7440. Topics include spectral methods, time dependent equations, multigrid, domain decomposition methods, problems on infinite domains, methods for boundary integral equations, Riemann-Hilbert problems and integrable systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Permission of the department.

**MATH 8210 Topics in Combinatorics 1 3 cr**

Topics will be chosen from the areas of algebraic combinatorics, coding theory, design theory, enumerative combinatorics, graph theory,

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8310 Partial Differential Equations 3 3 cr**

Continuation of MATH 4460/7460. Topics include functional analytic techniques for linear and nonlinear partial differential equations, conservation laws, KdV equation, singular perturbation, viscosity solutions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Permission of the department.

**MATH 8410 Seminar in Applied and Computational Mathematics 1 3 cr**

Designed to accommodate special topics in applied or computational areas of mathematics not included in other course offerings. Students are advised to consult the department as to availability.

**MATH 8420 Seminar in Applied and Computational Mathematics 2 6 cr**

Designed to accommodate special topics in applied or computational areas of mathematics not included in other course offerings. Students are advised to consult the department as to availability.

**MATH 8430 Seminar in Mathematics 1 3 cr**

Designed to accommodate special topics not included in topics courses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8440 Seminar in Mathematics 2 6 cr**

Designed to accommodate special topics not included in topics courses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8510 Topics in Algebra 1 3 cr**

Designed to accommodate special topics not included in topics courses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8520 Topics in Algebra 2 6 cr**

Topics will be chosen from the areas of associative and non-associative algebras, Boolean algebra and lattice theory, category theory, group theory, ring theory and universal algebra.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8610 Topics in Analysis 1 3 cr**

Topics will be chosen from the areas of asymptotics, functional analysis, operator theory, real and complex variables, summability theory, topological vector spaces.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8620 Topics in Analysis 2 6 cr**

Topics will be chosen from the areas of asymptotics, functional analysis, operator theory, real and complex variables, summability theory, topological vector spaces.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8720 Topics in Foundations 2 6 cr**

Topics will be chosen from the areas of logic, model theory, recursive functions, set theory.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval by department

**MATH 8810 Topics in Geometry 1 3 cr**

Topics will be chosen from the areas of algebraic curves, combinatorial geometry, Euclidean geometry, fractal geometry, groups and geometrics, projective geometry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8910 Topics in Topology 1 3 cr**

Topics will be chosen from the areas of compactifications and related extensions, covering properties, rings of continuous functions, set-theoretic topology, topological groups, uniformities and related structures.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: approval of department.

**MATH 8996 MSc project 1 6 cr**

This is a project course exclusively for students enrolled in the Course-based MSc program. Students must submit a written report, on the order of 40 to 60 pages, which can be a survey of a topic in mathematics, for instance. This course is taken under the supervision of a faculty member. Course graded pass/fail.

**MATH 8998 MSc project 2 6 cr**

This is a project course exclusively for students enrolled in the teaching track of the Course-based MSc program. Students must submit a written report, on the order of 20-30 pages, which can be a survey of a topic in mathematics, for instance. In addition, students are required to teach one undergraduate course. This course is taken under the supervision of a faculty member. Course graded pass/fail.

## Mech. Engineering Graduate (MECG)

**MECG 7150 Conduction Heat Transfer 3 cr**

Steady and unsteady state heat transfer by conduction, single and multidimensional systems. Conduction with moving boundaries and computer uses of finite difference techniques.

**MECG 7160 Convective Heat Transfer 3 cr**

Conservation principles and flux laws. Differential and integral equations of the boundary layer. Momentum and heat transfer for laminar and turbulent flow inside tubes and over external surfaces.

**MECG 7170 Radiation 3 cr**

Thermal radiation properties, blackbody radiation, heat exchange by radiation among surfaces in the presence or absence of participating media. Theory and measurement techniques, network methods, solar energy utilization.

**MECG 7190 Classical Fluid Mechanics 1 3 cr**

Bernoulli's equation, equations of motion, two-dimensional motion, streaming motions, aerofoils, sources and sinks, moving cylinders, theorem of Schwartz and Christoffel, jets and currents.

**MECG 7200 Classical Fluid Mechanics 2 3 cr**

Helmholtz motions, right linear vortices, waves. Stokes stream function, spheres and ellipsoids, solid moving through a fluid, vortex motion, viscosity.

**MECG 7220 Boundary Layer Theory 3 cr**

Basic concepts of boundary layer and separation. Navier-Stokes equations, exact solutions. Momentum and energy equations, approximate solutions; boundary layer control, and thermal boundary layers.

**MECG 7240 Turbomachinery 3 cr**

Generalized flow relations in rotating machinery, velocity triangles, limitation on work done per stage and Mach number effects, vortex flow, flow in cascades, blade temperatures and stresses, performance of turbomachines.

**MECG 7260 Theory of Vibrations 3 cr**

The formulation of vibration problems using variational principles; matrix formulation of the free and forced vibrations of discrete and continuous systems; the effect of damping; approximate methods for solving the equations of motion; numerical techniques.

**MECG 7290 Diffusion in Solids 3 cr**

Diffusion equations, atomic theory of diffusion, diffusion in dilute alloys, diffusion in a concentration gradient, diffusion in non-metals, high diffusivity paths, thermal diffusion, and electrolysis in solids.

**MECG 7330 Phase Transformation in Solids 3 cr**

Advanced treatment of phase transformations in solids such as precipitation, eutectoid decomposition, and martensitic reactions.

**MECG 7340 Corrosion and Oxidation of Metallic Materials 3 cr**

Topics include the electromechanical basis of corrosion, corrosion prevention by inhibitors, alloying and heat treatment passivity, stress corrosion crackling and fatigue, crack initiation and propagation, solid state chemistry including ionic and electronic conduction, and oxidation of metals and alloys.

**MECG 7350 Research Topics in Physical Metallurgy and Metal Physics 3 cr**

Topics selected from recent researches in physical metallurgy and metal physics.

**MECG 7370 Modern Research Techniques 3 cr**

Laboratory course designed to introduce the research student to a wide variety of equipment and techniques useful in metallurgical research, discussion, and laboratory.

**MECG 7380 Electron Microscopy of Materials 3 cr**

Theory and practice of electron microscopy, with emphasis on the application of transmission technique to materials research.

**MECG 7390 Dislocation Theory 3 cr**

Description of a dislocation; the stress field around a dislocation; forces on a dislocation; dislocation reactions in crystals, dislocation multiplication, pole mechanisms, twinning, stacking fault tetrahedron. Peierls force and related topics; image forces, interactions with point defects and other topics.

**MECG 7400 Solidification of Metals and Alloys 3 cr**

The theory of solidification with respect to microstructure and solute distribution. Practical applications such as casting semiconductors and zone refining.

**MECG 7410 Theory of Turbulence 3 cr**

Development and application of statistical theories to isotropic, nonisotropic, and homogeneous turbulent fluid motion.

**MECG 7420 Selected Topics in Turbulence 3 cr**

An extension of MECG 7410 to investigate the specialized problems of turbulence such as space-time correlation functions and spectral transfer in constrained and unconstrained fluid flows.

**MECG 7450 Biomechanics 3 cr**

Topics in kinematics related to normal gait and prosthetic devices; properties of materials used for prostheses; arterial, bone, and composite materials, including design and manufacturing methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: ECE 2090 or consent of instructor.

**MECG 7460 Topics in Heat Transfer 1 3 cr**

Selected topics in heat transfer based on MECG 7150, MECG 7160, and MECH 7170. Topics will be chosen from the following: conduction with and without internal heat generation, combined mode heat transfer problems, boiling and condensation heat transfer, heat exchanger design, propulsion systems heat transfer problems, special problems in forced, free and mixed convection, and two-phase flow.

**MECG 7470 Topics in Heat Transfer 2 3 cr**

A continuation of certain topics of MECG 7460 to include the most recent advances in these areas.

**MECG 7500 Topics in Aerodynamics 3 cr**

Topics in Aerodynamics.

**MECG 7600 Selected Topics in Engineering Design 3 cr**

Lectures and seminars on selected advanced topics in the field of mechanical engineering design.

**Mutually Exclusive:** ENG 7510

**MECG 7610 Engineering Properties of Polymers 3 cr**

A survey of the physics of crystalline and amorphous polymers, including molecular weight distribution measurements, physics of rubber elasticity, theories of the glass transition, crystallinity measurements, crystallization kinetics, mechanical properties of crystalline and amorphous polymers.

**MECG 7620 Fracture of Materials and Structures 3 cr**

Griffith criterion for crack propagation, stress intensity factors, plasticity effects, experimental methods for evaluation of criteria, J-integral, crack opening displacement. Microscopic aspects, dislocations at the crack tip, cleavage fracture, nil ductility temperature. Fatigue, creep, stress corrosion cracking.

**MECG 7680 Advanced Operations Research 3 cr**

Formulations and algorithms for the following problems, set partitioning, set covering, clustering, location, layout, order picking, vehicle routing, vehicle scheduling. Applications of these problems to planning of manufacturing systems, scheduling of production, systems, materials handling systems and planning for warehouse and storage systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 4760 or consent of instructor.

**MECG 7690 Computer Integrated Manufacturing 3 cr**

Basic concepts of microcomputer hardware and software with special emphasis on different manufacturing applications. These include data acquisition and analysis, machine monitoring and diagnostics, process control, robotics, machine tool control, automatic testing and quality control.

**MECG 7740 Selected Topics in Robot Technology 3 cr**

The role of digital computers and digital interface equipment in the control and operation of robots. Fundamentals of robot kinematics and coordinate systems. Various robotic sensing systems such as vision, tactile, proximity, ultrasonic. The selection of topics may change from time to time depending on student interest and advances in the field of robotic technology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MECH 4840 or consent of instructor.

**MECG 7760 Advanced Solid Mechanics 3 cr**

Selected advanced topics in solid mechanics; e.g., relationship between solid physics and solid mechanics, mechanical properties for static, low- and high-cycle fatigue, failure theories and mechanisms, theory of shell structures, numerical methods, applications.

**MECG 7770 Computer-Aided Engineering 3 cr**

Principles and mathematical formulation of computer-aided design, manufacturing and database management systems; related topics pertinent to computer integrated design and manufacturing systems.

**MECG 7780 Selected Topics in Engineering Mechanics 3 cr**

Lectures and seminars on selected advanced topics in engineering mechanics such as space dynamics, orbital mechanics and kineto-elastodynamics, current problems, implications in current research.

**MECG 7790 Transport Phenomena in Porous Media 3 cr**

Single and multiphase flow in porous media. Porosity, permeability, capillary pressure, relative permeability, electrical properties.

**MECG 7800 Topics in Porous Media 3 cr**

An extension of MECG 7790 to allow investigation of special topics; e.g., computational methods, experimental techniques, mixed transport phenomena (diffusion/dispersion, conductive/convective heat transfer), advanced concepts, etc.

**MECG 7810 Computational Thermofluids 3 cr**

An introduction to the solution of thermofluids problems. Computational techniques (finite difference, finite element, boundary element). Modelling of turbulent flow. Spectral methods.

**MECG 7840 Systems Modelling and Simulation 3 cr**

Topics may include: Models and Model Building. Mathematical Models: analytical solutions, numerical solutions, steady-state solutions.

Modeling techniques: state models, linear graphs, bond graphs, transfer functions, large-scale models, linear vs nonlinear models. Simulation of Systems (discrete/continuous) on digital computers; numerical operations and algorithms. Simulation Languages (discrete/continuous) applied to analysis and design of dynamic and control systems, or, services and manufacturing systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**MECG 7850 Applied Finite Element Method 3 cr**

Weighted Residuals, Boundary versus Finite Element Method, Conventional and Special elements, Equality and Inequality Constraints, Error Estimates, Self-adaptive Techniques and Mixed Formulations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CIVL 4240 or instructor approval.

**MECG 7860 Selected Topics in Control Engineering 3 cr**

Lectures and seminars on selected advanced topics in the field of systems and control that include mechanical systems, dynamics, control theory and mechatronics.

**MECG 7890 M.Sc. Graduate Research Seminar 1 cr**

Seminar presentation and discussion of current research topics in mechanical, industrial and materials engineering research.

**MECG 7900 Ph.D. Graduate Research Seminar 1 cr**

Seminar presentation and discussion of current research topics in mechanical, industrial and materials engineering research.

**MECG 7910 System Design for Robots and Teleoperators 3 cr**

Definitions and classification. Kinematics: transformations, forward and inverse kinematic solution methods, differential kinematic equations, motion trajectories. Dynamics: energy method vs. Newton-Euler formulation. Actuators; electric, hydraulics and pneumatics. Control: requirement and methods for control of robots and teleoperators.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MECH 3430, MECH 3480 or equivalent.

**MECG 7920 Engineering Mechanics of Composite Materials 3 cr**

Brief overview of composites; constituents; properties; processing and application; micro-mechanics of reinforcement; elastic behaviour of unidirectional lamina; strength of unidirectional lamina; elastic behaviour of multi-directional laminates; stress and failure analysis of multidirectional laminates; hygrothermal effects and durability; introduction to textile composites.

**MECG 7930 Advanced Non-Linear Systems Analysis 3 cr**

Topics may include (i) Modelling of Constrained Dynamic Systems, including derivation of dynamic equations for constrained systems using Lagrangian equations and/or Newton-Euler equations; (ii) Advanced Stability Theories, including construction of Lyapunov functions and Lyapunov's stability control; and (iii) Introduction to Analysis of Non-smooth Systems, including Filippov's solution analysis and extended Lyapunov's stability theory to non-smooth systems. Applications to computer modelling of bipedal locomotion, analysis of robotic contact tasks and stability analysis of power systems will be addressed.

**MECG 7940 Experimental Methods in Fluid Mechanics 3 cr**

Topics will be chosen from: Review of fluid mechanics, combustion and turbulence theory; role of experiments; conventional measurement methods for temperature, pressure and velocity; laser-based techniques for local and global velocity measurements (Laser Doppler Anemometry (LDA), Phase-Doppler Anemometry (PDA), Particle Image Velocimetry (PIV)); other laser-based techniques for imaging and concentration measurements in reacting and non-reacting single and two-phase flows.

**MECG 7950 Selected Topics for Productivity Improvement in Manufacturing 3 cr**

Will address techniques that can assist North American manufacturing and improve productivity in the global market place in the 21st century. Topics include: productivity techniques, quality, cost, manufacturing control and other pertinent issues.

## Medical Microbiology (MMIC)

**MMIC 6010 Biological Safety 3 cr**

Critical Analysis of biological safety in the research, diagnostic and hospital environment; assessment of the underlying causes of laboratory acquired infections and the administrative, engineering and personal protective control measures available; analysis of current and new bio-containment technologies, risk assessment tools, the need for scientific based decision making and the public perception versus real risk.

**MMIC 7012 Fundamental Virology 3 cr**

This is an introductory graduate-level course with a focus on virus gene organization, the different levels of regulated viral gene expressions, and their different replication mechanisms, covering experimental design and advanced knowledge and information on various ways in which viruses replicate in hosts and interact with cellular machinery to cause disease.

**MMIC 7040 Clinical Bacteriology 6 cr**

Scientific basis of routine laboratory methods used in the diagnosis of bacterial infection: specimen handling techniques; laboratory organization.

**MMIC 7050 Microbial Pathogenicity 6 cr**

Comparative structure of virulent and avirulent bacteria, biochemical basis of virulence; host defenses.

**MMIC 7140 Clinical Parasitology 3 cr**

The course will consist of a series of lectures on the epidemiology, molecular pathogenesis, clinical features, diagnosis (clinical and laboratory), treatment and prevention of human disease; each class is followed by a laboratory period in which the student obtains some practical experience.

**MMIC 7160 Molecular Basis of Infection and Antibiotic Action 3 cr**

Historical development, mechanism of action, principles of antimicrobial susceptibility testing and molecular and genetic basis for antibiotic resistance transfer as well as pathogenesis of infectious diseases. Prerequisite courses include Microbial Physiology or Biochemistry and at least an introductory course in Genetics and the consent of instructor.

**MMIC 7170 Molecular Biology of Animal Viruses 3 cr**

Lecture and conference course. Recent advances in molecular aspects of virus structure, replication, genetics, and spectrum of virus-host cell interaction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: MMIC 7010 or consent of instructor.

**MMIC 7190 Readings in Infectious Diseases 3 cr**

The student will conduct an appropriate in depth literature search on three aspects of a mutually agreed topic and present the "state of the science" and a critical review of it, to the instructor. This will be done as a series of interactive sessions.

**MMIC 7210 Clinical Virology 3 cr**

Each group of viruses will be presented in a lecture dealing with the General Virology and taxonomy, epidemiology, clinical aspects of the diseases, laboratory diagnosis, treatment options, anti-virals' classes with their mechanisms of action as well as susceptibility testing (where applicable), and prevention (including infection control measures, chemo- and immunoprophylaxis (where applicable)). The course consists of lecture and optional laboratory component (non-mandatory rotation for Graduate students only at CPL, Virus Detection and Serology sections).

**MMIC 7220 The Ecology of Infectious Diseases 6 cr**

Explores the study of infectious diseases in a global context from the perspective of biomedical, clinical, health systems/services and social, cultural and environmental determinants of health and disease. The course features didactic, self-directed reading and interactive small group sessions.

## Medical Rehabilitation (REHB)

**REHB 7010 Neurosciences 3 cr**

To provide the student with a comprehensive understanding of the neurophysiological basis of motor behaviour including: motor control mechanisms, pathophysiological correlates, and clinical manifestations of central nervous system lesions involving motorcentres.

**REHB 7170 Topics in Rehabilitation 3 cr**

A readings, tutorial, and/or practical course designed to provide an in-depth study of one or more rehabilitation topics to extend or acquire specialized knowledge in a particular area of interest. A subtitle will be added to the current title to reflect specialized interests.

**REHB 7180 Readings in Rehabilitation 3 cr**

A readings course in theory or research relevant to rehabilitation. A subtitle will be added to the current title to reflect specialized interests.

**REHB 7230 Independent Study 6 cr**

Over two university terms, students complete an in-depth study of evidence for practice in an area of interest which will include a review of relevant literature and the development and completion of a small scale project.

**REHB 7260 Assistive Technology 3 cr**

A theory and practice course designed to develop an advanced understanding of the application of technology for individuals with disabilities as a means to occupation. Particular emphasis will be on evaluating the impact and understanding the theory guiding the use of assistive technology, and developing an understanding of the contexts in which assistive technologies are used.

**REHB 7280 Rehabilitation Theory and Research Design 3 cr**

This is a required course in the MSc Rehabilitation Sciences degree. It focuses on quantitative and qualitative research methodologies and research designs used in rehabilitation research. Theories and frameworks central to rehabilitation research are incorporated throughout.

## Microbiology (MBIO)

### **MBIO 7010 Graduate Seminar in Microbiology 1 3 cr**

Seminars covering areas of interest to the faculty and students in the graduate Microbiology program, and current developments in the broad field of microbiology (including microbial physiology, environmental microbiology, virology, pathogenicity, genetics, molecular biology, biochemistry, biotechnology, and cell culture). Open to all qualified students by permission of the Microbiology department head.

### **MBIO 7020 Graduate Seminar in Microbiology 2 3 cr**

Seminars covering areas of interest to the faculty and students in the graduate Microbiology program, and current developments in the broad field of microbiology (including microbial physiology, environmental microbiology, virology, pathogenicity, genetics, molecular biology, biochemistry, biotechnology, and cell culture). Open to all qualified students by permission of the Microbiology department head.

### **MBIO 7030 Graduate Seminar in Microbiology 3 3 cr**

Seminars covering areas of interest to the faculty and students in the graduate Microbiology program, and current developments in the broad field of microbiology (including microbial physiology, environmental microbiology, virology, pathogenicity, genetics, molecular biology, biochemistry, biotechnology, and cell culture). Open to all qualified students by permission of the Microbiology department head.

### **MBIO 7040 Graduate Microbiology 3 cr**

Topics and current developments in the field of microbiology will be covered. A combined discussion, seminar and written exam format may be used. Inquire at the department for availability.

### **MBIO 7050 Environmental Microbiology 3 cr**

Topics and current developments in the field of environmental microbiology will be covered. A combined lecture, discussion, assignment and seminar format may be used. Inquire at the department for availability.

### **MBIO 7060 Microbial Interactions 3 cr**

Topics and current developments in the field of microbial interactions will be covered. A combined discussion, seminar and written exam format may be used. Inquire at the department for availability.

### **MBIO 7070 Bioprocessing 3 cr**

This course allows students with a background in either biological sciences or engineering to gain an understanding of biochemical engineering processes used to enable important chemical conversions by biological systems. Topics include bioprocessing for production of biofuels, bioplastics, and biopharmaceuticals, upstream processing technologies, fermentation and bioreactor systems, and downstream processing for product recovery. These will be related to present or potential industrial applications. This course is also offered in the Department of Biosystems Engineering as BIOE 7180. MBIO 7070 cannot be held with BIOE 7180.

### **MBIO 7100 Advanced Concepts in Molecular Biology 3 cr**

Recent advances in the molecular basis and control of gene activity; information transfer and molecular evolution. Inquire at the department for availability

### **MBIO 7160 Special Problems in Microbiology 3 cr**

An assignment and conference course to be taken only through consultation with the head of the department. The topics will vary, depending upon student needs and interests, and will include specialized topics not available in regular course offerings.

### **MBIO 7200 Macromolecular Structure Analysis 3 cr**

This course introduces the principles of X-ray crystallography as applied to the study of protein and nucleic acid structure. Protein crystallization and practical aspects of X-ray diffraction, structure determination and analysis are covered. This course is suitable for students with a background in microbiology, biochemistry or chemistry. Inquire at the department for availability.

## Music (MUSC)

### **MUSC 7000 Music History Seminar 3 cr**

The study of the nature of past and current concepts and practices in the discipline of music history

### **MUSC 7050 Bibliography and Research Methods 3 cr**

The techniques of bibliography and research methods in music are studied through research projects in selected areas relevant to each student's major field of study. Skill is developed in the use of primary and secondary sources, expository writing and documentation

### **MUSC 7060 Advanced Diction 1 1 cr**

Advanced training in rules of pronunciation, language use and translations skills in Italian and German. Lab Required.

### **MUSC 7070 Advanced Diction 2 1 cr**

Advanced training in rules of pronunciation, language use and translations skills in French and English. Lab Required.

### **MUSC 7100 Proseminar in Musicology 3 cr**

Survey of historiography and methodological approaches in musicology through critical examination of significant texts. Topics will include the history of the discipline, significant intellectual developments in the field, and key concepts in historical musicology and ethnomusicology.

### **MUSC 7110 Music Theory Seminar 3 cr**

A comprehensive survey of 20th century analytical methodologies of tonal and post-tonal music.

### **MUSC 7120 Seminar in Musicology 3 cr**

Advanced graduate seminar investigating selected topics in musicology and/or music history. The content of this course varies and may be repeated for credit only when the topic subtitle differs from one previously taken.

### **MUSC 7130 Seminar in Ethnomusicology 3 cr**

Advanced graduate seminar investigating selected topics in ethnomusicology. The content of this course varies and may be repeated for credit only when the topic subtitle differs from one previously taken.

### **MUSC 7180 Ensemble 3 cr**

Studio instruction and monitored pre-professional training activities in chamber music leading to the presentation of ensemble performance.

### **MUSC 7200 Proseminar in Music Theory 3 cr**

A survey of methodological approaches in music theory and analysis, related to tonal and post-tonal music. Critical examination of significant texts and analysis of selected repertoire, highlighting connections between analysis and musical performance.

### **MUSC 7210 Seminar in Music Theory and Analysis 3 cr**

Advanced graduate seminar investigating selected topics in music theory and music analysis. The content of this course varies and may be repeated for credit only when the topic subtitle differs from one previously taken.

**MUSC 7240 Music Theory Pedagogy 3 cr**

A practice-based graduate seminar on philosophies and methodologies used in teaching undergraduate music theory. Critical examination of pedagogical resources, teaching techniques, assessment, and curriculum design.

**MUSC 7380 Piano Repertoire Seminar 2 cr**

Advanced study of the repertoire for solo piano up to the early 20th century.

**MUSC 7390 Piano Chamber Music Literature Seminar 2 cr**

Advanced survey of piano chamber music.

**MUSC 7400 Major Practical Study 1 3 cr**

Private studio instruction and monitored pre-professional training activities in one of the following: composition, conducting, or any one of the standard instruments or voice.

**MUSC 7410 Major Practical Study 2 3 cr**

A continuation of Major Practical Study 1.

**MUSC 7490 Advanced Piano Pedagogy 2 cr**

Consideration of advanced approaches to the teaching of styles and techniques through an examination of piano repertoire.

**MUSC 7520 Coaching Skills 2 cr**

Advanced training in philosophies and techniques of vocal coaching including both song and operatic repertoire.

**MUSC 7530 Operatic Piano 2 cr**

Development of skills required of an operatic pianist, including standard Arias, operatic scores, working with conductors and developing orchestral sound. May include participation in community opera events (by audition only).

**MUSC 7600 Advanced Orchestration 3 cr**

Advanced practical work in orchestration for various-sized large ensembles up to and including full orchestra. Detailed study of selected scores and work on individual orchestration projects.

**MUSC 7630 20th to 21st Century Piano Repertoire 2 cr**

Advanced study of piano repertoire since 1900.

**MUSC 7810 Electroacoustic Music 3 cr**

A study of the techniques of electroacoustic music.

**MUSC 7860 Topics in Music 3 cr**

Course orientation will vary according to the needs and interests of students. A specific topic will be chosen for each offering of the course.

## Natural Resource Management (NRI)

**NRI 7070 Readings in Natural Resources Management 1 3 cr**

Student planned research in an area of interest. Course syllabus designed by student and approved by NRI faculty.

**NRI 7080 Readings in Natural Resources Management 2 3 cr**

Student planned research in an area of interest. Course syllabus designed by student and approved by NRI faculty.

**NRI 7110 Field Seminar 3 cr**

Exploration of selected issues in resource and environmental studies in field settings, arranged for groups of students. This course is subject to a field trip fee.

**NRI 7120 Mineral Resources Management and Policy 3 cr**

This course provides an interface between managers and mineral resources, focusing on a selection of practical topics related to minerals and mining. Role of mining activities in the development process; global, national, and provincial distribution of resources; policy issues relating to environmental, economic, and political consequences of non-renewable resource exploitation.

**NRI 7130 Energy Resources Management and Policy 3 cr**

This course covers global energy issues, objectives, strategies, and policies, and the environmental impacts of alternative energy sources; Canadian energy issues, objectives, strategies, and policies. The course stresses the need for a sound understanding of energy issues of fundamental importance, ability to assess alternatives, appreciation of policy strategies and instruments, and the ability to formulate an energy policy for a region.

**NRI 7160 Projects in Natural Resources Management 1 3 cr**

Team research project in an area of interest. Application of problem-solving skills to current issues in natural resources management.

**NRI 7170 Projects in Natural Resources Management 2 3 cr**

Team research project in an area of interest. Application of problem-solving skills to current issues in natural resources management.

**NRI 7180 Sustainable Development and Natural Resources 3 cr**

An examination of the context, concepts, principles, and applications of sustainable development and natural resources at the international, national, and regional levels. Sustainable development is considered from three perspectives - environment, economy, and peoples' well-being. Particular attention is focused upon the implications of sustainable development for natural resources and environmental management. Permission of the instructor required. Students are advised to consult with Institute faculty prior to admission.

**NRI 7182 Sustainability, Economics, and Natural Resources 3 cr**

Economic aspects of sustainability are a critical component of sustainable development. The relationship between environment, economy, and the human dimensions of natural resources comprise the primary focus of the course. Specific topics include environmental/ecological economics, externalities, project assessment, benefit cost analysis, the economics of renewable and non-renewable resource management and economic aspects of globalization.

**NRI 7190 Natural Resources Administration and Law 3 cr**

The objective of this course is to explore the legal frameworks and processes in Canada related to natural resource management. After a general review of the Canadian legal system with a particular focus on administrative law, national and international regulatory frameworks related to the ownership and disposition of specific natural resources are explored. Through class discussion, case studies and presentation, the law governing the use and development of natural resources is examined and critiqued. This course is cross-listed with LAW 3980 "Natural Resources Law."

**NRI 7200 The Role of Information Management in Sustainable Resource Use 3 cr**

This course reviews some of the key concepts of spatial analysis including geographic information systems, remote sensing, image processing, and cartography. The second part of the course is based on the application of these concepts to a resource management issue using a case study approach. Students will gain familiarity with the following software: Idrisi for GIS; Adobe Photoshop for image processing; and Adobe Illustrator for cartography. Classes will have three components, discussion/presentation; lecture; and lab.



**NRI 7222 Human Dimensions of Natural Resources and Environmental Management 3 cr**

The human dimensions of Natural Resources and Environmental Management will be considered through the following thematic units: definitions, history, and paradigms of management; intersection of science with politics, actors, groups and participatory processes; Traditional Ecological Knowledge (TEK), communications and environmental perception; institutions, common theory and adaptive co-management.

**NRI 7232 Ecological Dimensions of Resource and Environmental Management 3 cr**

Current concepts and theories in landscape ecology, plant and animal ecology, life-history strategies, food webs, and population and community ecology are discussed as they relate to management. Common themes throughout the course include the importance of scale, the influence of science on management, adaptive management, and critical thinking.

**NRI 7242 Resource and Environmental Management Policy 3 cr**

The complexity of natural resources and environmental policy formulation, implementation, and analysis is the primary focus. Specific topics include: modern state, government and policy development processes; policy community and stakeholders, and role of pressure and interest groups; policy analysis, research and evaluation are examined from a variety of perspectives. Theory and practice are linked in addressing course objectives.

**NRI 7252 Environmental Management Practice 3 cr**

Environmental Management systems (e.g. 14001 and Natural step), best management practices and project management. Tools: Awareness (Environmental Policy, Environmental Impacts, Risk Assessment, Life Cycle Assessment), Action (Objectives, Targets, Risk Reduction, Indicators, Monitoring, Activities), Advance (Sustainability Report, Triple Bottom Line, Environmental Audit).

**NRI 7262 Master's Thesis Research Seminar 3 cr**

This course will provide a practical introduction to thesis research. The core objective is to assist students in designing their research, including such tasks as considering an appropriate research paradigm, establishing researchable problems, setting goals and objectives, choosing appropriate methods, analyzing data, preparing research proposals, project administration, among other topics. Special attention will be paid to conducting interdisciplinary research in the field of natural resources management.

**NRI 7280 Regional Development in Northern Manitoba 3 cr**

A comprehensive examination of natural resources, socio-economic conditions, and institutional structures forms the basis for an evaluation of long-term sustainability and developmental strategies for Manitoba's North. Permission of the instructor required. Students are advised to consult with Institute faculty prior to admission.

**NRI 7290 Environmental Impact Assessment 3 cr**

Course is a fundamental tool of decision making regarding natural resources and the environment and will provide students with an understanding of how environmental assessment is designed, administered and operates in the field.

**NRI 7302 Conservation Biology and Biodiversity Management 3 cr**

The course explores management and conservation of biodiversity at the genetic, species, and ecosystem levels of biological organization, and from local to global scales. Emphasis is placed on understanding human impacts on biodiversity, critically evaluating the importance of biodiversity conservation, and political, economic, ecological, and philosophical implications and drivers of conservation.

**NRI 7310 Ph.D. Thesis Research Seminar 3 cr**

Designing research and methodology specific to a project; reviewing the philosophy of interdisciplinary approaches to Natural Resources and environmental management and trends in the field; analyzing appropriateness of a project with trends and directions in interdisciplinary research; conducting and administering research; communicating and disseminating results of research.

**NRI 7320 Environmental Risk and Hazards 3 cr**

Environmental risk and hazards are viewed in terms of complex processes of natural systems and social formation. Analysis of processes and events is assisted by theoretical formulation, development of models and examination of site- or type-specific empirical cases.

**NRI 7330 Water Resources: Analysis, Planning and Management 3 cr**

Considering fresh water as a resource, this course initially examines theoretical models and management approaches and practices; water supply requirement, measurements, and management; demand management; and environmental sustainability. The second part encompasses selected aspects of watershed hydrology and management; water and ecosystem health; and river basin management strategies and policies. The final part evaluates institutional arrangements and jurisdictional responsibilities; transboundary issues, opportunities and implications.

**NRI 7340 Environmental Justice and Ecosystem Health 3 cr**

Explores Ecosystem health and environmental justice issues to realize both the possibilities and barriers to sustainability. Risk, resource distribution and power/decision-making are analyzed across race, gender and class differences. Diverse views, theories and methods on community health consider well-being, quality of life, vulnerability and ecological integrity.

**NRI 7350 Study Design and Quantitative Methods for Resource and Environmental Management 3 cr**

This course addresses the quantitative analysis of environmental and natural resources data, emphasizing strong study design to prevent analytical difficulties. Focus is on preparing graduate students in environmental and resources management for dealing with the typical characteristics of environmental data, and for analyses specific to resources data.

**NRI 7360 Qualitative Field Methods for Community-based Resource and Environmental Management 3 cr**

The purpose of this course is to provide students with the knowledge and skills necessary to undertake qualitative research relevant to CBRM. The course will be offered in a studio format with an emphasis on student participation in a research team and the practical application of data collection procedures in field setting.

**NRI 7370 Sustainable Livelihoods, Food Resources and Community Food Security 3 cr**

About one third of a household's total environmental impact is related to food considering all the effects of livestock, agriculture and the food industry on water, soil and air, the overuse of fish resources, transport and packaging waste. This course analyzes sustainable livelihoods and food security/sovereignty in the food system (production, processing, marketing, etc.).

**NRI 7380 Project Management in Natural Resources and Environmental Management 3 cr**

This pass/fail course will provide students with a grounding in the knowledge and skills required to undertake a project within a professional workplace. The core objectives of this course are to encourage critical thinking about project management and develop the skills necessary to formulate, undertake and evaluate a project in the field of NREM.

## Nursing (NURS)

**NURS 7110 Readings in Selected Topics 3 cr**

An intensive readings course for graduate students in nursing. Topics may be selected within the general field of nursing to suit the special needs and research interests of students, for example, transcultural nursing, women's health, or palliative care. Students must have a faculty member agree to advise them before registering.

**NURS 7120 Capstone Project 0 cr**

The course-based option in the Master of Nursing Program culminates in the Capstone Project. The Capstone Project provides students with the opportunity to demonstrate the ability to analyze, interpret, apply, and communicate knowledge acquired throughout their MN Program. Course graded pass/fail.

**NURS 7210 Qualitative Research Methods in Nursing 3 cr**

Students will develop knowledge in qualitative research in nursing and health care, including the philosophical assumptions, theories, ethical issues, designs, methodologies, and knowledge translation strategies that are integral elements of qualitative research.

**NURS 7212 Systematic Reviews: Focus on Qualitative and Observational Studies 3 cr**

This course provides students with the opportunity to learn the essential steps of a systematic review and synthesis of the research literature, with a focus on qualitative and observational studies, to produce reliable evidence for health care practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: NURS 7220 and NURS 7210 or equivalent.

**NURS 7220 Quantitative Research Methods in Nursing 3 cr**

Students will apply the steps of the quantitative research process to address problems identified in nursing practice, education, and/or administration. Students will also analyze the contributions that quantitative research has made to knowledge development in nursing.

**NURS 7320 Philosophy of Nursing Science 3 cr**

Students will analyze nursing's theoretical and scientific evolution, and assess issues related to the role that theory and research play in a practice discipline. Emphasis will be placed upon the evaluation of conceptual and theoretical perspectives applicable to the student's chosen area of focus. May not be held with NURS 7090.

**Equiv To:** NURS 7090

**NURS 7330 Clinical Consolidation 0 cr**

This course provides the student with the opportunity to demonstrate the acquisition and integration of the knowledge, skills and attitudes commensurate with the Nurse Practitioner scope of practice in the clinical setting at the entry-level competency level. This course is evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 7502.

**NURS 7340 Evidence Informed Practice 3 cr**

Students will evaluate evidence-informed practice and its relationship to health care delivery and policy. Basic epidemiological statistics, literature searching, systematic reviews, critical appraisal, implementation science, and health intervention evaluation are integral elements of the course.

**Equiv To:** NURS 7080

**NURS 7352 Leadership in Advanced Practice Nursing 3 cr**

Students will develop their knowledge of leadership in advanced nursing practice. Leadership theory, change management, policy development, ethical leadership, models of practice, and professional development are key elements of the course. These will be evaluated within the context of contemporary health care systems, and the legislative and fiscal environments within leadership in advanced nursing practice takes place. May not be held with NURS 7350.

**Equiv To:** NURS 7350

**NURS 7360 Integrative Focus 6 cr**

Students will integrate previous coursework within their substantive area: clinical practice, education or administration. Students develop self-directed learning goals and the faculty advisor facilitates goal development and provides guidance. Practice in their substantive area is required.

**NURS 7400 Introduction to Advanced Nursing Practice 3 cr**

This course will provide an overview of the Nurse Practitioner curriculum with a focus on core content, concepts, and design of learning activities. This course is graded pass/fail.

**Mutually Exclusive:** NURS 7462

**NURS 7402 Advanced Pathophysiology and Therapeutics in Nurse Practitioner Practice 2 cr**

The student will apply advanced knowledge in the pathophysiology and therapeutics underlying nursing concepts common to primary care conditions, and will integrate this knowledge to provide safe and effective clinical reasoning and prescribing practices within the scope of NP practice.

**NURS 7410 Advanced Health Assessment & Diagnostic Reasoning 2 cr**

This course develops advanced health assessment and critical thinking skills required of advanced practice as a nurse practitioner.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 7400 Introduction to Advanced Nursing Practice.

**Mutually Exclusive:** NURS 7412

**NURS 7412 Advanced Health Assessment 3 cr**

The student will perform advanced health assessments to create differential diagnoses for well clients of all ages in the context of primary care. Emphasis is on diagnostic reasoning and clinical judgment within the Nurse Practitioner scope of practice. Not to be held with NURS 7410 and NURS 7420.

**Mutually Exclusive:** NURS 7410, NURS 7420

**NURS 7420 Clinical Practice 1 1 cr**

Within the Nurse Practitioner scope of practice, this clinical course focuses on advanced nursing practice assessment of clients of all ages in a primary care setting. This course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: NURS 7400 Introduction to Advanced Nursing Practice. Pre- or co-requisite: NURS 7410 Advanced Health Assessment & Diagnostic Reasoning.

**Mutually Exclusive:** NURS 7412

**NURS 7430 Nurse Practitioner 1 6 cr**

Within the Nurse Practitioner scope of practice, the student will develop advanced knowledge and skills as a primary care provider to address health issues affecting clients of all ages related to the HEENT (head, ears, eyes, nose, & throat), respiratory, and cardiovascular systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: NURS 7412.

**NURS 7440 Clinical Practice 2 3 cr**

Within the Nurse Practitioner scope of practice, this clinical course focuses on advanced nursing practice with clients who are experiencing health problems related to the HEENT, respiratory and cardiovascular systems. Course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 7440 Introduction to Advanced Nursing Practice and NURS 7420 Clinical Practice 1.

**Mutually Exclusive:** NURS 7442

**NURS 7442 Clinical Practice 1 3 cr**

This course provides the student with the opportunity to demonstrate the acquisition and integration of the knowledge, skills and attitudes commensurate with the Nurse Practitioner scope of practice in the clinical setting at the beginner level. This course is evaluated on a pass/fail basis. Not to be held with NURS 7440.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or Co-requisite: NURS 7430.

**Mutually Exclusive:** NURS 7440

**NURS 7450 Nurse Practitioner 2 5 cr**

Within the Nurse Practitioner scope of practice, the student will develop advanced knowledge and skills as a primary care provider to address health issues affecting clients of all ages related to the reproductive, hematological, and genitourinary/renal system systems. Pre-requisite: NURS 7430.

**NURS 7460 Community Health: Key Components for Nurse Practitioners 1 cr**

This course furthers theoretical and practical knowledge of key components of community health within primary care. The emphasis of this course is on the community as client.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: NURS 7400 Introduction to Advanced Nursing Practice.

**Mutually Exclusive:** NURS 7462

**NURS 7462 Advanced Practice Nursing in Primary Care Settings 2 cr**

The student will examine advanced nursing care in primary care settings, including population health needs, the determinants of health, ethical practice, cultural safety and social justice. Emphasis will be on the development and evaluation of evidence-informed interventions to meet the health needs of Manitobans. Not to be held with NURS 7400 and NURS 7460.

**Mutually Exclusive:** NURS 7400, NURS 7460

**NURS 7470 Nurse Practitioner 3 5 cr**

Within the Nurse Practitioner scope of practice, the student will develop advanced knowledge and skills as a primary care provider to address health issues affecting clients of all ages related to the neurological, metabolic and gastro-intestinal systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 7450.

**NURS 7480 Clinical Practice 3 4 cr**

Within the Nurse Practitioner scope of practice, this clinical course focuses on advanced nursing practice with clients who are experiencing health problems related to the gastrointestinal, hematology, genitourinary/renal, neurology, metabolic, and reproductive systems. Course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 7400 Introduction to Advanced Nursing Practice and NURS 7440 Clinical Practice 2.

**Mutually Exclusive:** NURS 7482

**NURS 7482 Clinical Practice 2 4 cr**

This course provides the student with the opportunity to demonstrate (the acquisition and integration of the knowledge, skills and attitudes commensurate with the Nurse Practitioner scope of practice in the clinical setting at the intermediate level. This course is evaluated on a pass/fail basis. Not to be held with NURS 7480.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 7442, pre or co-requisite: NURS 7470.

**Mutually Exclusive:** NURS 7480

**NURS 7490 Nurse Practitioner 4 5 cr**

Within the Nurse Practitioner scope of practice, the student will develop advanced knowledge and skills as a primary care provider to address health issues affecting clients of all ages related to mental health, and the musculoskeletal and dermatological systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: NURS 7470.

**NURS 7500 Clinical Practice 4 4 cr**

Within the Nurse Practitioner scope of practice, this clinical course focuses on advanced nursing practice with clients who are experiencing health problems related to musculoskeletal, dermatological and mental health issues. Course is graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: NURS 7400 Introduction to Advanced Nursing Practice and NURS 7480 Clinical Practice 3.

**Mutually Exclusive:** NURS 7502

**NURS 7502 Clinical Practice 3 4 cr**

This course provides the student with the opportunity to demonstrate the acquisition and integration of the knowledge, skills and attitudes commensurate with the Nurse Practitioner scope of practice in the clinical setting at the proficient level. This course is evaluated on a pass/fail basis. Not to be held with NURS 7500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 7482. Pre or co-requisite: NURS 7490.

**Mutually Exclusive:** NURS 7500

**NURS 8002 Advanced Philosophy of Nursing Science 3 cr**

Through a critical evaluation of relevant concepts, paradigms, theories, and conceptual frameworks in science and nursing, students will advance their thesis endeavors.

**NURS 8010 Advanced Qualitative Research for Nursing 3 cr**

This course will advance the student's critical understanding of the philosophical foundations and application of qualitative research methods in nursing and health care. Students will engage in a critical examination of the epistemological, ethical and methodological underpinnings of qualitative research. The implications of qualitative research, and its advancement and impact on policy development in nursing and health care are integral elements of the course.

**NURS 8020 Advanced Knowledge Translation & Health Care Policy 3 cr**

Through critical analysis of knowledge translation and health policy frameworks, students will advance their knowledge of evidence-to-practice strategies that maximize research uptake in interprofessional, clinical, and political contexts. Students will draw on the course concepts to inform their area of research.

**NURS 8030 Doctoral Student Seminars I 0 cr**

A dynamic seminar series for first year doctoral students to stimulate and facilitate academic discourse, professional socialization, proposal/thesis/development, funding opportunities and integration into the professional, university and national/international community of nursing scientists and their collaborative partners. This course is evaluated on a pass/fail basis.

**NURS 8040 Doctoral Student Seminars II 0 cr**

A dynamic seminar series for second year doctoral students to stimulate and facilitate academic discourse, professional socialization, proposal/thesis/development, funding opportunities and integration into the professional, university and national/international community of nursing scientists and their collaborative partners. This course is evaluated on a pass/fail basis.

**NURS 8220 Advanced Quantitative Research Design & Methods in Nursing and Health Care 3 cr**

This course prepares doctoral students in nursing and other health related programs to expand their knowledge and skills in advanced level quantitative design and methods. Emphasis in the course is on critically appraising issues specific to the design, measurement, and analysis of data for advanced level quantitative studies in nursing and healthcare. Students will also analyze ethical and policy issues related to quantitative research designs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: NURS 7220 or equivalent; pre- or co-requisite: CHSC 7810 statistics course or equivalent.

## Occupational Therapy (OT)

**OT 6100 Human Determinants of Occupational Performance 6 cr**

Students study the anatomical, physiological, biomechanical, and psychosocial factors that underlie the physical, cognitive and affective components of human capacities. Content is presented in the context of understanding the relationship between human capacities and occupational performance, the ability to carry out activities and tasks of self-care, productivity and leisure throughout the lifespan.

**OT 6110 Fundamentals of Occupational Therapy Theory 3 cr**

Students study the foundational values and beliefs of occupational therapy, the fundamentals of occupational therapy theory, and the relationship between occupation, health and well-being. Processes and approaches that guide practice with clients of various ages and in a variety of settings are introduced.

**OT 6122 Foundations of Health and Well-being 3 cr**

This course explores foundational knowledge in topics essential for understanding the concepts of and influences on health and well-being. Students engage in theory based and practical activities to understand models of disability, concepts of health, social determinants of health, cultural competence and safety, power and privilege. Course evaluated on a pass/fail basis.

**OT 6130 Occupational Therapy Practice Skills 1 3 cr**

Through instruction, case illustration and practice laboratory sessions students are introduced to practice skills related to the occupational therapy process. Occupational therapy skills and approaches used to identify occupational performance issues are introduced and practiced. Basic assessment of physical, cognitive, and affective performance components are taught. Students participate in problem solving and basic interventions around issues of occupational performance.

**OT 6142 Professionalism and Enabling Occupation 7 cr**

This course introduces the principles of professionalism and therapeutic strategies to promote enabling occupations, collaborative partnerships and client-centred practice. Guided by professional documents, emphasis is placed on reflective practice, communication, and ethical and legal dimensions of practice.

**OT 6190 Fieldwork Preparation 1 cr**

This course provides foundational knowledge and skills required to participate effectively in the fieldwork component of the Occupational Therapy Program. Course evaluated on a pass/fail basis.

**OT 6200 Basic Fieldwork 4 cr**

Students are placed in practice settings for four weeks of fieldwork experience under the supervision of a registered occupational therapist(s). Experiences are offered in a wide variety of practice settings. Course evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OT 6190.

**OT 6300 Analysis of Occupation 4 cr**

Students examine the relationships between components of human performance and engagement in occupations. Students analyze self-care, productivity and leisure occupations to identify physical, cognitive and affective components required for function. Adapting and grading principles and methods are applied. Course evaluated on a Pass/Fail basis.

**OT 6310 The Environment and Occupational Performance 4 cr**

An examination of physical, social, cultural and institutional aspects of the environment and their relationship to occupational performance throughout the life span. Students will begin to identify the environment in terms of enablers and obstacles to function for individuals with variable capacities.

**OT 6320 Health Conditions and Occupational Performance 4 cr**

An introduction to diseases, disorders and impairments as barriers to human occupational performance including an introduction to occupational therapy management approaches to enabling function.

**OT 6330 Occupational Therapy Practice Skills 2 4 cr**

This course builds on OT Practice Skills 1. With a focus on practice skills related to the occupational therapy process, students gain further practice in assessment of occupational performance issues and physical, cognitive, and affective performance components. Students are introduced to assessment of environmental factors that influence occupational performance and participate in problem solving and interventions around occupational performance issues.

**OT 6352 Foundations of Evidence-informed Occupational Therapy 4 cr**

Students are introduced to research principles and methods used to support evidence-informed occupational therapy. Students learn to critically appraise qualitative and quantitative research to answer clinical questions and apply evidence to occupational therapy.

**OT 6400 Intermediate Fieldwork 1 8 cr**

Students are placed in practice settings for eight weeks of fieldwork experience under the supervision of a registered occupational therapist(s). Experiences are offered in a wide variety of practice settings. Course evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OT 6200.

**OT 7542 Professionalism and Leadership in Enabling Occupation 1 4 cr**

Building on the Professionalism and Enabling Occupation course, emphasis is placed on leadership using a client-centred, culturally safe and equity based approach. Integrated topics are addressed: advanced communication skills; leadership in practice and in the profession; and program development and evaluation.

**OT 7560 Occupational Therapy Process 1 6 cr**

Working in small group tutorials and using problem-based learning methods, students apply the occupational therapy process to selected learning scenarios within a variety of service delivery models, professional roles and practice environments.

**OT 7572 Occupational Therapy Practice Skills 3 6 cr**

Building on knowledge and skills learned in Occupational Therapy Skills 1 & 2, students are introduced to advanced concepts, theories and models which guide client-centred occupational therapy. Students apply theory to practice and continue to develop skills for evaluation and intervention of occupational performance issues.

**OT 7600 Intermediate Fieldwork 2 8 cr**

Students are placed in practice settings for eight weeks of fieldwork experience under the supervision of a registered occupational therapist(s). Experiences are offered in a wide variety of practice settings. Course evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OT 6400.

**OT 7742 Professionalism and Leadership in Enabling Occupation 2 4 cr**

This course builds upon previous Professionalism courses and emphasizes leadership in practice using a client-centred, culturally safe and equity based approach. Integrated sections are addressed: Leadership in Program Development and Evaluation, Client-centred Practice in Macro Environments, Leadership in Team Knowledge Translation, and Transition to Practice.

**OT 7752 Critical Inquiry Research Project 6 cr**

Working with an assigned faculty advisor, students complete a research study relevant to occupational therapy. Students critique the literature, plan and conduct a capstone project, and relate their findings through a process of knowledge translation.

**OT 7760 Occupational Therapy Process 2 6 cr**

Building on knowledge and skills learned in Occupational Therapy Process 1, students work in small group tutorials and use problem-based learning methods to apply the occupational therapy process to selected learning scenarios across the continuum of community health and new/emerging areas of practice.

**OT 7772 Occupational Therapy Practice Skills 4 6 cr**

Building on knowledge and skills learned in Occupational Therapy Practice Skills 1, 2 and 3, students evaluate and apply concepts, theories and models of client-centred occupational therapy. Students develop skills to select, justify, perform and interpret evaluations and interventions to address occupational performance issues.

**OT 7800 Advanced Fieldwork 6 cr**

Students are placed in practice settings for a six weeks of fieldwork experience under the supervision of a registered occupational therapist(s). Experiences are offered in a wide variety of practice settings. Course evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OT 7600 and all MOT academic courses.

## Operations Management (OPM)

**OPM 7120 Operations and Supply Chain Management 3 cr**

Operations and Supply Chain Management focuses on the management of processes that transform inputs into valuable outputs within supply chains. This case method course will allow students to learn systematic ways of seeing, thinking, and managing key related processes.

**OPM 7130 Supply Chain Sustainability 3 cr**

This course takes a broad look at supply chain sustainability. Supply chain management includes logistics/transportation, purchasing, and a few aspects of marketing. Sustainability is a multi-dimensional concept, spanning environmental, social and economic issues. Delivery is via interactive lectures, small group discussions, and writing/presenting a sustainability term paper.

**OPM 7140 Seminar in Supply Chain Management 3 cr**

This graduate seminar addresses key subject areas in supply chain management, primarily via the review of recent academic literature in the field. The material is approached from an overall management perspective, with little emphasis on specific operational or mathematical techniques.

**OPM 7150 Operations Strategy 3 cr**

This course examines issues of operations strategy. Representative topics include the development of operational capabilities for competitive advantage, capacity strategy, operations improvement, vertical integration and outsourcing, managing operating networks, and new process development.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OPM 7120 or former OPM 6090.

**OPM 7160 Purchasing and Supply Management 3 cr**

Purchasing and supply management are sometimes considered equal yet separate areas of business; and sometimes they are considered to be interchangeable. Purchasing is now one of the key strategic elements of an organization. The broad goal of the course is for students to better understand the strategic side of purchasing, as well as tactical approaches that support the strategy. The course builds from an initial discussion of strategic and tactical purchasing to a consideration of key processes that support the strategic goal and tactical imperative.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OPM 7120 (or the former OPM 6090).

**OPM 7170 Project Management 3 cr**

Topics covered in this course will include project initiating, planning, executing, monitoring and controlling, and closing. Knowledge areas such as scope, schedule, cost, risk, and HR management will be discussed. The course will make use of industrial projects for developing a strong planning and analytical approach pertinent to project management.

**OPM 7180 Sustainable Lean Management 3 cr**

Sustainable Lean Management will provide students with a basic understanding of the components of Sustainable Lean Management in the context of Profit, People and Plant (the triple bottom line) and the opportunity to practically apply the principles, methods and tools of Sustainable Lean Management to real problems. Sustainable Lean Management, at its core, is about systematically identifying the strategic problems of an organization and methodically solving those problems while simultaneously growing and developing the potential of people to the benefit of all stakeholders of the enterprise.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OPM 7120.

**OPM 7300 Topics in Advanced Production and Operations Management 3 cr**

A study of recent developments in production systems and management. Topics include systems design, plant location and layout, inventory systems planning and control.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: OPM 7120 (or OPM 6090).

## Oral Biology (ORLB)

**ORLB 7090 Pharmacology and Therapeutics 3 cr**

A combined lecture and seminar course on the pharmacological basis of therapeutics. Special attention will be paid to drugs used commonly in the practice of dentistry, their side effects and their interaction.

**ORLB 7100 Oral Microbial Ecology 3 cr**

Study of principles of ecology in relation to the various ecosystems in the oral cavity. In depth examination of the taxonomic relationships of oral bacterial species. Emphasis will be placed on the growth and metabolic activities of oral bacteria which lead to successful colonization of the mouth.

**ORLB 7110 Infectious Diseases and the Oral Cavity 3 cr**

The description of the aetiology of microbial infections in the mouth and infections elsewhere in the body which involve oral bacteria. The control of such infections by vaccines, antibiotics and antimicrobial drugs. Treatment of infections in the immuno-suppressed, post-operative infections and nosocomial infections. The relationships of host immune system to the oral flora.

**ORLB 7120 Special Problems in Oral Biology 3 cr**

Each student will be required to carry out a minor research project in an area of oral biology other than that of their thesis work. The results of this project will be presented in a seminar and submitted as a written report.

**ORLB 7130 Macromolecular Interactions of Connective Tissue in Health and Disease 6 cr**

A comprehensive study of the macromolecular constituents of connective tissue, of their synthesis, metabolism, macromolecular interaction in health and disease, and of their regulatory mechanisms.

**ORLB 7140 Cell Membrane and Cell Signaling 3 cr**

This course will cover the structure and function of cell membrane receptors. The mechanisms and regulation of membrane coupled signal transduction pathways including those stimulated by oral tastants and drugs will also be covered.

**ORLB 7150 MECH ORAL & MAX DIS 3 cr**

This course deals with the molecular pathology of the oral cavity and maxillofacial complex.

**ORLB 7162 Neurophysiology of Pain 3 cr**

This course examines the peripheral and central mechanisms associated with pain. Endogenous pain control systems and the pharmacological treatment of pain will also be covered.

**ORLB 7180 Recent Advances in Oral Biology 6 cr**

This course is given by staff in the form of lectures and tutorials. Additional lectures may be given by visiting scientists. Students are expected to familiarize themselves with the relevant literature and are examined for an in-depth appreciation of the topics covered.

**ORLB 7190 Communication Skills in Dental Research 3 cr**

A course to develop written, visual and oral communication skills in scientific and clinical disciplines related to dentistry.

## Pathology (PATH)

**PATH 7010 Investigative Pathology 6 cr**

The student will complete a supervised project in the field of anatomic and/or clinical pathology, the results to be submitted in an acceptable report. The student will be examined on his/her knowledge in the field relating to his project.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PATH 7020 or departmental consent.

**PATH 7032 Pathologists Assistant Field Practicum I 4 cr**

(Formerly PATH 7030) The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.

**PATH 7034 Pathologists Assistant Field Practicum II 4 cr**

The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PATH 7032.

**PATH 7036 Pathologists Assistant Field Practicum III 4 cr**

The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PATH 7034.

**PATH 7038 Pathologists Assistant Filed Practicum IV 4 cr**

The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PATH 7036.

**PATH 7042 Pathologists Assistant Field Practicum V 4 cr**

The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PATH 7038.

**PATH 7120 Diseases of Human Organ Systems 1.5 cr**

(Formerly PATH 7020) The course introduces the student to the pathology of major organ systems of the human body via lectures, assigned readings and discussion, and oral presentations. The course will provide coverage of disease mechanisms and the pathology of specific organ systems including: gastrointestinal, genitourinary, reproductive, breast, hematology, cardiovascular and respiratory systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: IMED 7212.

**PATH 7130 Clinical Pathological Correlations 1 1.5 cr**

(Formerly: PATH 7020) The course provides an opportunity to synthesize clinical skills and theoretical knowledge in the identification, classification, and staging of cancer with emphasis on Primary Tumor (T); Regional Lymph Nodes (N); Distant Metastasis (M) TNM staging. Course graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: IMED 7212.

**PATH 7140 Clinical Pathological Correlations 2 1.5 cr**

The course provides an opportunity to synthesize clinical skills and theoretical knowledge in the identification, classification, and staging of cancer with emphasis on Primary Tumor (T); Regional Lymph Nodes (N); Distant Metastasis (M) TNM staging. Course graded pass/fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PATH 7130.

## Peace and Conflict Studies (PEAC)

**PEAC 7010 Interpersonal Communication, Problem-Solving, and Trust-building 3 cr**

Examines the role of language and communication in conflict and conflict resolution. These theoretical and practice perspectives are fundamental to the field of conflict analysis and resolution/peace studies. The role of power, gender, and culture in communication and conflict are reviewed. Theories and practical skills for successful communication, collaborative problem-solving, and trust-building are explored. This class is relevant for addressing conflicts within diverse settings.

**PEAC 7020 Theories of Conflict and Conflict Resolution 3 cr**

Provides an overview of the theoretical foundations of the interdisciplinary field of conflict analysis and resolution, examining macro and micro theories regarding the causes of conflicts and approaches to their resolution. Conflicts are complex and take shape on multiple, interlocking planes. The course focuses on theory and the implications of these theories for practice.

**PEAC 7030 International Conflict Resolution and Peace-building 3 cr**

Examines international conflict resolution and post-accord peace-building. Theories regarding the causes of international conflict are reviewed. Approaches for just and enduring resolution to international conflicts, building peace, and the promotion of a global civil society are explored.

**PEAC 7040 Violence Intervention and Prevention 3 cr**

Examines different definitions and types of violence from the interpersonal to the global levels (e.g., family violence, youth and gang violence, violence in the workplace, hate crimes, and war). Theories of human aggression and causes of violence, as well as approaches for violence intervention and prevention are reviewed. Theories of nonviolence are explored.

**PEAC 7050 Intercultural Conflict Resolution and Peace-Building 3 cr**

Examines the role of socially constructed identities and meaning in intergroup conflicts in a variety of contexts. Culture is broadly conceived to encompass a variety of identities, including differences along racial, ethnic, religious, gender, and class lines. Various models for resolution are reviewed. The nature of and ethics of intervention in cultures other than one's own are explored.

**PEAC 7060 Special Topics in Peace and Conflict Studies 1 3 cr**

The topics addressed in this course will vary depending on faculty expertise and student need. Topics could include but will not be restricted to: "Gender and Conflict;" "Storytelling: Identity, Power and Transformation;" "Ethnic Conflict Analysis and Resolution;" "Children and War;" "Peace Education;" "Transformational Conflict Resolution;" "Role of Religion in Conflict and Peace."

**PEAC 7070 Special Topics in Peace and Conflict Studies 2 3 cr**

The topics addressed in this course will vary depending on faculty expertise and student need. Topics could include but will not be restricted to: "Gender and Conflict;" "Storytelling: Identity, Power and Transformation;" "Ethnic Conflict Analysis and Resolution;" "Children and War;" "Peace Education;" "Transformational Conflict Resolution;" "Role of Religion in Conflict and Peace."

**PEAC 7110 International Human Rights and Human Security 3 cr**

This course examines the shift in focus from state security to people. Human security is a bridge between the inter-related fields of development, human rights and conflict resolution. The course explores how these efforts at exploring the human condition can best be understood and applied.

**PEAC 7120 Peacebuilding and Social Justice 3 cr**

This course examines the role of peacebuilding in short term crisis intervention and longer term conflict transformation processes. Social justice is addressed at the systems level as it impacts the achievement of sustainable reconciliation. Crisis management in conflict settings, the root causes of conflict and its prevention are explored.

**PEAC 7122 Dispute Systems Design 3 cr**

Examines the role of conflict resolution within organizations and diverse settings (workplace, schools, communities, multiparty conflicts, international conflicts). The course focuses on analyzing how conflict is built into organizational structures and systems, and redesigning the system to produce effective human centres relations.

**PEAC 7124 Gender, Conflict and Peacemaking 3 cr**

Examines the role of gender in conflict and peacemaking in areas of armed conflict. Women tend to be impacted and respond to conflict in ways different from men. The course explores the theoretical and practical contributions of women activists, peace researchers and educators have made toward understanding the role of gender

**PEAC 7126 Ethnic Conflict Analysis and Resolution 3 cr**

Examines theories of ethnic conflict and the intervention methods used by states, international organizations and conflict resolution and peace practitioners to analyze, manage and resolve ethnic conflicts. Case studies are used to explain conflict analysis and resolution and peacebuilding.

**PEAC 7128 Storytelling: Identity, Power and Transformation 3 cr**

Examines the role of narrative and storytelling in conflict resolution, theory, research and practice. The relationship between language and power and destructive or constructive relationships is explored. The use of storytelling-based projects as a means of peacebuilding and community building are explored.

**PEAC 7230 Gender, Conflict and Peacemaking 3 cr**

Examines the role of gender in conflict and peacemaking in areas of armed conflict. Women tend to be impacted and respond to conflict in ways different from men. The course explores the theoretical and practical contributions women activists, peace researchers and educators have made toward understanding the role of gender.

**PEAC 7240 Indigenous World Views and Approaches to Peacebuilding 3 cr**

Examines indigenous models of peacebuilding from community level to national level. Emphasis is placed on restorative processes fundamental to cohesive relationships with others. This is achieved through ceremony, empathy, compassion, conflict resolution and restoration part of the peacebuilding models of indigenous peoples.

**PEAC 7250 Restorative and Social Justice 3 cr**

Examines the principles of restorative justice, the theoretical foundations of the restorative justice movement, and the development of new restorative justice programs. Restorative justice healing, re-integration and reconciliation are explored in a variety of contexts, including colonized and postcolonial indigenous communities.

**PEAC 7260 Peace Education 3 cr**

Examines the role of peace education as students seek to make sense of complicated and perilous events in their society. The course provides students with a background in the area of social justice, peace studies and conflict resolution.

**PEAC 7280 Children and War 3 cr**

Examines the impact of international war, civil war, and genocide on young people. The role of gender, class, and culture are explored; as well as the role of peacemakers, governments, and communities for addressing these issues. The implications for both the political socialization of children as well as how young people may be actors in political solutions will be explored.

**PEAC 7300 Special Topics 1: Children and War 3 cr**

Examines the impact of international war, civil war and genocide on children. Today's children are tomorrow's world citizens, and their events will shape the future in unforeseeable ways. Young people are socio-economic and political agents, expressive through violence, peace work and other creative forms.

**PEAC 7400 Special Topics 2: Directed Readings in Peace and Conflict Studies 3 cr**

This course is designed for MA students in Peace and Conflict Studies. Course requirements including readings and assignments will be selected and developed by the Professor in conjunction with the students' interests.

**PEAC 7500 Practicum 3 cr**

Students develop awareness of theoretical knowledge, practice skills and abilities necessary for intervention in community, group and organizational conflicts at a practicum site. Students integrate theory and experiential learning into practice to analyze the conflict, during the intervention, and post intervention reflection.

## Pharmacology (PHAC)

**PHAC 7042 Cardiovascular Regulation and Drug Action 2 1.5 cr**

The normal homeostatic regulation of the cardiovascular system, its modification by drugs, and the sites and characteristics of drug actions affecting the cardiovascular system.

**PHAC 7062 Drug Distribution, Metabolism and Excretion A 1.5 cr**

The mechanisms by which the body handles the absorption, distribution and elimination of drugs and the impact this has on biological response.

**PHAC 7064 Drug Distribution, Metabolism and Excretion B 1.5 cr**

The mechanisms influencing the absorption, distribution and elimination of drugs from the body and their impact on pharmacodynamic and pharmacokinetic properties.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHAC 7062 or its equivalent.

**PHAC 7110 Topics in Pharmacology 6 cr**

(Formerly 089.711) Short research projects on various properties and effects of newer drugs. Presentation of oral and written reports by graduate students on research conducted. Open only to graduate students in Pharmacology.

**PHAC 7136 General Pharmacology 3 cr**

General pharmacological principles including pharmacodynamics of the more important groups of drugs, the factors which control and modify their effects, and the basis for rational selection and administration of drugs in the treatment of common diseases.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of department.

**PHAC 7162 Neuropharmacology 1.5 cr**

A broad sample at the graduate level of the pathophysiology, pharmacological treatments, and current research related to common neurological disorders. These will be didactic lectures followed by discussion of current topics in neuropathology and neuropharmacology.

**PHAC 7164 Pharmacology Grant Writing Course 1.5 cr**

The objective of this course is to teach students how to formulate, write, and present a professional research grant on the subject of their pharmacology graduate research. Students will be required to write and present a research grant under the close supervision of the course director.



**PHAC 7180 Recent Advances in Pharmacology 3 cr**

Lectures given by staff, followed by group discussions on current research, new developments in drugs and re-evaluation of currently employed drugs, their mechanism of action, etc. Three hours per week both terms. Open only to graduate students in Pharmacology.

**PHAC 7190 Pharmacokinetics of Drug Disposition 3 cr**

Lectures and problem-solving sessions directed at appropriate modelling of the disposition of drugs in the body.

**PHAC 7212 Clinical Trial A 1.5 cr**

Evaluate the essential elements of clinical trials as the basis for determining the potential value of interventions advocated for the treatment of diseases in humans. Topics include designing a study question, types of clinical trial designs, methods for randomization, sample size calculations, and ethics. The format will include assigned readings, lectures, discussion and assignment preparation.

**PHAC 7214 Clinical Trial B 1.5 cr**

Evaluate the essential elements of clinical trials as the basis for determining the potential value of interventions advocated for the treatment of diseases in humans. Topics include recruitment, baseline assessment, reporting morbidity and mortality, data collection, and survival analysis. While it is suggested that PHAC 7212 is taken before PHAC 7214 since there is a natural progression of information, it is not required that both courses are taken.

**PHAC 7222 Molecular Pharmacology 2 3 cr**

Lectures, seminars and selected readings on the mechanism of action of therapeutic and recreational drugs. This course covers 6 major themes: G-protein coupled receptors; Ion channels; Transporters; Lipid signaling; Tyrosine kinase receptors and tyrosine kinase-associated receptors.

**PHAC 7230 Fundamental in Pharmacology for Health Care I 3 cr**

This course will build on foundational knowledge of human physiology and examine basic pharmacokinetic (drug metabolism) and pharmacodynamic (drug action) principles of specific drug classes related to the autonomic nervous system, cardiovascular system (edema, hypertension, arrhythmia, angina, blood clotting, heart failure, hyperlipidemia), diabetes, thyroid, inflammation and pain. Remaining major drug classes will be covered in PHAC 7240. Students may take one or both courses. Taking both courses must be done in the same academic year (Sept to April) or with permission from the Department Head. Course delivery will involve lectures followed by clinical case-based tutorials.

**PHAC 7240 Fundamentals in Pharmacology for Health Care II 3 cr**

This course will build on foundational knowledge of human physiology and examine basic pharmacokinetic (drug metabolism) and pharmacodynamic (drug action) principles of specific drug classes related to the central nervous system (depression, psychosis, anxiety, epilepsy, movement disorders (e.g. Parkinson's)), infection (bacterial, viral, fungal), cancer, asthma, allergy, osteoporosis, gastrointestinal system, reproduction and special topics (pregnancy, geriatrics, drugs of abuse). Remaining major drug classes will be covered in PHAC 7230. Students may take one or both courses. Taking both courses must be done in the same academic year (Sept to April) or with permission from the Department Head. Course delivery will involve lectures followed by clinical case-based tutorials.

## Pharmacy (PHRM)

**PHRM 7080 Biopharmaceutics and Relevant Pharmacokinetics 3 cr**

Lecture course on biopharmaceutics with particular emphasis on the application of pharmacokinetic principles in the design of conventional and sustained-release drug dosage forms, assessment of drug bioavailability, and selection of dosage regimens.

**PHRM 7102 Pharmacoepidemiology 3 cr**

This course will enable students to develop expertise in study designs applicable to pharmacoepidemiology. Sources of data, including automated databases, analytical methodologies and special issues in pharmacoepidemiology will be discussed.

**PHRM 7120 Medical and Scientific Writing 3 cr**

Lectures and exercises on the preparation of medical and scientific manuscripts, including papers for publication or oral presentation, progress reports, reviews, short papers, grant applications and similar projects.

**PHRM 7130 Novel Drug Delivery Systems 3 cr**

Advanced course dealing with the role of drugs and drug products in the treatment of disease with emphasis on pharmaceuticals and physical pharmacy. Current and future status of drug delivery systems, their design and evaluation will also be examined.

**PHRM 7160 Pharmacy Seminar 1 MSc 3 cr**

Seminars and lectures on selected topics in pharmacy. Students are required to present both oral and written reports on research topics.

**PHRM 7170 Pharmacy Seminar 2 MSc 3 cr**

Lectures and group discussions on recent developments in pharmaceutical fields. Students are required to give an oral presentation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHRM 7160.

**PHRM 7180 Pharmaceutical Implications of Biotechnology 3 cr**

Introduction to biotechnology in pharmaceutical sciences and pharmacy. Students will be introduced to concepts from molecular biology, immunology, biotechnology and pharmacogenomics. Implications of biotechnology in pharmaceutical biopharmaceutical research.

**PHRM 7202 Advanced Topics in Pharmacoepidemiology - Level 1 3 cr**

Reserved to M.Sc. students in Pharmacy seeking a concentration in Pharmacoepidemiology. Students must have obtained approval for their thesis proposal in pharmacoepidemiology before enrolling in PHRM 7202. Advanced topics regarding study design and analytical methodology in pharmacoepidemiology are discussed. Prerequisite PHRM 7102 (or equivalent).

**PHRM 7260 Pharmacy Seminar 1 PhD 3 cr**

Seminars and lectures on selected topics in pharmacy. Students are required to present both oral and written reports on research topics.

**PHRM 7270 Pharmacy Seminar 2 PhD 3 cr**

Lectures and groups discussions on recent developments in pharmaceutical fields. Students are required to give an oral presentation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHRM 7260 or PHRM 7160 if the student direct transfers from M.Sc.

**PHRM 7302 Advanced Topics in Pharmacoepidemiology - Level 2 3 cr**

Reserved to Ph.D. students enrolled in Pharmacy and seeking a concentration in Pharmacoepidemiology. Students must have obtained approval for their thesis proposal in pharmacoepidemiology before enrolling in PHRM 7302. Advanced topics regarding study design and new analytical methodology in pharmacoepidemiology are discussed. Prerequisite PHRM 7102 (or equivalent).

## Philosophy (PHIL)

**PHIL 7110 Graduate Seminar 6 cr**

Not currently offered.

**PHIL 7120 Graduate Reading 1 3 cr**

A reading course for graduate students in philosophy. Subject matter may be arranged to suit the special needs and interests of students; the course might, for example, be devoted to modal logic, or the free will problem, the ontological argument, phenomenology, the philosophy of W.V. Quine, etc. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7130 Graduate Reading 2 3 cr**

A reading course for graduate students in philosophy, similar to PHIL 7120. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7140 Epistemology 3 cr**

A study of selected topics in epistemology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7160 Metaphysics 3 cr**

A study of selected topics in metaphysics. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7180 Graduate Reading 3 3 cr**

A reading course for graduate students in philosophy, similar to PHIL 7120. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7190 Graduate Reading 4 3 cr**

A reading course for graduate students in philosophy, similar to PHIL 7120. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7200 Topics in Ethics 1 3 cr**

Basic topics in moral theory. Readings will include contemporary articles and books. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7210 Topics in Ethics 2 3 cr**

Basic topics in moral theory. Readings will include contemporary articles and books. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7230 Topics in Logic and the Philosophy of Logic 2 3 cr**

Selected topics in mathematical logic, inductive logic, the philosophy of logic, and the methodology of the natural and formal sciences. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PHIL 7400 Independent Research Paper 1 0 cr**

This course is for students taking Option B in the M.A. program in Philosophy. The student will supply a paper with original research under the guidance of the research paper advisor. Course graded Pass/Fail.

**PHIL 7410 Independent Research Paper 2 0 cr**

This course is for students taking Option B in the M.A. program in Philosophy. The student will supply a paper with original research under the guidance of the research paper advisor. Course graded Pass/Fail.

## Physical Therapy (PT)

**PT 6100 Foundations of Physical Therapy 5 cr**

Through lecture, labs and seminars, students are introduced to the theory of physical therapy knowledge, skills, attitudes and behaviours. Course content includes conceptual frameworks, principles surrounding safe and ethical professional conduct in the current health care environment. Course is graded pass/fail.

**PT 6110 Foundations to Evidenced-Based Practice 1 1 cr**

Students will learn to critically evaluate the evidence for physical therapy practice and rehabilitation and will be challenged to become involved in contributing to the evidence for their future practice.

**PT 6124 Physical Therapy and Hospital Based Care 4 cr**

Through lecture, tutorial and laboratory sessions, students learn the role of physical therapy in hospital settings. Students will learn knowledge, skills and behaviours which support physical therapy assessment and treatment.

**PT 6130 Applied Sciences for Physical Therapy 1 4 cr**

Through lecture, tutorial and laboratory sessions, students will learn the application of exercise and pain physiology to body structure and function and how it relates to activity and participation.

**PT 6140 Neuromusculoskeletal Anatomy for Physical Therapy 3 cr**

Through lecture and laboratory sessions, students learn detailed musculoskeletal anatomy of the upper and lower limbs, head, neck and trunk. Bones, joints, ligaments, muscles, nerves and vessels are included, and integration of structure and function is emphasized. Students are also introduced to the anatomy of the spinal cord and peripheral nerves.

**PT 6221 Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 1 6 cr**

Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for upper quadrant neuromusculoskeletal conditions across the lifespan.

**PT 6224 Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 2 6 cr**

Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for lower quadrant neuromusculoskeletal conditions across the lifespan.

**PT 6230 Applied Sciences for Physical Therapy 2 6 cr**

Through lecture, tutorial and laboratory sessions, students will learn the application of anatomy, biomechanics, physiology, pathology and exercise to the neuromusculoskeletal system. Scientific and medical theoretical basis for physical therapy intervention will be covered.

**PT 6250 Integrated Practice for Neuromusculoskeletal Conditions 3 cr**

Students integrate relevant information for physical therapy management of neuromusculoskeletal conditions through problem-based learning. Case studies reflect current key indicator conditions from the Entry-to-Practice Physiotherapy Curriculum: Content Guidelines for Canadian University Programs.

**PT 6260 Physical Therapy Practice and Professional Issues 1 3 cr**

Through lecture and tutorial sessions, students will address various professional topics to develop their knowledge concerning of business, ethical and legal principles for physical therapy practice.

**PT 6291 Neuromusculoskeletal Clinical Education 1 6 cr**

First of two six-week experiential learning periods in the clinical community, providing opportunity for students to assess and treat clients with musculoskeletal disorders under supervision. Includes 3-4 hours of preparatory sessions prior to the placements, and 3-4 hours of follow up including debriefing group discussion and presentation of reflective journals.

**PT 6292 Neuromusculoskeletal Clinical Education 2 6 cr**

Second of two six-week experiential learning periods in the clinical community, providing opportunity for students to assess and treat clients with neuromusculoskeletal disorders under supervision. Prerequisite PT 6291.

**PT 6310 Foundations to Evidenced-Based Practice 2 2 cr**

Students will learn to identify appropriate research and /or evaluation questions and appropriate methodologies for the rehabilitation context and the general process of conducting a research/evaluation study to facilitate future participation in research. Course graded pass/fail.

**PT 7121 Clinical Skills for Physical Therapy Neurological Conditions 5 cr**

Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for neurological conditions across the lifespan.

**PT 7124 Clinical Skills for Physical Therapy in Cardiorespiratory Conditions 5 cr**

Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for cardiorespiratory conditions across the lifespan.

**PT 7150 Integrated Practice for Cardiorespiratory and Neurological Conditions 3 cr**

Students integrate relevant information for physical therapy management of complex cardiorespiratory and neurological conditions through lectures, labs and small group work with a focus on interprofessional collaborative practice. Case studies may include but are not limited to: geriatrics, developmental disorders, spinal cord injuries, ARDS, critical care, etc.

**PT 7160 Physical Therapy Practice and Professional Issues 2 3 cr**

Through lecture and tutorial sessions, students will integrate their knowledge and clinical experience concerning business, ethical and legal principles for physical therapy practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PT 6260.

**PT 7230 Applied Sciences for Physical Therapy 3 3 cr**

Through lecture, tutorial and laboratory sessions, students will learn the application of anatomy, physiology and pathology to the cardiovascular and pulmonary systems. This course provides the theoretical basis for physical therapy intervention for cardiovascular and pulmonary disorders.

**PT 7292 Neurosciences Clinical Education 6 cr**

A six-week experiential learning period in the clinical community, providing opportunity for students to assess and treat clients with neurological disorders under supervision. Includes 3 - 4 hours of preparatory sessions prior to the placements, and 3 - 4 hours of follow up including debriefing group discussion and presentation of reflective journals.

**PT 7294 Cardiovascular and Pulmonary Clinical Education 5 cr**

A five-week experiential learning period in the clinical community, providing opportunity for students to assess and treat clients with cardiovascular and pulmonary disorders under supervision. Includes 3-4 hours of preparatory sessions prior to the placement, and 3-4 hours of follow up including debriefing group discussion and presentation of reflective journals. Course is pass/fail.

**PT 7330 Applied Sciences for Physical Therapy 4 3 cr**

Through lecture, tutorial and laboratory sessions, students will learn the application of anatomy, physiology and pathology to the neurological system. Scientific and medical theoretical basis for physical therapy intervention will be covered.

**PT 7390 Elective Clinical Education 6 cr**

One six-week experiential learning period in the clinical community to complement previous clinical placements, address gaps in previous clinical placements and /or to explore emerging practice roles in physiotherapy.

**PT 7410 Exercise Prescription and Manual Therapy for Physical Therapists 3 cr**

Through a variety of learning strategies, students further develop exercise prescription and manual therapy skills in physical therapy assessment, diagnosis and treatment for individuals across the lifespan.

**PT 7500 Physical Therapy Evaluation/Research Project 6 cr**

Under the supervision of a faculty advisor the student will develop and complete a physical therapy or rehabilitation- focused research or evaluation project. Course graded pass/fail.

## Physician Assistant Education (PAEP)

**PAEP 7000 Physiology and Pathophysiology for Physician Assistants 3 cr**

This brief introduction is designed to impart an understanding of normal physiological functioning of the human body. This basic science course builds upon the entry knowledge of the Physician Assistant student, by presenting the pathophysiology of disease by organ systems. The emphasis is on the homeostatic mechanisms for all the major organ systems. Evaluation will be by successful completion of exercises, class participation and written examination, demonstrating to faculty proficiency in course principles.

**PAEP 7002 Physiology and Pathophysiology for Physician Assistants II 3 cr**

A continuation of the material presented in Physiology and Pathophysiology for Physician Assistants. A basic science course which builds upon the entry knowledge of the PAEP learner by presenting normal physiology and the pathophysiology for disease by organ systems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Admission to PAEP Year 1

**PAEP 7010 Human Anatomy for Physician Assistants 3 cr**

This brief comprehensive introduction is designed to impart an understanding of gross functional anatomy of the human body. This basic science course builds upon the entry knowledge of the student by presenting clinical human anatomy, correlated to clinical applications, assessment and pathology of disease. Evaluation will be by successful completion of exercises, class participation and written examination, demonstrating to faculty proficiency in course principles.

**PAEP 7030 Professional Studies of Physician Assistants 3 cr**

This course is designed to provide the student with an understanding of the role the Physician Assistant plays within the structure of the Canadian Health Care System. This introduction is designed to impart an understanding of the interaction between the various stakeholders. Ethical considerations in health care and the legal aspects of the PA role in Canada will be addressed. Evaluation will be by successful completion of a presentation (evaluated by classmates), participation in ethical problem solving exercises and written examination, demonstrating to faculty proficiency in course principles. Students are expected to submit a research paper on an ethics topic of choice and write a short-answer examination at the end of the course.

**PAEP 7042 Biochemistry for Physician Assistants 1 cr**

A brief introduction to medical biochemistry.

**PAEP 7045 Research and Clinical Practice for Physician Assistants 1 cr**

An introduction to the skills required for quality improvement efforts and critical appraisal of medical literature in clinical practice and evidenced based medicine.

**PAEP 7046 Genetics for Physician Assistants 1 cr**

A brief introduction to medical genetics.

**PAEP 7048 Pediatrics for Physician Assistants 3 cr**

A brief, comprehensive didactic introduction to the field of obstetrics and gynecology designed to prepare the physician assistant to diagnose and treat, within his or her scope of practice, common obstetrics and gynecology conditions as would be encountered in a primary care setting.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Successful completion of MPAS year 1.

**PAEP 7050 Obstetrics and Gynecology for Physician Assistants 3 cr**

A brief, comprehensive didactic introduction to the field of obstetrics and gynecology designed to prepare the physician assistant to diagnose and treat, within his or her scope of practice, common obstetrics and gynecology conditions as would be encountered in a primary care setting.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: Successful completion of MPAS year 1.

**PAEP 7052 Patient Assessment for Physician Assistants I 2 cr**

A comprehensive introduction to the clinical assessment of a patient, delivered as a group of three courses. Part I introduces basic history-taking and physical exam skills. Patient Assessment II and Patient Assessment III extend these skills to other clinical settings.

**PAEP 7054 Patient Assessment for Physician Assistants II 2 cr**

Continues developing the skills in history taking and physical examination introduced in patient Assessment for Pas I. Learners are introduced to the Standardized Patient Program.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Admissions to PAEP Year 1.

**PAEP 7056 Patient Assessment for Physician Assistants III 2 cr**

A brief, comprehensive introduction to diagnostic imaging techniques and interpretation of diagnostic images designed to enable Physician Assistants, within their scope of practice, to diagnose and treat medical, surgical, and infectious disease.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Admission to PAEP Year 1.

**PAEP 7068 Adult Medicine for Physician Assistants 1 6 cr**

A comprehensive, system-based introduction to the clinical disciplines of medicine. Adult Medicine I is the first part of a two-course sequence; content areas include endocrinological, gastrointestinal and neurological, medicine, ophthalmology, and hematology/oncology.

**PAEP 7078 Adult Medicine for Physician Assistants II 6 cr**

A comprehensive, system-based introduction to the clinical disciplines of medicine. Adult Medicine II is the second part of a two-course sequence; content areas include cardiovascular, musculoskeletal, renal, dermatologic and respiratory medicine, and otolaryngology.

**PAEP 7082 Diagnostic Imaging for Physician Assistants 1 cr**

A brief, comprehensive introduction to diagnostic imaging techniques and interpretation of diagnostic images designed to enable Physician Assistants, within their scope of practice, to diagnose and treat medical, surgical and infectious disease.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Admissions to PAEP Year 1

**PAEP 7084 Microbiology for Physician Assistants 1 cr**

A brief introduction to Medical Microbiology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Admissions to PAEP Year 1.

**PAEP 7090 Principles of Psychiatry for Physician Assistants 3 cr**

A brief, comprehensive introduction designed to impart an understanding of mental and behavioral health. Based on the special needs of a patient populations, the patient's presentation and unique contributing factors, the PA will be able to evaluate and analyze the patient's needs, providing the required specialty assessment for the psychiatric patient. Evaluation will be by successful completion of a practical and written evaluation, demonstrating the faculty proficiency in the course material.

**PAEP 7100 Principles of Surgery for Physician Assistants 3 cr**

A brief, comprehensive introduction designed to impart an understanding of surgical diseases. Upon completion, the Physical Assistant student, with their scope of practice, will be able to diagnose, refer and treat the medical, surgical and infectious diseases from a surgical perspective. Evaluation will be by successful completion of a practical and written evaluation, demonstrating to faculty proficiency in the principals of surgery and application of surgical skills.

**PAEP 7110 Emergency and Critical Care for Physician Assistants 3 cr**

A brief, systems-based comprehensive introduction designed to impart an understanding of emergency and intensive care medicine. This course will equip the Physician Assistant student with the skills necessary to diagnose, refer and treat medical, surgical and infectious disease emergencies and life threatening conditions. The Advanced Cardiac Life Support (ACLS) course is a mandatory component of the Emergency and Critical Care course. It is organized by the Department of Emergency Medicine and is designed to provide the student with advanced knowledge and experience on how to handle a cardiac arrest. Most Physician Assistant students find the course invaluable regardless of what specialty they enter. Evaluation is based on successful completion of a practical evaluation, problem solving exercises, displaying proficiency in clinical skills and a written examination, demonstrating to faculty proficiency in course principles.

**PAEP 7150 Year 1 Comprehensive Examination 0 cr**

A pass/fail, multiple choice examination designed to assess students' knowledge of clinically relevant Year 1 material prior to entry into the clinical year.

**PAEP 7202 Family Medicine for Physician Assistants 6 cr**

A clinical rotation designed to impart a practical understanding of Family Medicine, to prepare the physician assistant, within his or her scope of practice, to diagnose and manage conditions and issues related to primary care medicine and general practice.

**PAEP 7204 Clinical Elective for Physician Assistants I 1.5 cr**

This course consists of two weeks of clinical time, offering an introduction to the clinical discipline of the Physician Assistant learner's choice. Course objectives will be developed by the learner in collaboration with PAEP faculty members.

**PAEP 7206 Clinical Elective for Physician Assistants II 1.5 cr**

This course consists of two weeks of clinical time, offering an introduction to the clinical discipline of the Physician Assistant learner's choice. Course objectives will be developed by the learner in collaboration with PAEP faculty members.

**PAEP 7210 Clinical Internal Medicine for Physician Assistants 3 cr**

A brief, clinical rotation designed to impart a practical understanding in the area of internal medicine. There will be an internal medicine speciality focus in this rotation versus the general exposure seen in Family Medicine. Upon completion, the Physician Assistant student will, within their scope of practice, be able to diagnose, refer and treat the medical, surgical and infectious conditions related to the field of internal medicine.

**PAEP 7212 External Electives for Physician Assistant Students 0 cr**

A clinical rotation of varying length designed to provide a physician assistant student not from the University of Manitoba with clinical education and training in a medical discipline of the student's choice at a University of Manitoba clinical teaching unit. Course credit is assigned by the student's home institution.

**PAEP 7220 Clinical Surgery for Physician Assistants 3 cr**

The 6-week General Surgery service rotation provides Physician Assistant-Student with clinical experience in a surgical learning environment. The PA-Student competencies addresses relate to the generalist role a PA requires to support surgery services and the skills required in surgical practice.

**PAEP 7240 Clinical Pediatrics for Physician Assistants 3 cr**

A brief, clinical rotation designed to impart a practical understanding of health and diseases in the field of pediatrics. Upon completion, the Physician Assistant student, within their scope of practice, will be able to diagnose, refer and treat the medical, surgical and infectious conditions related to the field of pediatric medicine.

**PAEP 7250 Clinical Psychiatry for Physician Assistants 3 cr**

A brief, clinical rotation designed to impart a practical understanding of mental health and psychiatric disease to the Physician Assistant. Upon completion, the Physician Assistant student, within their scope of practice, will be able to diagnose, refer and treat the medical, surgical and infectious conditions related to psychiatric medicine.

**PAEP 7260 Community Health for Physician Assistants 3 cr**

Community Health for PAs is a 4-week clinical experience focusing on primary health care and community services. Community health focuses on the maintenance, protection, and improvement of the patient's and communities' health status. The learners' experience occurs in community health organizations that provide primary healthcare, health promotion, and community services using interdisciplinary teams of health providers. Course graded pass/fail.

**PAEP 7270 Clinical Emergency Medicine for Physician Assistants 3 cr**

The Physician Assistant must have the knowledge and skills to manage life-threatening emergent medical or surgical issues. The competencies acquired during the Emergency Medicine clinical rotation build upon material taught during the academic year of the program. PAEP 7270 is a six-week rotation at designated Emergency Departments in Manitoba.

**PAEP 7280 Clinical Obstetrics and Gynecology for Physician Assistants 3 cr**

A brief, clinical rotation in obstetrics and gynecology designed to impart a practical understanding of reproductive health. Upon completion, the Physician Assistant student, within their scope of practice, will be able to diagnose, refer and treat the medical, surgical and infectious conditions related to the field of reproductive, obstetrical and gynecologic health.

**PAEP 7300 Comprehensive Assessment of Clinical Skills 0 cr**

The Comprehensive Assessment of Clinical Skills is a comprehensive summary of clinical performance using information from PA-ITRES, mini-CEX evaluations, and observed histories/physical exams. This assessment will be graded on a pass/fail basis.

**PAEP 7350 PAEP Final Project 0 cr**

A capstone project that may take a variety of formats as dictated by Program faculty. Students will, in consultation with a faculty mentor, develop and research a topic for presentation to faculty and peers.

## Physics (PHYS)

**PHYS 7010 General Relativity 1: A Relativistic Theory of Gravity 3 cr**

Topics include Newtonian gravity, the theory of special relativity, relativistic hydrodynamics, relativistic electrodynamics, curved space-time, tensor calculus, and Einstein's equations. This course is taught together with PHYS 4010. Students may not hold credit for both PHYS 4010 and PHYS 4020.

**Equiv To:** PHYS 4010, PHYS 4020

**PHYS 7250 Seminar course in Advanced Physics 6 cr**

Selected topics in advanced physics may be offered from time to time by the faculty or visiting lecturers. Credit for this course will be determined by the head of the department of Physics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PHYS 7260 Mass Spectroscopy 3 cr**

Two lectures per week for one term. The course covers the techniques and applications of mass spectroscopy. Special emphasis is given to the general principles of ion optics for use in the design of modern instruments.

**PHYS 7360 Medical Radiation Physics 3 cr**

The relevant physics of the production and interaction of radiation beams used in both diagnostic and therapeutic medicine will be covered. Such beams included X- and g-rays, particle beams, visible and I.R. radiation, microwaves, and ultrasound.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 4560 or consent of instructor.

**PHYS 7370 Radiation Therapy Physics 3 cr**

The calculations and measurements necessary to determine the radiation dose distribution in patients receiving radiotherapy will be presented. Newer treatment modalities, e.g., pion therapy and hyperthermia will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 4510, PHYS 4560, or consent of instructor.

**PHYS 7380 Radiation Biology 3 cr**

The interaction of ionizing and non-ionizing radiations with living systems. The relevance to Radiotherapy. Nuclear medicine and diagnostic radiology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 1020 or consent of instructor.

**PHYS 7390 Radiation Protection 3 cr**

Ionizing radiation including X-ray, g-ray, neutrons, alpha-, beta-, and heavy ion-particle sources, bioeffects, and protection principles are covered. Non-ionizing radiation, including laser light, radio- frequency waves, ultraviolet and infrared light, and ultrasound, sources, bioeffects, and exposure protection guidelines are studied.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 7360 and PHYS 7380 or consent of instructor.

**PHYS 7400 Linear Systems for Imaging 3 cr**

Fundamental principles of image formation, analysis of the characteristics of medical images, parametric description of image quality; application to transmission radiography.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PHYS 7410 Diagnostic Methods 3 cr**

This course is an intensive introduction to the fundamentals of medical imaging using magnetic resonance imaging and ultrasound. Included is an in-depth look at the physics and mathematics of image formation. Note this course is challenging with a great deal of mathematical content.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 7400/4400 or consent of instructor.

**PHYS 7422 Physics of X-ray Imaging 3 cr**

X-ray imaging is the oldest form of medical imaging, yet continues to undergo dramatic technological development and innovation. This course will cover topics related to clinical and diagnostic x-ray imaging, including: x-ray production; x-ray detection; special radiographic systems; mammography; fluroscopy; digital imaging; computed tomography and theoretical and practical aspects of image reconstruction and image quality.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHYS 7400/PHYS 4400 or consent of instructor.

**PHYS 7430 Physics of Nuclear Medicine 3 cr**

Nuclear medicine covers a range of topics from radionuclide based imaging methods to treatments through administration of radioisotopes. Knowledge of nuclear structure, radioactive decay and the interaction of radiation with matter are essential to understanding the application of radiotracer methods to medicine and the function of highly sophisticated nuclear medicine imaging equipment. This course will cover topics related to clinical and diagnostic nuclear medicine including: radioactive decay; interaction of radiation with matter; radionuclide and radiotracer production counting statistics; radiation detection systems; nuclear medicine imaging systems; emission computed tomography; image reconstruction and evaluation and radiation dosimetry.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7400/4400 or consent of instructor.

**PHYS 7440 Advanced Topics in Physics 3 cr**

Selected topics in advanced physics. This course may be offered from time to time by the faculty or visiting lecturers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: consent of instructor.

**PHYS 7460 Methods in Medical and Health Physics 1 - (Medical Imaging and Radiation Protection) 3 cr**

This practical course is designed to give students hands-on experience with equipment, clinical techniques and methods of analysis in medical imaging and health physics. Topics such as: dosimetry of unsealed sources, radiation shielding design and surveys, meter calibration, decontamination and plume dispersal, CT, Ultrasound, X-ray and Nuclear Medicine imaging techniques, mammography and quality assurance in medical and health physics will be covered. Students are required to take both PHYS 7460 and PHYS 7470 which will be offered in consecutive years. Note: only students accepted to the Medical Physics Program will be allowed to register for this course

**PHYS 7470 Methods in Medical and Health Physics 2 - (Radiotherapy and Radiation Biology) 3 cr**

This practical course is designed to give students hands-on experience with equipment, clinical techniques and methods of analysis in radiotherapy and radiation biology. Topics such as: error analysis and data reduction, dosimetry of ionizing radiation, radiotherapy treatment planning, calibration, HDR brachytherapy, micro-dosimetry and quality assurance in medical physics, will be covered. Students are required to take both PHYS 7460 and PHYS 7470 which will be offered in consecutive years. Note: only students accepted to the Medical Physics Program will be allowed to register for this course.

**PHYS 7500 Condensed Matter Physics 1 3 cr**

The principles of electrical and vibrational properties of primarily crystalline structures. Topics include free electron theory, electron-electron interactions, screening, phonons, electron-phonon coupling and transport properties.

**PHYS 7510 Condensed Matter Physics 2 3 cr**

A comprehensive survey of advanced topics in condensed matter physics. The topics may change from year to year but include collective excitations, defects, localized states, superconductivity, Josephson effect, superfluids, quantum Hall effect.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7500 or consent of instructor.

**PHYS 7530 Physics of Magnetism 3 cr**

A comprehensive survey of magnetism and magnetic materials. Topics include the origins of magnetic interactions, types of magnetic order, domain structures, magnetization processes, dynamics, thin films, applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7500 or consent of instructor.

**PHYS 7540 Statistical Mechanics 3 cr**

The principles of statistical mechanics. Topics include statistical ensembles, entropy, Fermi gas, Bose-Einstein condensation, superfluidity, phase transitions and equilibria, fluctuations, Fluctuation-Dissipation and Wiener-Khintchin theorems, liquids and dense gases.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 4390 or consent of instructor.

**PHYS 7550 Advanced Statistical Mechanics 3 cr**

An advanced treatment of phase transitions and critical phenomena in a variety of systems. Topics include solvable models, mean field theory, Landau theory, scaling laws, series methods, renormalization group methods, linear response theory, generalized rigidity.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7540 or consent of instructor.

**PHYS 7560 Relativistic Quantum Mechanics 3 cr**

Relativistic single particle equations for bosons and fermions, quantization of fields, interacting fields, elementary quantum electrodynamics, covariant perturbation theory and Feynman diagrams.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7420 or consent of instructor.

**PHYS 7570 Nuclear Physics 3 cr**

Hadron and lepton scattering, the nucleon-nucleon interaction, nuclear structure, nuclear shell model, nuclear excitations and decay, hadronic interactions and decays, the quark model.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 4510 or consent of instructor.

**PHYS 7580 Advanced Topics in Nuclear Physics 3 cr**

A selection of advanced topics in nuclear and intermediate energy physics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7570 or consent of instructor.

**PHYS 7590 Electromagnetic Theory 3 cr**

Maxwell's equations, electromagnetic potentials, gauge conditions, conservation laws, Green function methods, diffraction theory, simple radiating systems, Lagrangian derivation of Maxwell's equations and the covariant structure of electromagnetism.

**PHYS 7600 Applied Electromagnetism 3 cr**

Wave guides and resonant cavities, charged particles collision theory, Bremsstrahlung, radiation of moving charged particles, multipole radiation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7590 or consent of instructor.

**PHYS 7630 Particle Physics 3 cr**

Basic particles and interactions, symmetries and conservation laws, the quark model, deep inelastic scattering, electroweak theory, introduction to QCD.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7420 or consent of instructor.

**PHYS 7660 Astronomy 1: The Phenomenology of Galaxies 3 cr**

Describes astronomical standards such as intensity magnitudes, colour and metallicity; the properties of stars and the interstellar medium; galactic structure, kinematics, and the evolution of galactic components.

**PHYS 7670 Astronomy 2: Galactic Dynamics 3 cr**

A continuation of PHYS 7660, this course provides mathematical descriptions of potential theory, disk dynamics and spiral structure, collisions between galaxies, and dark matter. Additional topics are galaxy evolution, large-scale structure of the universe and cosmology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7660.

**PHYS 7680 Astrophysics 1: Stars 3 cr**

Covers the basic physical concepts required to extract qualitative estimates of astrophysical parameters, describes several aspects of observational astronomy, and it emphasizes in a more mathematical way the astrophysics of stellar structure and evolution.

**PHYS 7690 Astrophysics 2: Interstellar Matter and Galaxies 3 cr**

Emphasizes the physics of interstellar matter and dust grains, gaseous nebulae, basic hydrodynamics, shock waves, and supernova remnants.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 7680.

**PHYS 7700 Research Project in Medical Health Physics 0 cr**

Students undertake a relevant research project in an approved laboratory. At least six months of full-time research is expected. The research project report shall be submitted in a style and length as specified by the department. A comprehensive oral examination will follow the submission of the project report.

**PHYS 7710 Quantum Optics 6 cr**

Matter-radiation interaction, spectral line broadening, quantization of the radiation field, degree of coherence of light; number, coherent, chaotic and squeezed states of light, quantum theory of detection, laser theory, resonance fluorescence, light scattering, non-linear quantum optics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PHYS 7720 Quantum Mechanics 1 3 cr**

Topics include the concepts and foundations of quantum mechanics, continuous and discrete symmetries, time dependent perturbation theory including interaction with electromagnetic fields and scattering theory. Not to be held with the former PHYS 7420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHYS 4380 (C+).

## Physiology (PHGY)

**PHGY 7010 Readings in Physiology 6 cr**

Tutorial course covering recent contributions in an area of physiology related to a student's research interests.

**PHGY 7030 Special Physiology 6 cr**

Seminar and reading course on physiology of particular systems.

**PHGY 7150 Cardiac Physiology 3 cr**

Tutorial and reading course on cardiac physiology; emphasis on the energetics of cardiac contraction and its relationship to ultrastructural and biochemical properties of the heart.

**PHGY 7160 Vascular Physiology 3 cr**

Lectures and seminars on physiology of blood vessels including hemodynamics, rheology of blood, and the function and structure of smooth muscle.

**PHGY 7170 Endocrine and Metabolic Physiology 3 cr**

Special topics in endocrine and metabolic physiology emphasizing current concepts.

**PHGY 7172 Advanced Endocrine and Metabolic Physiology 1.5 cr**

A seminar course on advanced topics in endocrine and metabolic physiology and diseases. The course focuses on developing skills required to present and critique research data on endocrine and metabolic physiology & pathophysiology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 7256 or consent of course coordinator.

**PHGY 7180 Advanced Topics in Physiology 3 cr**

Advances in selected areas of physiology, research proposals related to the student's area of interest, procedures for grant writing and refereeing grant proposals, evaluation of citations and impact factors.

**PHGY 7190 Research Topics in Physiology 3 cr**

Seminars on research presentations by staff and senior students in physiology.

**PHGY 7230 Molecular and Cellular Aspects of Organ Physiology 3 cr**

Tutorial course: Function of various organs in the light of current concepts regarding structure and function at the molecular and cellular level.

**PHGY 7252 Respiratory Physiology & Pathophysiology 1.5 cr**

Lecture, readings, and student-directed discussion course dealing with fundamental biophysical processes and function of major respiratory organ systems (including membrane transport and muscle contraction in respiratory physiology), illustrated with pathophysiological structures and function, and their relationship to disease. The course will also examine current therapeutic approaches and active areas of research interest.

**PHGY 7254 Cardiovascular Physiology & Pathophysiology 1.5 cr**

Lecture, readings, and student-directed discussion course dealing with fundamental biophysical processes and function of major cardiovascular organ systems, illustrated with pathophysiological structures and function, and their relationship to disease. The course will also examine current therapeutic approaches and active areas of research interest.

**PHGY 7256 Endocrine Physiology & Pathophysiology 1.5 cr**

Lecture, readings, and student-directed discussion course dealing with fundamental biophysical processes and function of major endocrine (including reproductive) organ systems, illustrated with pathophysiological structures and function, and their relationship to disease. The course will also examine current therapeutic approaches and active areas of research interest.

**PHGY 7258 Neurophysiology & Pathophysiology 1.5 cr**

Lecture, readings, and student-directed discussion course dealing with fundamental biophysical processes and function of major neurophysiology organ systems, illustrated with pathophysiological structures and function, and their relationship to disease. The course will also examine current therapeutic approaches and active areas of research interest.

**PHGY 7260 Advanced Neurological Sciences 3 cr**

Seminar, readings and lecture course covering original research papers leading to the most significant advances in the neurological sciences. Emphasis is placed on student comprehension of major research directions in the broad field of neurological sciences.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 7240 or equivalent and consent of instructor.

**PHGY 7270 Physiology of Striated Muscle 3 cr**

A lecture and seminar course dealing with the physiology and biophysics of skeletal and cardiac muscle.

**PHGY 7290 Physiology of the Airways 3 cr**

A lecture and seminar course dealing with the physiology of the airways in the intact animal and with the role of smooth muscle in controlling airway function. The fundamental properties of airway smooth muscle in controlling airway function will be emphasized.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 7240 or equivalent and consent of instructor.

**PHGY 7300 Molecular Endocrinology 3 cr**

A lecture and seminar course on advances in molecular and cellular aspects of endocrinology and other systems. The course is taught by members of the Gene Technology Group and topics will reflect current research interests. These include the roles of hormones/growth factors in cancer, growth and development, and reproduction, and the regulation of hormone gene families. This course is designed for individuals with knowledge in the areas of molecular and/or cell biology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PHGY 7310 Principles of Electronics for Life Sciences 3 cr**

Lectures on basic principles of electricity and electronics of particular application to electrophysiology.

**PHGY 7320 Instrumentation for Electrophysiology 3 cr**

Lectures on the application of principles of electricity and electronics to electrophysiology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 7310.

**PHGY 7330 Physiology of Smooth Muscle 3 cr**

A lecture and seminar course dealing with the biophysics, electrophysiology, pharmacology and biochemistry of the smooth muscle in the major organ systems.

**PHGY 7340 Cardiovascular Electrophysiology 3 cr**

A comprehensive lecture and seminar course on the electrical activity of the cardiovascular system. The fundamental electrical properties of cardiac and vascular muscle cell membranes, currents and channels as studied by intracellular microelectrodes, voltage clamp and patch clamp techniques will be stressed.

**PHGY 7350 Cardiovascular Pathophysiology 3 cr**

A comprehensive lecture course on disease in the cardiovascular system. Topics to be covered include methods of analysis of cardiac viability, heart failure, arrhythmias, heart diseases (congenital, valvular, pericardial, cardiomyopathy), hypertension, stroke, atherosclerosis and myocardial infarction.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 7240.

**PHGY 7360 Trends in Cardiovascular Sciences 3 cr**

This is a comprehensive seminar-based course dealing with recent advances in cardiovascular research given by local fellows and prominent scientists. Students are expected to participate in the series and present their own research data seminar. This course will enable the trainees to learn how to prepare research seminars, handle question/answer sessions after a seminar and prepare a formal report.

**PHGY 7370 Cardiovascular Molecular Biology 3 cr**

This course introduces the principles of molecular biology and their application to the cardiovascular system in health and disease, with a focus on gene regulation, cardiac development and the use of transgenic models. The course comprises lectures and student self-directed learning assignments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PHGY 7254 or permission of instructor.

**PHGY 7380 Cardiovascular Cell Biology 3 cr**

A comprehensive lecture course on morphology, biochemical composition and function of the cardiac and smooth muscle cell, with particular emphasis on developmental and injury-related issues. Topics include the description of various cardiac cells and their immediate extracellular environment, intercellular communication, cardiac development, control of cell cycle, hyperplasia and hypertrophy, cardiac growth factors, mechanism of injury and cell death, regeneration, heat shock proteins and cardioprotection.

**PHGY 7390 Gene Therapy 3 cr**

Advanced course detailing new frontiers in the application of gene therapy and technological protocols currently utilized in treating cardiovascular diseases such as cardiomyopathy, hypertension, congenital birth defects and restenosis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PHGY 7370, PHGY 7380 or permission of the course coordinator.



**PHGY 7400 Cellular and Molecular Biology of the Vascular System 3 cr**

This course provides current concepts in vascular biology at the molecular level as well as the pathogenesis and treatment of vascular diseases for the purpose of graduate studies. Students may also learn up-to-date techniques in research of vascular cell biology and the diagnosis of vascular diseases through laboratory demonstrations.

## Plant Science (PLNT)

**PLNT 7120 Special Problems in Plant Science 3 cr**

Reading or assignment or research on specific aspects of crop development, crop production, weed science, plant pathology, plant biochemistry or plant physiology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**PLNT 7130 Topics in Plant Breeding and Genetics 3 cr**

An in-depth study of selected topics of current interest in the fields of plant breeding and genetics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**PLNT 7162 Plant Genomics 3 cr**

Detailed analysis of advanced genomic techniques, experimental approaches, and progress in current plant genomic projects.

**PLNT 7164 Genetic Mapping in Plants 3 cr**

Application of genetic mapping analyses for the dissection of traits in plant species. Linkage mapping, quantitative trait locus (QTL) mapping, association mapping, and related analyses will be reviewed in detail. Emphasis will be placed on practical applications in genetic studies. The analysis and interpretation of real data will be conducted in computer tutorial sessions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 4330 or consent of instructor.

**PLNT 7170 Advanced Plant Breeding 3 cr**

Advanced training in modern methods of plant breeding.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 3520 or consent of instructor.

**PLNT 7250 Plant Science Seminar 3 cr**

Principles of oral and poster presentations, visual aid design and organization are discussed and then applied by students in presentations of their current research, and agricultural issues. Course evaluated on a pass/fail basis.

**PLNT 7340 Advanced Weed Science 3 cr**

Weed biology and ecology in the context of weed management, covering theory, current information, investigative approaches and experimental techniques. Topics explored include: weed population biology, modelling, weed community ecology, herbicide efficacy and herbicide resistant weeds.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 3540 or equivalent or consent of instructor.

**PLNT 7420 Advanced Plant Science Seminar 3 cr**

The development of a research proposal, instruction and practice in scientific writing and presentation of a seminar. For Ph.D. students only. Course evaluated on a pass/fail basis.

**PLNT 7480 Epidemiology of Plant Disease 3 cr**

Lectures, seminars and discussions relating epidemiological principles to plant disease development and control. The course examines in-depth the interrelationships of host, pathogen and environment. Measurement of epidemiological parameters is stressed in relation to disease assessment, disease forecasting and disease management.

**PLNT 7610 Topics in Crop Physiology 3 cr**

An in-depth study of selected topics of current interest in the field of Crop Physiology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**PLNT 7612 Advanced Plant Physiology 3 cr**

Examination of current concepts of regulation and limitations of photosynthesis, nitrogen metabolism, and assimilate partitioning in field and horticultural crops. Content will include the mode of action of plant growth regulators and herbicides in these processes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PLNT 3400 or BIOL 3400 or the former PLNT 3500, PLNT 4590 or consent of instructor.

**PLNT 7620 Topics in Agronomy 3 cr**

An in-depth study of selected topics of current interest in the field of Agronomy.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**PLNT 7630 Topics in Plant Pathology 3 cr**

An in-depth study of selected topics of current interest in the field of Plant Pathology.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of department head.

**PLNT 7660 Advanced Crop Production 3 cr**

A lecture-seminar course to investigate environmental, crop management and genetic limitations to growth, yield formation, yield, water use efficiency and quality of field, forage and horticultural crops. Interactions will be stressed and emphasis will be placed on sustainable crop production systems. Simple and complex relationships will be demonstrated using models.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PLNT 7670 Quantitative Genetics and Plant Breeding 3 cr**

The theoretical basis of quantitative genetic variation. The genetic structure of plant breeding populations. Estimation, interpretation and use of genetic parameters in cross-pollinated and self-pollinated plant species. Variance components, genotype x environment interaction, inbreeding, heterosis, selection, heritability and combining ability.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PLNT 3520 and PLNT 4330 or consent of instructor.

**PLNT 7690 Bioinformatics 3 cr**

An introduction to the theory, strategies, and practice of data management, analysis and utilization in molecular biology. Topics include DNA and protein sequence analysis, biological databases, genomic mapping and analysis of gene expression data. This course will include problem-solving exercises using Unix server-based software. Not to be held with PLNT 4610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PLNT 2530 or PLNT 3140 or PLNT 4310 or the former PLNT 4540 or MBIO 3410 or consent of instructor.

**Equiv To:** PLNT 4610

## Political Studies (POLS)

### **POLS 6010 The Manitoba Legislative Internship Seminar 6 cr**

This credit is granted to six individuals who annually complete the assignment as Legislative Interns within the Manitoba Legislative Assembly.

### **POLS 7100 The Study of Politics 3 cr**

This course introduces students to the academic discipline of Political Science via an exploration of its origins, evolutions, and challenges. Particular emphasis is placed on contemporary issues and debates. Course graded pass/fail.

### **POLS 7110 Major Research Paper 0 cr**

The Major Research Paper (or MRP) is designed for M.A. students in Political Studies who are doing the course-based stream. Students in this course will pursue individual research projects in an area of interest to them, once they have completed the majority of other program coursework. This course is evaluated on a pass/fail basis.

### **POLS 7130 Theories and Issues in Public Administration 3 cr**

Integrating theory and practice helps to better understand the challenges facing public administration. Topics covered include changing approaches to management, human resource and financial management, reporting, accountability, citizen engagement, and network governance. Restricted to MPA students.

### **POLS 7132 Public Policy Process and Issues 3 cr**

An introduction to the idea of policy analysis, including key foundational concepts and significant theories, models, and approaches; how and why the policy process operates as it does (empirical) and how and why some think it should (normative); and specific policy issues. Restricted to MPA students.

### **POLS 7134 Qualitative Methods and Communications for the Public Sector 3 cr**

Communication coupled with an understanding of qualitative research approaches are key to success in public administration. Topics include research design, policy research, referencing, evaluating writing and research, and presenting for results. Restricted to MPA students.

### **POLS 7136 Governance and Administration 3 cr**

An introduction to theories of organization and bureaucracy linked to administrative practices in the public sector. Governance models (Traditional Public Administration, New Public Management, Multi-level Governance) in the Canadian, provincial, and local context will be explored. Restricted to MPA students.

### **POLS 7138 Quantitative Methods for Policy Analysis 3 cr**

An introduction to quantitative methods, including research design, data collection techniques, basic statistical analysis, statistical significance, contingency tables, multiple regression; with an emphasis on reading tables and graphs and understanding statistical assumptions. Restricted to MPA students.

### **POLS 7140 Principles of Public Finance for Policy Analysis 3 cr**

An introduction to basic economic theories and tools used in public sector economics, which may include the economics/politics of taxing policies, externalities, theories of intergovernmental grants, major Canadian government spending programs, and new developments. Restricted to MPA students.

### **POLS 7142 Selected Topics in Public Administration 3 cr**

A course on a selected topic in the discipline of Public Administration. The content of this course will vary. Please contact department for a course description. Students can earn multiple credits for this course only when the topic subtitle is different.

### **POLS 7230 Comparative Politics of Advanced Industrial States 3 cr**

An introduction to the field of comparative politics through an examination of the key political issues facing advanced industrial states and how different political systems fare in dealing with them. Students may not hold credit for both POLS 7230 and the former POLS 7720.

**Mutually Exclusive:** POLS 7720

### **POLS 7270 Selected Topics in Politics 3 cr**

A course on a selected topic in the discipline of Political Science. The content of this course will vary. Please contact department for a course description. Students can earn multiple credits for this course only when the topic subtitle is different.

### **POLS 7280 Directed Readings in Politics 3 cr**

An independent reading and/or research course on a selected topic in political studies, undertaken and arranged in consultation with the prospective instructor, upon the approval of the Graduate Committee. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

### **POLS 7290 Directed Readings in Politics 2 6 cr**

An independent reading and/or research course on a selected topic undertaken and arranged in consultation with the prospective instructor, upon approval of the Graduate Committee. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

### **POLS 7300 Directed Readings in Public Administration 3 cr**

An independent reading and/or research course on a selected topic undertaken and arranged in consultation with the prospective instructor, upon approval of the Graduate Committee. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

### **POLS 7330 State-Civil Society Relations 3 cr**

An examination of how the state relates to civil society actors, notably the voluntary sector in Canada. Students will critically assess the role voluntary organizations play - and should play - in governing process.

### **POLS 7340 Canadian Government 3 cr**

Examines the core institutions of Canadian Government and politics including parliamentary government, federalism, the Constitution and the Charter of Rights and Freedoms.

### **POLS 7350 Canadian Democracy 3 cr**

Examines the core institutions and processes of Canadian democracy including political parties, elections, voting, social movements, interest groups and public opinion.

### **POLS 7370 Seminar in the Theory and Practice of Public Administration 6 cr**

The intent of this course is to provide insight into the exigencies of actual public administration. The course will be conducted on a topical basis within the framework of certain trends facing Canadian governments today. (The course will attempt to utilize, to the fullest extent possible, the particular expertise of students in the program, faculty members, and of both elected and appointed public officials.)

### **POLS 7410 Selected Topics in Political Behaviour 1 3 cr**

A systematic examination of empirical research in the area of political socialization and political culture.

**POLS 7470 Strategic Human Resource Management in Government 3 cr**

A study of the human resource management functions, including planning, staffing, training, performance management, compensation and labour relations, in ways that optimize organizational performance. This course will also address contemporary challenges including recruitment and retention, managing change, demographic shifts, and information technology.

**POLS 7520 The Political Classics 3 cr**

A thorough study of selected works with special attention to methodology, historical content, theoretical position and universal significance.

**POLS 7530 International Political Economy 3 cr**

An examination of the systematic study of international political economy. Particular attention is paid to the foreign economic policies of advanced industrialized states and the various issues surrounding the redistribution of wealth and influence in the contemporary international system.

**POLS 7550 Contemporary Issues in Canadian Politics 3 cr**

A seminar series examining a contemporary debate in Canadian politics and government. The specific topic will vary from year to year depending on faculty interest and specialization.

**POLS 7610 Political Theory and Contemporary Issues 3 cr**

An examination of recent theoretical perspectives on contemporary political institutions, problems and values.

**POLS 7710 Liberalism and Its Critics 3 cr**

An advanced study of liberalism and various theoretical challenges to its ethical and political claims.

**POLS 7790 International Relations Theory 3 cr**

A critical assessment of basic theories and models used in International Relations, emphasizing theoretical approaches and research.

**POLS 7800 MPA Co-operative Education Term 1 0 cr**

This work term enables MPA students to gain experience in public or non-profit sector employment. Work terms are normally paid positions offered by employers in the public or non-profit sectors for a minimum of 13 weeks. Learning objectives are established by the employer, in conjunction with the student and Co-op Course Director. Students with significant public or non-profit sector work experience may apply to have this course requirement waived. Course graded pass/fail.

**POLS 7810 MPA Co-operative Education Term 2 0 cr**

This work term enables MPA students to gain experience in public or non-profit sector employment. Work terms are normally paid positions offered by employers in the public or non-profit sectors for a minimum of 13 weeks. Learning objectives are established by the employer, in conjunction with the student and Co-op Course Director. Students with significant public or non-profit sector work experience may apply to have this course requirement waived. Course graded pass/fail.

**POLS 7850 Contemporary Strategic and Security Studies 6 cr**

An advanced course in strategic studies. The evolution of strategic thought in the modern period will be examined, and particular emphasis will be placed on the role of armed force in relation to the problem of international security. Normally students will be expected to have taken POLS 4730 or its equivalent as prerequisite.

**POLS 7910 Multivariate Research Methods 3 cr**

Introduction to the theory and application of multivariate regression models in political analysis.

**POLS 7980 Professional Development 3 cr**

Students will build employment-related skills such as interpersonal communications, presentation, leadership, career development, and software-related skills. They will bridge theory and practice through participation and reflection in community events and workshops. Restricted to MPA students. Course graded Pass/Fail.

**POLS 7990 MPA Capstone Seminar 3 cr**

Students pursue individual supervised projects that allow them to integrate theory and practice in an original topic in public administration and/or public policy, drawing on their skills and knowledge gained through the program. These projects will be presented in a semester-end colloquium. Restricted to MPA students.

**POLS 9010 UW POL 4301 Administrative Theory 6 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9020 UW POL 4400 Seminar in Canadian Politics 6 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9030 UW POL 4415 State and Economy 6 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9040 UW GPOL 7700 Theories and Issues in Public Administration 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9090 UW GPOL-7331 Directed Readings in Public Administration 6 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9242 UW POL-4505 Politics of Urban Planning 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9250 UW GPOL 7710 Public Policy Process and Issues 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9260 UW GPOL 7720 Governance and Administration 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9340 UW GPOL-7300 Seminar in Theory and Practice of Public Administration I 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9350 UW GPOL-7305 Seminar in Theory and Practice of Public Administration II 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9370 UW GPOL-7320 Seminar in the Public Policy Process 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9380 UW GPOL-7325 Seminar in Public Policy Issues 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9420 UW GPOL 7730 Principles of Public Finance for Policy Analysis 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9470 UW GPOL-7335 Directed Readings in Public Administration 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9540 UW POL 4515 Inner City Seminar 6 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9560 UW POL 4105 Seminar in Global Political Economy 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9570 UW POL 4100 Seminar in Global Politics 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9606 UW GPOL-7385 Special Topics in Public Administration 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9608 UW POL 4121 Special Topics in Global Politics 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9610 UW GPOL 7760 MPA Capstone Seminar 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9620 UW GPOL 7770 Professional Development 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9630 UW GPOL 7740 Quantitative Methods for Policy Analysis 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

**POLS 9640 UW GPOL 7750 Qualitative Methods and Communication for the Public Sector 3 cr**

Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

## Preventive Dental Science (PDSD)

**PDSD 7000 Neural Basis of Oropharyngeal Function 3 cr**

A program of problem-oriented seminars on the sensory and reflex mechanisms affecting the respiratory and alimentary functions of the mouth and pharynx, mandibular posture and movement and respective application to oropharyngeal dysfunction and orthodontic therapy. One seminar per week for one term.

**PDSD 7020 The Mechanics of Orthodontic Therapy 6 cr**

The mathematics of three dimensional space, force and moment systems are given as the basis for considering the mechanics of orthodontic treatment. The mechanical properties of some orthodontic materials are studied as a background for appliance design. The quantitative aspects of tooth movement are discussed in terms of patient treatment planning. Seminar and laboratory sessions.

**PDSD 7040 Clinical Craniofacial Growth and Development 3 cr**

A program of student-based seminars on the morphogenesis of craniofacial structures and their significance to clinical problems.

**PDSD 7060 Cephalometric Analysis 3 cr**

A seminar program on the application of cephalometric radiography to craniofacial morphological research, orthodontic diagnosis and case analysis.

**PDSD 7070 Biology of Orthodontics and Facial Orthopedics 3 cr**

A program of student-based seminars and lectures on the biological basis of orthodontic and facial orthopedic diagnosis and therapeutic technique.

**PDSD 7101 Preventive Programs in Pediatric Dentistry 3 cr**

This course will be offered during the second year (term III). The prerequisite for this course will be the completion of the required courses in the first year of the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients II. Course is evaluated on a pass/fail basis.

**PDSD 7102 Hospital Pediatric Dentistry I 6 cr**

This course will be offered during the first year (term I and II). The prerequisite for this course will be the dental degree obtained prior to applying to the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients I and Special Needs and Emergency care in Pediatric Patients. Course is evaluated on a pass/fail basis.

**PDSD 7103 Hospital Pediatric Dentistry II 6 cr**

This course will be offered during the first year (term III and IV). The prerequisite for this course will be completion of the required courses in the first year of the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients II and Preventive Programs in Pediatric Dentistry. Course is evaluated on a pass/fail basis.

**PDSD 7104 Management and Restorative Treatment of Pediatric Patients I 6 cr**

This course will be offered during the first year (term I and II). The prerequisite for this course will be the dental degree obtained prior to applying to the program. In clinical terms this course will be taught with the following courses: Hospital Pediatric Dentistry I and Preventive and Community Pediatric Dentistry. Course is evaluated on a pass/fail basis.

**PDSD 7105 Management and Restorative Treatment of Pediatric Patients II 6 cr**

This course will be offered during the second year (term III and IV). The prerequisite for this course will be the completion of the required courses in the first year of the program. In clinical terms this course will be taught with the following courses: Hospital Pediatric Dentistry II and Preventive Programs in Pediatric Dentistry. Course is evaluated on a pass/fail basis.

**PDSD 7106 Preventive and Community Pediatric Dentistry 3 cr**

This course will be offered during the first year (term I). The prerequisite for this course will be the dental degree obtained prior to applying to the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients I. Course is evaluated on a pass/fail basis.

**PDSD 7107 Special Needs and Emergency Care in Pediatric Patients 3 cr**

This course will be offered during the first year (term I). The prerequisite for this course will be the dental degree obtained prior to applying to the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients I and Hospital Pediatric Dentistry I. Course is evaluated on a pass/fail basis.

**PDSD 7108 Growth and Development - Management of the Developing Occlusion 3 cr**

A program of resident presentations and seminars on the biology of interceptive orthodontics and dentofacial orthopaedics and their significance to clinical pediatric dentistry.

**PDSB 7110 Pharmacology and Toxicology in Pediatric Dentistry 3 cr**

Residents will be expected to obtain knowledge of pharmacology and toxicology of commonly used medications in clinical pediatric dentistry. A number of seminars will be conducted to obtain adequate knowledge and skills in this course.

## Psychology (PSYC)

**PSYC 7012 Ethics, History and Profession of School Psychology 1 3 cr**

An overview of the fundamental concepts and issues of professional School Psychology. Ethical, professional, regulatory and legal issues pertaining to the practice of school psychology are examined. Also examined are the history of school psychology and the organization of educational systems. Students may not hold credit for both PSYC 7012 and the former PSYC 7010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**Mutually Exclusive:** PSYC 7010

**PSYC 7014 Ethics, History and Profession of School Psychology 2 3 cr**

A continuation of the examination of fundamental concepts and issues of professional School Psychology. Ethical, professional, regulatory and legal issues pertaining to the practice of school psychology are examined. Also examined are the history of school psychology and the organization of educational systems. Students may not hold credit for both PSYC 7014 and the former PSYC 7010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**Mutually Exclusive:** PSYC 7010

**PSYC 7022 Psycho-educational Assessment and Measurement 1 3 cr**

Designed to provide students with training in the basic principles of psychological assessment and related measurement concepts, highlighting the process of data-based decision making. Emphasis will be placed on how information from a variety of psycho-educational sources is used to identify profiles for planning intervention programs. Students may not hold credit for both PSYC 7022 and the former PSYC 7020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**Mutually Exclusive:** PSYC 7020

**PSYC 7024 Psycho-educational Assessment and Measurement 2 3 cr**

A continuation of training in the basic principles of psychological assessment and related measurement concepts, highlighting the process of data-based decision making. Emphasis will be placed on how information from a variety of psycho-educational sources is used to identify profiles for planning intervention programs. Students may not hold credit for both PSYC 7024 and the former PSYC 7020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**Mutually Exclusive:** PSYC 7020

**PSYC 7030 Learning and Cognitive Impairment 3 cr**

An examination of cognitive and medical disorders that have a direct impact on learning, including disabilities, reading failure, mental retardation, Attention Deficit Hyperactivity Disorder, pervasive development disorders (e.g. autism), fetal alcohol syndrome, and co-occurring conditions. Effective compensatory interventions and social, behavioural and affective consequences will be emphasized.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**PSYC 7040 Teaching Strategies, Learning Styles, and Academic Remediation 3 cr**

Provides an overview of basic theories of learning as applied to effective classroom instruction. Knowledge of individual differences in learning and principles of best practices in classroom instruction will be applied to the development of effective and curriculum adaptations for students with specific academic problems.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**PSYC 7050 Junior Practicum in School Psychology 3 cr**

Supervised practice with school children in a field setting. Emphasis on development of skills in assessing intelligence, academic skills and social-emotional difficulties, and on communication of findings to parents, teachers, and school administrators through written and verbal reports. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PSYC 7060 Senior Practicum in School Psychology 6 cr**

Supervised practice in a school setting. The focus is on development of skills relevant to case conceptualization, intervention, and supervision of junior practicum students. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: PSYC 7050, permission of instructor.

**PSYC 7070 Social, Emotional, and Personality Assessment of Children/Youth 3 cr**

An overview of theory, research, and the educational implications of social, emotional, and personality assessment of children and adolescents. A variety of methods are examined with an emphasis on empirically-supported practices in the assessment of psychopathology and socio-emotional functions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**PSYC 7080 Child/Youth Psychopathology 3 cr**

Examines mental health conditions, covering a range of internalizing and externalizing disorders in children and youth. Biopsychosocial and ecological models, risk and resiliency, and developmental and cultural issues are examined. Structured and semi-structured diagnostic interviews are reviewed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**PSYC 7082 Intervening with Children and Social Systems 3 cr**

Examines psychotherapy with social systems, including children, families, and groups. A lifespan perspective will be employed. Diversity issues within each relevant social grouping will be highlighted. Restricted to students in clinical or school psychology.

**PSYC 7090 Behavioural Assessment and Intervention in School Settings 3 cr**

Behavioural management strategies and techniques for children and adolescents who present with serious disruptive and/or emotional and behavioural disorders in schools. A wide range of techniques and strategies are considered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**PSYC 7120 Consultation and Supervision 3 cr**

An examination of theories and models of school-based consultation and collaboration. Practice with techniques and procedures associated with effective consultation with teachers, school administrators, and parents.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**PSYC 7130 School Psychology Research Design and Program Evaluation 3 cr**

Provides students with knowledge and skills needed to understand, design, and conduct evaluations of intervention programs for individuals experiencing academic or behaviour difficulties in school. Addresses the aims, theories and methods of program evaluation, including relevant research design and statistical methods.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.

**PSYC 7140 Clinical Research Design 3 cr**

This course addresses issues of research design relevant to clinical research. Topics include reliability and validity of measurement, correlational, quasi-experimental, and experimental designs, clinical significance, and power analysis. Students complete a research proposal relevant to their thesis interests.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**PSYC 7150 Readings in Autism Spectrum Disorders 3 cr**

Students will read recent research in Autism Spectrum Disorders, acquire skills to critically evaluate empirical evidence, and examine implications for practice. Among the topics covered will be assessment, diagnosis, epidemiology, and applied behaviour analysis early intervention.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PSYC 7160 Cross-Cultural Social Psychology 3 cr**

Cross-cultural psychology is the critical and comparative study of the linkages between cultural norms and thoughts, feeling and behaviour. This course focuses on Cross-cultural Social Psychology. Therefore, the assigned readings deal with topics that Social Psychology in general examines.

**PSYC 7170 Theories of Close Relationships 3 cr**

Students will be exposed to the theories that apply to the initiation, development, maintenance, and dissolution of relationships. The primary focus will be on evolutionary theory, attachment styles, communal and exchange relationships, equity theory, interdependence theory and the investment model, attributional theories, and theories of love.

**PSYC 7180 Self-Regulation and Health 3 cr**

This course examines how self-regulatory processes such as goal-setting and self-awareness can affect behaviours that promote or undermine human health. A wide range of health-related behaviours is considered such as smoking, exercise, safe-sex practices, and eating.

**PSYC 7190 Social Psychology and Health 3 cr**

This course considers health from a social psychological perspective. Weekly readings and discussion will focus on social cognitive processes and social influence processes that may mediate between stress and illness or may direct people's judgments of their health and choices of health-related behaviours.

**PSYC 7192 Psychology of Health and Aging 3 cr**

This course considers how adults adapt to the challenges of aging and the accompanying health problems. Seminar discussions will focus on selected psychological theories and related empirical literature regarding belief systems that operate in the face of health- and age-related challenges. Students may not hold credit for both PSYC 7192 and PSYC 7310 with the topic "Health and Aging."

**PSYC 7200 Quantitative Methods in Psychology 1 3 cr**

An introduction to descriptive and inferential statistics as it relates to the analysis of psychological data. Topics such as shapes of distributions, measures of central tendency and variability, hypothesis testing, and interval estimation, single and multifactor analyses, classical and robust methods of analysis will be discussed.

**PSYC 7210 Quantitative Methods in Psychology 2 3 cr**

Applied statistics for psychologists, with a focus on regression analysis, linear models, and generalized linear models. Emphasis will be placed on the application of statistical methods and computer software in psychological research. Not to be held with the former PSYC 8420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 7200 or permission of instructor.

**Equiv To:** PSYC 8420

**PSYC 7220 Autism Practicum 1 3 cr**

Graduate students will be taught to provide applied behavior analysis training for children with autism. Students will be taught many of the skills expected of tutors and senior tutors in the St. Amant Applied Behavior Analysis Program for Children with Autism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PSYC 7230 Autism Practicum 2 3 cr**

Graduate students will learn to supervise tutors and parents providing applied behavior analysis training for children with autism. Students will be taught many of the skills expected of a clinical consultant in the St. Amant Applied Behavior Analysis Program for Children with Autism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 7220 and permission of instructor.

**PSYC 7240 Developmental Disabilities Practicum 1 3 cr**

Students will work closely with behavior analysts in the Psychology Department at St. Amant to assess problems, design and execute appropriate interventions, and conduct follow-ups for persons with developmental disabilities.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PSYC 7250 Developmental Disabilities Practicum 2 3 cr**

Graduate students will work closely with behavior analysts in the Psychology Department at St. Amant in the provision of applied behavior analysis consultation services for front line staff caring for persons with developmental disabilities.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 7240 and permission of instructor.

**PSYC 7260 Case Conceptualization and Communication 1 0 cr**

In this course students will be exposed to the theory and practice of case conceptualization and communication. Students are required to be present for presentations of clinical cases and participate in discussions of them. Grading is Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**PSYC 7270 Case Conceptualization and Communication 2 0 cr**

In this course students will be exposed to the theory and practice of case conceptualization and communication. Students are required to be present for presentations of clinical cases and participate in discussions of them. Grading is Pass/Fail.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**PSYC 7280 History and Systems of Psychology 3 cr**

A survey of the major contemporary systems of psychology and their history.

**PSYC 7290 Psychopathology and Diagnosis 3 cr**

Advanced study of abnormal behaviour, diagnostic approaches, and related research. Not to be held with the former PSYC 7870.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**Equip To:** PSYC 7870

**PSYC 7300 Applied Behavior Analysis in Developmental Disabilities 3 cr**

Students will read recent applied behavior analytic research in behavioral assessments and interventions for people with developmental disabilities, acquire skills to critically evaluate empirical evidence, and examine implications for practice. Students may not hold credit for both PSYC 7300 and PSYC 7310 with the topic "Research in Developmental Disabilities."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PSYC 7310 Current Topics 1 3 cr**

An intensive study of the contemporary research and theory in a selected field of psychology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PSYC 7320 Foundations of Evidence-Based Treatment 3 cr**

This course is designed to provide students with both a knowledge/evidence base for the foundations of psychotherapy and practical skills that will prepare them for more advanced learning via supervised work with clients. Not to be held with the former PSYC 8410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**Equip To:** PSYC 8410

**PSYC 7330 Cognitive Development 3 cr**

You will gain an advanced understanding of core theories and fundamental issues in cognitive development research. You will also gain an in-depth understanding of a particular cognitive developmental research issue of your choice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7340 Sensory Processes 1 3 cr**

An intensive review of current research and theories in visual processes. Both behavioural and physiological aspects of vision will be considered.

**PSYC 7350 Sensory Processes 2 3 cr**

An intensive review of current theories and research in audition, smell, taste, and the cutaneous senses.

**PSYC 7362 Ethics and Professional Issues in Applied Behaviour Analysis and Psychology 3 cr**

This course is intended to provide an introduction to ethical and professional issues relevant to the science and practice of applied behaviour analysis and psychology. Students in this course will become familiar with the code of ethics for behaviour analysts and psychologists; relevant Provincial legislations; examine ethical issues pertaining to practice and research with humans; and examine essential skills to be an effective professional.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PSYC 7380 Advanced Research Design 3 cr**

The use of randomized subjects, block, factorial, latin square, and repeated measures designs in psychological research is discussed. Ancillary topics considered are unbalanced designs, multiple linear regression, magnitude estimation and simultaneous inference. Students will also use statistical packages to analyze data from psychological experiments.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 8420 or permission of instructor.

**PSYC 7400 Measurement and Scaling Theory 3 cr**

Discussion of measurement theory, data theory, and scaling models.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: the former PSYC 7390 or permission of instructor.

**PSYC 7410 Advanced Psychometric Theory 3 cr**

Current theory and research in psychometrics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 7400 or permission of instructor.

**PSYC 7420 Multivariate Methods in Psychology 3 cr**

Designing and analyzing behavioural science experiments containing multiple dependent (criterion) and independent (predictor) variables is discussed. The use of statistical packages is illustrated.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 7210 or the former PSYC 8420 or permission of instructor.

**PSYC 7430 Advanced Physiological Psychology 3 cr**

The physiological correlates of sensation, perception, learning, motivation, and complex behaviour.

**PSYC 7470 Advanced Developmental Psychology 3 cr**

Theory and research in contemporary developmental psychology.

**PSYC 7492 Psychology of Addiction 3 cr**

This course allows for advanced study in an integrative psychology of addictive disorders. Topics will include the history, epidemiology, psychopharmacology, and biological and psychosocial etiologies of addictive behaviours. Evidence-based treatments will also be covered.

**PSYC 7520 Ethics and Professional Issues in Clinical Psychology 3 cr**

Study of professional issues in clinical psychology. Historical development and present status of clinical psychology; what defines a profession; ethics codes, standards of practice, and legal requirements; training, internships, and accreditation; professional organizations, registration, and advocacy; employment in public and private sectors. Grading is Pass/Fail. Not to be held with the former PSYC 8070.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**Equip To:** PSYC 8070

**PSYC 7550 Intellectual and Cognitive Assessment 3 cr**

This course will provide clinical students with a thorough overview of key issues and clinical knowledge related to intellectual and cognitive assessment of children and adults. Learning will take place through a combination of lectures, course readings, discussion, group exercises, student presentations, and hands-on practical experience with cognitive tests. Not to be held with the former PSYC 8150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**Equiv To:** PSYC 8150

**PSYC 7560 Personality and Psychological Assessment 3 cr**

This course will provide clinical students with a thorough overview of key issues and clinical knowledge related to personality and psychological assessment of youth and adults. Learning will take place through a combination of lectures, course readings, discussions, group exercises, student presentations, and hands-on practical experience with personality and psychological tests. Not to be held with the former PSYC 8160.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**Equiv To:** PSYC 8160

**PSYC 7570 Skinner's Writings 3 cr**

The course will cover basic behavioural principles and procedures, and examine Skinner's behavioural interpretations of complex human behaviours and social phenomena.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PSYC 7620 Person X Situation Interactionism 3 cr**

We will first explore research demonstrating the impact of personality and situations, separately, on behavior. We will then examine the debate that arose about whether understanding the person or the situation would have the most scientific merit. We spend the remainder (and majority) of the course discussing the theories and research that arose from that debate. The majority of this research has an interactionist perspective, taking both the person and his/her situation into account. Students may not hold credit for both PSYC 7620 and PSYC 7310 with the topic "Person X Situation Interactionism."

**PSYC 7650 Theory and Research in Personality 3 cr**

A lecture and reading course designed to familiarize the student with the concepts and operations associated with various approaches to the study of individual differences and patterns of difference in behaviour; emphasis is placed on research and that function of theory which generates research.

**PSYC 7660 Intergroup Relations 3 cr**

This course examines intergroup relations from a social psychological perspective. Key topics include sources of prejudice and discrimination, the "target's" perspective, and strategies for reducing prejudice and discrimination. Activities may include participating in class discussions, giving presentations, and writing several short papers and a research proposal. Students may not hold credit for both PSYC 7660 and PSYC 7310 when titled "Intergroup Relations."

**PSYC 7670 Seminar in Personality 1 3 cr**

An intensive examination of the current methods and research arising from the classical theories of personality.

**PSYC 7680 Seminar in Personality 2 3 cr**

An examination of individual difference variables suggested by the various personality theories. Particular emphasis will be given to current research and theory.

**PSYC 7700 Problems in Psychological Research 3 cr**

No description available for this course.

**PSYC 7710 Problems in Psychological Research 3 cr**

No description available for this course.

**PSYC 7720 Problems in Psychological Research 3 cr**

No description available for this course.

**PSYC 7730 Problems in Psychological Research 3 cr**

No description available for this course.

**PSYC 7740 Problems in Psychological Research 3 cr**

No description available for this course.

**PSYC 7750 Problems in Psychological Research 3 cr**

No description available for this course.

**PSYC 7760 Problems in Psychological Research 3 cr**

No description available for this course.

**PSYC 7770 Problems in Psychological Research 3 cr**

No description available for this course.

**PSYC 7780 M.A. Thesis Proposal Development 0 cr**

Students registering for this course will work under the supervision of their advisor to prepare a complete draft of the M.A. Thesis Research Proposal. Students enrolled in a thesis-based M.A. program in Psychology must register for this course in one of their first four (4) terms of full-time study. The course must culminate in submission of a complete draft of the M.A. Thesis Research Proposal to all members of the thesis advisory committee. This course will be graded on a pass/fail basis as determined by majority opinion of the thesis advisory committee.

**PSYC 7790 Ph.D. Dissertation Proposal Development 0 cr**

Students registering for this course will work under the supervision of their advisor to prepare a complete draft of the Ph.D. Dissertation Research Proposal. Ph.D. students must register for this course in one of their first eight (8) terms of full-time study. The course must culminate in submission of a complete draft of the Ph.D. Dissertation Research Proposal to all members of the thesis advisory committee. This course will be graded on a pass/fail basis as determined by majority opinion of the thesis advisory committee.

**PSYC 7800 Seminar in Quantitative Methods in Psychology 1 3 cr**

Special topics and recent advances in the design and analysis of behavioural science data will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 7760 or permission of instructor.

**PSYC 7810 Seminar in Quantitative Methods in Psychology 2 3 cr**

An extension of the material covered in PSYC 7800 with particular emphasis on quantitative techniques typically employed in such areas as discrimination learning, personality, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 7760 or permission of instructor.

**PSYC 7820 Interventions I 3 cr**

This course examines empirically-supported interventions ranging from primary through tertiary prevention/intervention efforts directed at individuals, groups, and families, as well as classroom- and school-based intervention and prevention programs to promote a range of adaptive outcomes and intervene in a range of maladaptive pathways.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-School Psychology students.



**PSYC 7830 Interventions II 3 cr**

This course examines empirically-supported interventions ranging from primary through tertiary prevention/intervention efforts directed at individuals, groups, and families, as well as classroom- and school-based intervention and prevention programs to promote a range of adaptive outcomes (e.g., social competence, positive peer relations) and intervene in a range of maladaptive pathways (e.g., development of internalizing and externalizing problems and disorders). The course briefly introduces some specific programs available to assist in intervention design; however, the focus is on broad theoretical principles and aspects of evidence-based perspectives. Opportunities to integrate assessment and intervention will be presented throughout the course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 7820 (C+).

**PSYC 7900 Foundations of Health Psychology 3 cr**

For advanced students in psychology seeking specialized expertise in health, this course will review major topics such as the human body, the mind/brain connection, research methods, psychology and health care, terminal illness, pain and chronic disease, stress/coping, and health-related behaviours.

**PSYC 7910 Clerkship-Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7920 Clerkship-Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7930 Clerkship-Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7940 Clerkship-Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7950 Clerkship-Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7952 Clerkship-Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7954 Clerkship-Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7956 Clerkship-Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7958 Clerkship Practicum in Clinical Psychology 0 cr**

Supervised practice in a clinical service facility operated by the university or approved by the training program. Direct client contact to provide experience in assessment and therapy based on case conceptualization and supervised by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**PSYC 7980 Internship in Clinical Psychology 0 cr**

Supervised practice in a clinical setting outside the university involving more responsible, more autonomous, and more professional work than is present in either clerkship or practicum.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: four terms of PSYC 7910 - PSYC 7950.

**PSYC 7990 The Psychology of Language 3 cr**

Examination of recent advances in the study of human language use. Topics such as memory for meaning, language development and language comprehension will emphasize the interactions between modern cognitive psychology and linguistics.

**PSYC 8040 Psychology of Aging 3 cr**

An intensive review of current research and theory. Biological, psychological, and social aspects of aging are related to each other.

**PSYC 8050 Human Brain Functions 3 cr**

The physiological basis of human cognitive processes is discussed from various perspectives. Different theories and different research strategies are discussed critically.

**PSYC 8080 Case Conceptualization and Communication 3 3 cr**

In this course students will learn the theory and practice of case conceptualization and communication. Students will prepare and present clinical cases using well-defined models of treatment and case formulation strategies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**PSYC 8090 Clinical Supervision in Psychology 3 cr**

This course will review the major models, ethical issues, and recommended strategies and practices of clinical supervision. Learning modalities will include discussion of readings, role-playing, and supervised supervision of student clinicians. Pass/Fail course.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**PSYC 8100 Social and Community Intervention 3 cr**

A general introduction to community psychology and community mental health. Historical, conceptual, and philosophical underpinnings of community psychology and community mental health; community assessment and intervention; alternative approaches to contemporary social problems; understanding social policy and the role of the public sector; community research methods. Not to be held with the former PSYC 8170.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**Equip To:** PSYC 8170

**PSYC 8110 Program Evaluation and Consultation 3 cr**

An overview of program evaluation and consultation as major areas of applied psychological practice; analysis of contemporary social and health problems; development, implementation, and evaluation of human service programs; understanding human service organizations; the role of consultant and common types of consultation; ethical issues in program evaluation and consultation. Not to be held with the former PSYC 8180.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**Equip To:** PSYC 8180

**PSYC 8200 Development and Its Deviations 1 3 cr**

Developmental deviations will be related to such factors as genetic influences, physiological development, early experiences, language, intellectual and mental abilities, social and ethnic influences, parent-child interactions, and peer group interactions. Methods of special treatment will be considered.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

**PSYC 8212 Verbal Behaviour 3 cr**

This seminar critically examines the concepts developed by B.F. Skinner in his classical work "Verbal Behaviour."

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

**PSYC 8220 Topics in Abnormal Psychology 3 cr**

An in-depth study of various areas in the field of psychopathology.

**PSYC 8230 Clinical Neuropsychology 3 cr**

The understanding and evaluation of cognitive, sensory, and motor functions as they relate to cerebral dysfunction.

**PSYC 8240 Seminar in Behaviour Modification 3 cr**

This seminar deals with a variety of specific topics in behaviour modification.

**PSYC 8250 Practical Applications of Behaviour Modification 3 cr**

This course deals with the design, implementation, and evaluation of program packages, based on behaviour modification, to different population and problem areas.

**PSYC 8260 Individual Organism Research Methodology 3 cr**

An extensive coverage of the methods by which behaviour can be studied in individual organisms, including the rationale for the use of such methods as opposed to methods involving the averaging of group data.

**PSYC 8270 Seminar in Basic Operant Research 3 cr**

This seminar deals with selected topics in basic operant research.

**PSYC 8280 Supervised Field Study in Behaviour Modification 1 3 cr**

Supervised training will take place in a service facility typically located off the University campus. Students will work closely with a supervisor in assessing a problem, designing and executing an intervention program and conducting a follow-up.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of the instructor.

**PSYC 8282 Supervised Field Study in Behaviour Modification 1 3 cr**

Supervised training will occur in a setting typically located off campus. Students will work closely with a supervisor in assessing a problem, designing and executing an intervention program and conducting a follow-up with clients without developmental disabilities or autism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**PSYC 8290 Supervised Field Study in Behaviour Modification 2 3 cr**

Supervised training will take place in a service facility typically located off the University campus. Students will work closely with a supervisor in assessing a problem, designing and executing an appropriate intervention program and conducting a follow up.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of the instructor.

**PSYC 8292 Field Study in Behaviour Modification 2 3 cr**

Supervised training will occur in a setting typically located off campus. Students will work closely with a supervisor in assessing a problem, designing and executing an intervention program and conducting a follow-up with clients without developmental disabilities or autism.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written consent of instructor.

**PSYC 8300 Behavioural Assessment 3 cr**

This course teaches students how to conduct behavioural assessment as a necessary feature of the three interrelated processes of problem identification, program design and outcome evaluation in the application of behaviour modification techniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of the instructor.

**PSYC 8330 Family Therapy Seminar 3 cr**

This course deals with both family theory and practice by reviewing the current literature on family systems and providing case discussions, peer supervision and small group simulated tasks.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Corequisite: current enrollment in PSYC 7910 - PSYC 7950 or GRAD 7030 or permission of the instructor.

**PSYC 8370 Logic of Research Design 3 cr**

A survey of nonstatistical issues in research design, focusing on precise formulation of research questions and implication for research design. Design problems from various psychological areas are solved by students in the laboratory the purpose being to strengthen critical ability and to identify commonalities across areas in methodological approach. Broader philosophical issues relevant to research design, such as the meaning of causality, are also addressed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: PSYC 8420 or permission of instructor.

**PSYC 8380 History and Theory in Developmental Psychology 3 cr**

A history of fundamental concepts in developmental psychology with consideration of important philosophical, theoretical, and empirical influences on the contemporary field.

**PSYC 8430 Cognitive Behaviour Therapy 3 cr**

Students learn the theory and practice of empirically supported therapies that emphasize cognitive and behavioural methods. Opportunities for CBT skill development, which can be applied to a wide range of psychological problems, are provided. Students may not hold credit for PSYC 8430 and any of: the former PSYC 8340 or the former PSYC 8400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor required for non-Clinical students.

## Religion (RLGN)

**RLGN 7020 Special Topics 1 3 cr**

Description not available for this course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**RLGN 7030 Special Topics 2 3 cr**

Description not available for this course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**RLGN 7080 Seminar in Research Methods and Theory 3 cr**

Description not available for this course.

**RLGN 7130 Seminar in Hinduism 3 cr**

An advanced study of select aspects of the Hindu tradition.

**RLGN 7140 Seminar in Buddhism 3 cr**

An advanced study of select aspects of the Buddhist tradition.

**RLGN 7150 Seminar in Islam 3 cr**

An advanced seminar in the study of Islam.

**RLGN 7160 Seminar in Judaism 3 cr**

An advanced seminar in the study of Judaism.

**RLGN 7170 Seminar in Formative Christianity 3 cr**

Advanced studies in selected aspects of formative Christianity.

**RLGN 7180 Seminar in Early Modern, Modern and Contemporary Christianity 3 cr**

Advanced studies in developments of Western Christianity since 1500.

**RLGN 7190 Seminar in Religion and Philosophy 3 cr**

Examination of the relation between religion and philosophy through selected figures and themes.

**RLGN 7200 Seminar in Religion and Psychology 3 cr**

Examination of selected developments in psychology and religion and religion and/or in psychoanalysis and the study of religion.

**RLGN 7210 Studies in Religious Concepts and Practices 3 cr**

Advanced study of selected religious concepts and practices topics.

**RLGN 7220 Seminar in Religions and Historiography 3 cr**

Advanced studies in the interactions among specific religious traditions, ideologies and historiography.

**RLGN 7230 Thesis Seminar 3 cr**

Exploration of a range of academic writing techniques and of their theoretical aspects.

**RLGN 7240 Textual Studies in Original Languages 3 cr**

Close study of primary texts in their original languages.

**RLGN 7250 Research Seminar 3 cr**

Study of selected theoretical and methodological issues in the study of religion.

**RLGN 7270 Seminar in Christianity 3 cr**

Critical study or selected historical and/or theoretical issues in selected periods of Christianity.

**RLGN 7300 Seminar in Religion and Culture 3 cr**

Study of selected religion-and-culture figures, issues, or themes.

**RLGN 8310 Seminar in Judaism 3 cr**

Selected issues in the study of Judaism.

**RLGN 9190 UW REL 3999 Languages for Religious Studies 6 cr**

Course may be taken as part of a Master of Religion program offered jointly with the University of Winnipeg.

## Restorative Dentistry (RSTD)

**RSTD 7010 Dental Laboratory Technology 4 cr**

This course is intended to assure that residents have a comprehensive overview of conventional, and digital dental laboratory technologies. It consists of lecture, seminar and laboratory periods and will review foundational and digital dental laboratory techniques and its application to prosthodontics. The student will fabricate prosthetic devices for patients.

**RSTD 7012 Advanced Prosthodontic Seminars 1-TMD, Occlusion, Articulators 1 cr**

This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to TMD, occlusion and articulators. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

**RSTD 7014 Classic Fixed Prosthodontic Literature Review 1 cr**

This course will consider classic concepts underlying the current practice of fixed prosthodontics by reviewing assigned readings from the scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

**RSTD 7016 Clinical Practice in Prosthodontics 1 8 cr**

This course consists of an integrated, patient-centered clinical programs. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary speciality prosthodontic practice.

**RSTD 7018 Current Prosthodontic Literature Review 1 1 cr**

This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

**RSTD 7022 Advanced Prosthodontic Seminars 3 - Removable Partial Dentures, Dental Materials 1 cr**

This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to removable partial dentures, dental materials. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

**RSTD 7024 Classic Complete Denture Prosthodontic Literature Review 1 cr**

This course will consider concepts underlying the current practice of complete denture prosthodontics by reviewing assigned readings from the scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

**RSTD 7026 Clinical Practice in Prosthodontics 3 8 cr**

This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary speciality prosthodontic practice. Pre-requisite is successful completion of RSTD 7116.

**RSTD 7028 Current Prosthodontic Literature Review 3 1 cr**

This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

**RSTD 7032 Advanced Prosthodontic Seminars 5 - Implant Prosthodontics 1 cr**

This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to implant prosthodontics. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

**RSTD 7036 Clinical Practice in Prosthodontics 5 8 cr**

This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking experiences for a contemporary speciality prosthodontic practice. Prerequisite is successful completion of RSTD 7126.

**RSTD 7038 Current Prosthodontic Literature Review 5 1 cr**

This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

**RSTD 7100 Dental Materials 6 cr**

This course consists of lecture, seminar and laboratory periods. The student will examine the current literature relevant to the program and will gain experience in the testing procedures used to evaluate dental materials. A project involving the evaluation of a dental material will be required of each student.

**RSTD 7112 Advanced Prosthodontic Seminar 2 - Complete Dentures, Maxillofacial Prosthodontics 1 cr**

This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to complete dentures, speech pathology, geriatric dentistry and maxillofacial prosthodontics. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

**RSTD 7114 Classic Removable Partial Denture Prosthodontic Literature Review 1 cr**

This course will consider classic concepts underlying the current practice of removable partial denture prosthodontics by reviewing assigned readings from the scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

**RSTD 7116 Clinical Practice in Prosthodontics 2 8 cr**

This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary speciality prosthodontic practice. Prerequisite is successful completion for RSTD 7016.

**RSTD 7118 Current Prosthodontic Literature Review 2 1 cr**

This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them. Prerequisite is successful completion of RSTD 7018.

**RSTD 7122 Advanced Prosthodontic Seminars 4 - Conventional Fixed Prosthodontics 1 cr**

This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to conventional fixed prosthodontics. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

**RSTD 7124 Classic Articulator and Maxillofacial Literature Review 1 cr**

This course will consider classic concepts underlying the current practice of articulators and maxillofacial prosthodontics by reviewing assigned readings from the scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

**RSTD 7126 Clinical Practice in Prosthodontics 4 8 cr**

This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary speciality prosthodontic practice. Prerequisite is successful completion of RSTD 7026.

**RSTD 7128 Current Prosthodontic Literature Review 4 1 cr**

This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them. Prerequisite is successful completion of RSTD 7028.

**RSTD 7132 Advanced Prosthodontic Seminars 6- Practice Management, Ethics, and Sleep Medicine 1 cr**

This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to practice management, ethics, infection control, and sleep medicine. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

**RSTD 7136 Clinical Practice in Prosthodontics 6 8 cr**

This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary specialty prosthodontic practice. Pre-requisite is successful completion of RSTD 7036.

**RSTD 7138 Current Prosthodontic Literature Review 6 1 cr**

This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them. Prerequisite is the successful completion of RSTD 7038.

**RSTD 7150 Orthodontic Materials 3 cr**

Students will examine in depth through lectures, seminars and research of the current literature, those materials used by orthodontists in their clinical practice. The relationship between materials properties and clinical performance will be emphasized.

## Russian (Slavic Studies) (RUSN)

**RUSN 6000 Language Reading Test 0 cr**

This course is graded pass/fail.

## Slavic Studies (Pol,Rusn,Ukrn) (SLAV)

**SLAV 7200 Literary and Cultural Theory 3 cr**

A survey of major theoretical approaches to German and Slavic literatures and cultures. Discusses the aesthetics of Enlightenment and Idealism, Nietzsche, Freud, Russian Formalism, Prague Structuralism, hermeneutics, semiotics, dialogism (Bakhtin), the Frankfurt School, collective memory, gender studies, post-colonialism, and multiculturalism.

**SLAV 7210 Introduction to Second Language Acquisition and Methods of Language Teaching 3 cr**

This course provides a general introduction to theories and approaches in second language acquisition (SLA) and methods of language teaching specifically designed for MA students of German and Slavic languages.

**SLAV 7400 Selected Topics in Slavic Literatures 3 cr**

Seminar discussions of various problems in Slavic literatures as related to the students' field of research. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**SLAV 7410 Seminar in Contemporary Slavic Literatures 3 cr**

Selected problems in contemporary Slavic literatures as related to the students' field of research.

**SLAV 7420 Studies in Modernism 3 cr**

A study of the representative works of modernism in Slavic countries with a focus on the years 1890-1930. The styles and movements that characterized the period will be examined. References will be made to the art of the period.

**SLAV 7430 Special Topics in Slavic Studies 3 cr**

An independent study course in Slavic literatures, cultures, or folklore. Topics will be selected to meet students' research or study interests. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

## Social Work (SWRK)

**SWRK 6010 Data Analysis for Social Work Research 3 cr**

An intermediate course in the analysis of quantitative social work data. The course will emphasize application and interpretation of analytical techniques useful in the pursuit of social justice through social work. **PR/CR: A minimum grade of C is required unless otherwise indicated.** Pre or co-requisite: SWRK 7620 or instructor approval. Priority to be provided to MSW students in course registration.

**SWRK 6020 Social Work Practice Seminar 6 cr**

Introduces students to ecological and other generalist practice models in the provision of social services. Attention is given to key contextual aspects of social work practice such as gender, poverty, and culture in the study of professional roles and ethics. Intervention modalities considered range from direct practice with individuals to strategies of community change.

**SWRK 6030 Canadian Social Welfare Policy 6 cr**

An examination of the elements of ideology, and the application of competing ideological systems in the study of social welfare policy. This course also examines the history of Canadian social welfare from European contact to contemporary developments.

**SWRK 6040 Anti-Oppressive Social Work Practice 3 cr**

An Overview of Anti-Oppressive social work practice. Focuses on application of this approach to a wide variety of service participants and the connections between policy and practice. Implications for the profession are explored.

**SWRK 6050 Field Practice 6 cr**

An educationally focused practice experience where the student carries a sustained professional role as a beginning practitioner. Requires 450 hours of time including an orientation program, engagement in practicum activities under supervision, educational contact time with the field instructor and evaluation of performance. For Pre-MSW students only. Subject to satisfactory completion and reports, students will be graded on a pass/fail basis.

**SWRK 6060 Social Work and Aboriginal People 3 cr**

Focuses on the analysis of social welfare policy and social work practice from an Aboriginal perspective. The influence of colonization as an attribute of oppression is examined along with an exploration of developments oriented to the goal of decolonization and empowerment.

**SWRK 6070 Qualitative Research in Social Work 3 cr**

An intermediate course in qualitative approaches for research for the pursuit of social justice through social work. It will examine various approaches to the design and analysis of qualitative social work research.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or co-requisite: SWRK 7620 or instructor approval. Priority to be provided to MSW students in course registration.

**SWRK 7002 Foundation in Social Work Practice and the Profession 3 cr**

Situates the social work profession within the context of a settler colonial state and examines the intersection of knowledge, theory, values, ethics, and power relations that form the foundation of the profession and shape interventions and norms within social service agencies.

**SWRK 7180 Advanced Field Practice 0 cr**

A student directed specialized practice experience where the focus is on the integration of theory, research and practice. Requires 450 hours of supervised, advanced practice following approval of a proposal developed by the student. Students will be graded on a pass/fail basis. Pre or Co Requisite: SWRK 7190.

**SWRK 7190 Integrating Theory and Research in Advanced Field Practice 3 cr**

Requires application of theory and research to analysis of selected activities undertaken in Advanced Field Practice. Pre or Co-requisite: SWRK 7180.

**SWRK 7220 Selected Topics in Social Work 3 cr**

A tutorial approach which permits the graduate student to develop an area of concentration independently but with assistance and mutual work with a faculty member.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: written permission of instructor.

**SWRK 7230 Problem Seminar 3 cr**

Students focus on the theory, social policy and social work practice implications of a given social problem area.

**SWRK 7280 Readings in Social Work and Social Welfare Research 3 cr**

A tutorial in specialized research methodology to be offered only to students who have highly specialized research interests which are not commonly offered in other courses.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: an introductory research course and consent of the instructor.

**SWRK 7290 Family Focused Social Work Practice 6 cr**

Theories of human behaviour are considered from an ecological perspective as they relate to family focused social work practice. Intervention methods are studied with special attention given to developmental issues and social contextual factors in the assessment and treatment of distressed human systems.

**SWRK 7300 Clinical Evaluation of Social Work Interventions 3 cr**

This course examines methods of evaluating clinical social work interventions with individuals, couples, families, and other small groups.

**SWRK 7430 Evaluation Research in Social Work Practice 3 cr**

A course focused on the development of knowledge and skills in applying methods of evaluation to policies and programs in the human services. Analytical and practice skills in program evaluation are developed through an examination of theories, models, and case study applications.

**SWRK 7440 Policy Analysis in Social Work Practice 3 cr**

A course focused on the development of knowledge and skills for planning social policies and social programs with special attention to the importance of policy analysis. Analytical and practice skills are developed through case studies and a critical review of theories and models.

**SWRK 7450 Advanced Research Methods 1 3 cr**

An overview of design and methodology options in quantitative and qualitative social work research, with special emphasis on practice in community settings.

**SWRK 7460 Advanced Research Methods 2 3 cr**

Advanced quantitative analysis of social work policy and practice, with emphasis on multivariate analysis techniques.

**SWRK 7470 Advanced Research Methods 3 3 cr**

Advanced qualitative analysis of social work policy and practice, with emphasis on analyzing appropriate case studies, and interview and documentary information.

**SWRK 7520 Dissertation Seminar 0 cr**

A required non-credit course on special issues to support students in preparing their formal dissertation proposals. Topics include scholarly findings, research methodology, and data analysis. Graded as P/F.

**SWRK 7530 Critical Issues in Social Work 3 cr**

An opportunity for students to engage in the study of a specific field or topic in social work. Taken as a course, tutorial or offered as a special Ph.D. seminar when numbers permit.

**SWRK 7600 Critical Perspectives and Social Work 3 cr**

This course focuses on exploring the relationship between critical social theories and social work. Students will examine social work theory and practice from critical theoretical perspectives and analyze their current and past policy and practice experiences from these perspectives. Priority to be provided to MSW students in course registration.

**Mutually Exclusive:** SWRK 7720

**SWRK 7620 Paradigms, Methodologies, and Methods for Social Work Research 3 cr**

An intermediate course that provides an overview of research paradigms, methodologies, and methods. Students will be prepared to employ research as critical consumers, mobilizers, and producers of knowledge to further social work based on social justice. Priority to be provided to MSW students in course registration.

**SWRK 7630 Advanced Social Work Practice with Individuals and Families 3 cr**

This course provides the foundation for advanced social work practice with individuals and families in their social contexts. Perspectives for intervention are examined and critiqued including ecological, systems, postmodern, indigenous, and structural approaches.

**SWRK 7640 Application and Critique of Theory and Research in Social Work Practice with Individuals and Families 3 cr**

Using supervised practice experiences, this course develops advanced skills for assessment, intervention, and evaluation of direct practice with individuals and families within the context of social work's commitment to addressing social injustice.

**SWRK 7650 Advanced Social Work Practice with Groups 3 cr**

This course will increase students' knowledge and skill in reflexive social work practice with groups in a broad range of health and social service settings.

**SWRK 7660 Social Work Perspectives on Practice with Networks, Neighbourhoods and Communities 3 cr**

This course aims to develop students' knowledge and skills in reflexive social work practice with networks, neighbourhoods and communities.

**SWRK 7670 Community Mobilization: Application of Concepts in Social Work Practice with Groups, Networks and Co 3 cr**

This course integrates theories about community with practical application. Students will also gain knowledge of agencies based in community practice. This course will extend over two terms.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or co-requisite: SWRK 7660.

**SWRK 7690 Leadership, Strategic Program Planning and Financial Management in Social Service Organizations 3 cr**

A course focused on the development of knowledge and leadership skills in the analysis and implementation of organizational management models for the strategic planning, development, implementation, delivery, and financial management of social services organizations.

**SWRK 7700 Grounding Our Foundation in Indigenous Knowledges and Social Work 0 cr**

This course provides a general overview of Indigenous approaches to healing and helping. Connections to social work practice/policy are identified. The course is focused on experiential and participatory learning and involves a 5-day intensive retreat. Students will be graded on a pass/fail basis.

**SWRK 7710 Remembering Our Histories 3 cr**

This course will set a foundation for understanding historical perspectives of Indigenous knowledges in relation to social work. Raise awareness of traditional and spiritual; connections to languages, families, communities, nations, and lands to establish an understanding of "relationship" in Indigenous ways of being. Students will be graded on a pass/fail basis.

**SWRK 7720 Critical Theory and Indigenous Peoples 3 cr**

This course will review critical social theories with primary focus on colonialism and social justice, in relation to social work. Anti-colonialism, anti-oppressive approaches, feminist approaches and other critical perspectives, in relation to Indigenous Peoples, will be examined from Indigenous perspectives. May not hold with SWRK 7600.

**Mutually Exclusive:** SWRK 7600

**SWRK 7730 Indigenous Research Methodologies and Knowledge Development 3 cr**

This course will examine research epistemologies and methodologies based in Indigenous ontologies and social experiences in the context of social work research with Indigenous Peoples. The course will present the influences of colonization, Indigenism, and decolonization on knowledge development.

**SWRK 7740 Indigenous Peoples, Identity, and Social Work 3 cr**

This course will give students an understanding of how they see themselves and how their relationships at individual, family, clan, community, and nation levels contribute to identity development. It deepens understanding of how people view themselves and react in contemporary contexts. Students will be graded on a pass/fail basis.

**SWRK 7750 Indigeneity, Power, Privilege, and Social Work 3 cr**

This course will examine identity development influenced by gender, ethnicity, Indigeneity, internalized oppression, aboriginalism, internalized domination, whiteness, white privilege, racism, and in relation to social policies and social work practice with individuals, families, communities, and nations.

**SWRK 7760 Project/Thesis Seminar 1 0 cr**

This course will focus on initiating knowledge development in practice settings. Students will learn to apply Indigenous and critical social work epistemological and methodological concepts by finalizing their project/thesis proposal and beginning their projects. Students will be graded on a pass/fail basis.

**SWRK 7770 Social Challenges and Indigenous Helping Practices 3 cr**

This course will teach students how Indigenous Elders, traditional teachers and /or medicine people identify, interpret and meet current social challenges. The course looks at how positive identities and relationships are fostered through traditional Indigenous helping practices and how they currently inform social work. Students will be graded on a pass/fail basis.

**SWRK 7780 Social Work, Social Challenges, and Indigenous Peoples 3 cr**

This course will present challenges Indigenous peoples face through lenses of critical theories, particularly decolonization and social justice. It reviews social policies and social work practices affecting Indigenous peoples, including those of Indigenous organizations that centre Indigenous perspectives.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SWRK 7750.

**SWRK 7790 Project/Thesis Seminar 2 0 cr**

This course will continue to guide students on their application/research of Indigenous practice knowledges in their chosen projects/theses and to ensure the student is actively implementing the projects/theses as outlined in their approved proposals. Students will be graded on a pass/fail basis.

**SWRK 7800 Indigenism 3 cr**

This course will focus on Indigenous knowledges shared through group participation in Indigenous helping practices. It looks at how these practices could be supported by social workers in communities and organizations for people facing social challenges. Students will be graded on a pass/fail basis.

**SWRK 7810 Anti-Colonial Social Work 3 cr**

This course will focus on design and participation in community service and research projects. This course will challenge the student to include reflection, application, and evaluation of critical social work knowledge and research on how the student project (s) and/or action(s) contribute to development of anti-colonialism, social justice, and Indigenism.

**SWRK 7820 Project Seminar 3 3 cr**

Students in this course will complete their major projects. Students will also complete a written paper and oral presentation addressing their respective projects.

**SWRK 8010 Perspectives on Knowledge for Social Work 3 cr**

A seminar focusing on the definition, development, legitimization, and transmission of knowledge for social work practice. A range of approaches will be discussed including scientific approaches (logical positivism), post-modern approaches, indigenous and culturally based approaches, and critical approaches.

**SWRK 8020 Development of the Social Work Profession 3 cr**

A seminar focusing on the development of social work from mainstream and marginalized people's perspectives (including Aboriginal people and women), and its relationship; to current professional issues. Histories, ideological, economic, theoretical, and political factors will be considered in examining selected fields of practice.

**SWRK 8030 Advanced Qualitative Research in Social Work 6 cr**

A seminar and laboratory course in the understanding and use of a wide range of epistemological and methodological approaches to research related to social work. This will include a focus on the views and practices of Aboriginal peoples, women, and other marginalized persons.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: a Master's level qualitative research course (B) taken within five years or instructor approval.

**SWRK 8040 Advanced Quantitative Research in Social Work 6 cr**

A seminar and laboratory course in the use of multivariate statistics in analyzing experimental, quasi-experimental, survey and administrative data related to social policy, social services, and social work practice.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: Master's level quantitative research course (B) taken within five years or instructor approval.

**SWRK 8100 Social Work Past and Present: Trends, Institutions and Practices 3 cr**

Development of Social Work in Canada, with international comparisons, through examination of social processes and intellectual trends shaping the profession, such as colonization, Indigenous issues, feminism, neoliberalism and globalization, and highlighting of practices, methods and models. Cannot be held with SWRK 8020.

**Equiv To:** SWRK 8020

## Sociology (SOC)

**SOC 7110 Seminar in Sociology of Religion 3 cr**

A comparative and analytical study of religion with particular reference to such areas as integration, change, ideology, value orientation, normative structures, social class, intergroup relations, personality systems.

**SOC 7120 Seminar in Sociology of Education 3 cr**

An analytical treatment of the influence of education, as a basic social institution, on society its functions in socialization, change, control, social mobility, social progress, etc. and the influence of society on the organization, content, and goals of education.

**SOC 7160 Selected Topics 3 cr**

An intensive study of the contemporary research and theory in a selected field of sociology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**SOC 7190 Seminar in Selected Topics in Sociological Theory 3 cr**

The content of this course may vary from year to year, depending on interest and need. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**SOC 7240 Seminar in Selected Topics in Research and Methods 3 cr**

The content of this course may vary from year to year, depending on interest and need. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**SOC 7280 Seminar in Theoretical Criminology 3 cr**

An advanced course dealing with theory and research in the field of criminology with emphasis placed on an evaluation of existing theories of crime, law, and social justice.

**SOC 7300 Seminar in the Sociology of Law and Social Control 3 cr**

A critical examination of classical and contemporary sociological theories of law and social control and their import for understanding substantive issues relating to the law-society relationship.

**SOC 7310 Seminar in Intergroup Relations 3 cr**

This seminar will provide an opportunity for detailed study of intergroup (religious, racial, and ethnic) relations in contemporary Canadian society. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**SOC 7320 Seminar in Political Sociology 3 cr**

A critical examination of classical and contemporary sociological theories and current empirical research concerned with the relationship between politics and society. Particular emphasis is placed upon the origin, development, nature and future of the welfare state from a comparative perspective.

**SOC 7340 Seminar in the Sociology of the Family 3 cr**

This seminar investigates various conceptual frameworks which are developing in the study of the family today, including research problems and procedures unique to such study. Various approaches will be examined.

**SOC 7350 Advanced Reading and Research 1 3 cr**

Directed study of a selected area within the general field of sociology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**SOC 7370 Issues in Health Care Seminar 3 cr**

An advanced seminar designed to examine current issues in health care. The content of this course may vary from year to year depending on interest and need.

**SOC 7390 Survey Research Methods 3 cr**

Through the use of secondary electronic data sources, students learn all aspects of survey research. Topics covered include: sampling, question and questionnaire construction, index construction and scaling methods, techniques of establishing validity and reliability, order effects, conducting interviews, coding, data analysis, and budgeting. Previous experience with multivariate data analysis at the undergraduate level is strongly encouraged.

**SOC 7400 Advanced Quantitative Research Methods 3 cr**

This course emphasizes the understanding and application of advanced quantitative data analysis techniques to sociological research problems. Issues in regression decomposition, path analysis, log-linear analysis, discriminant function analysis, principal components and factor analysis, as well as non-parametric statistical tests are covered as they relate to sociological research concerns. Statistical packages are used to illustrate sociological examples.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: [SOC 4570 or the former SOC 4480] or written consent of department head.

**SOC 7420 Qualitative Research Methods for Sociological Inquiry 3 cr**

This course provides an overview of methodologies of qualitative research for sociological inquiry. Discussion focuses on the ontological and epistemological foundations of qualitative methods and the variety of approaches and techniques available within interpretive and critical paradigms. Issues such as sampling, reflexivity, analysis, interpretation, theoretical development, rigor and representation will be discussed.

**SOC 7430 Seminar in Classical Sociological Theory 3 cr**

A critical examination of certain central aspects of the sociological tradition. The content of this course may vary from year to year depending on interest and need.

**SOC 7440 Seminar in Contemporary Sociological Theory 3 cr**

An examination of current trends in sociological theory. The content of this course may vary from year to year depending on interest and need.



**SOC 7450 Selected Topics in Criminology 3 cr**

An advanced seminar in a selected area of criminology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**SOC 7470 Evaluating Social Programs 3 cr**

Designed as a course in applied sociology, students will review the models and methodologies used for evaluating social programs. The course will introduce the necessary conceptual and analytic tools to design and carry out program evaluations.

**SOC 7480 Social Inequality 3 cr**

A critical examination of classical and contemporary theories and current empirical research concerned with various dimensions of social inequality (such as class, gender and race) and social stratification from a comparative perspective.

**SOC 7490 Globalization 3 cr**

A sociological examination of the globalization of trade, production and finance, including the creation of multilateral trading blocs (e.g., APEC, EU, NAFTA) and international organizations (e.g., WTO, IMF, the World Bank) and their impact upon social inequality, the welfare state and the environment in developed and developing nations.

## Soil Science (SOIL)

**SOIL 7100 Soil Physical Chemistry 3 cr**

Topics of discussion: ionic equilibria, ion exchange and ionic transport including soil-plant relationships.

**SOIL 7110 Soil Physics I - General 3 cr**

First and second laws of thermodynamics, Darcy's law, saturated and unsaturated flow, simulation modeling of moisture movement, soil aeration, water availability to seeds, strength properties of unsaturated soils.

**SOIL 7130 Soil Chemistry 3 cr**

Chemical equilibria and soil solution chemistry; surface chemistry and solid-solution reactions; mineral structure, colloid chemistry and analytical techniques; fate of nutrients and pollutants; reactions of fertilizers.

**SOIL 7140 Soil Nitrogen 3 cr**

Discussion of organic and inorganic nitrogen in soils, nitrogen fixation, mineralization, nitrification, denitrification, and plant availability of soil nitrogen. Students will be required to review literature on assigned topics.

**SOIL 7170 Agricultural Micrometeorology 3 cr**

Discussion of mass and energy transport in the boundary layer, evaporation and transpiration of water, light absorption and transmission of carbon dioxide in plant canopies and climate change impacts on micrometeorological processes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: SOIL 3060 and/or consent of instructor.

**SOIL 7180 Environmental Chemistry of Pesticides and Related Compounds 3 cr**

Pesticide chemodynamics, biological and non-biological transformations of pesticides in water, soil and biota, bioaccumulation and food chain distribution of pesticides and related xenobiotics and environmental fate models will be discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of instructor.

**SOIL 7210 Topics in Soil Fertility 3 cr**

Advanced study of behaviour and crop requirements for selected nutrients (except for nitrogen, as covered in SOIL 7140. Students will be required to review literature and prepare seminars on assigned topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: SOIL 4520 or consent of instructor.

**SOIL 7220 Principles of Scientific Research and Communication 3 cr**

Principles of scientific research; management skills; writing skills; oral and poster presentation; preparation of research proposal and thesis (pass/fail). These topics will focus on aspects of soil science and will give students experience in writing and presenting scientific material to increase their professionalism as soil scientists.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of instructor.

**SOIL 7230 Topics in Landscape and Processes I 3 cr**

An examination of methods of landscape characterization and of landscape processes, their impacts, interactions and modelling.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of instructor.

**SOIL 7240 Topics in Landscape Processes II 3 cr**

A continuation of SOIL 7230.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Consent of instructor.

**SOIL 7250 Topics in Soil Science 3 cr**

Several courses in soil science are sectioned into modules. Modules of one credit hour on special topics are also available. Students may select three modules from the various courses or from special topics for SOIL 7250.

**SOIL 7270 Advanced Soil Ecology 3 cr**

Examine the role of soil organisms and their communities in decomposition, elemental cycling, and pathogen/pest suppression in managed and natural soil systems. Understand methods of studying biochemical activity and communities in soil. Take a specific research topic of choice and develop an understanding of the organisms and communities, environmental controls of key biological processes involved and apply your knowledge to resolving a specific research issue.

## Statistics (STAT)

**STAT 7060 Advanced Theory of Probability 3 cr**

Probability as measure, convolutions, limit laws, conditional probability and expectation, law of large numbers and other selected topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**STAT 7080 Advanced Statistical Inference 3 cr**

Selected topics from recent developments in parametric and/or non-parametric statistical inference.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**STAT 7100 Analysis of Discrete Data 3 cr**

Inference concerning discrete distributions, analysis of categorical data, and other selected topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**STAT 7140 Linear Models 3 cr**

Theory of linear models, regression analysis, and analysis of variance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**STAT 7200 Multivariate Analysis 1 3 cr**

Multivariate normal distribution, Hotelling's T<sub>2</sub>, Classification methods, principal components and canonical correlations.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**STAT 7220 Seminar in Statistics 1 3 cr**

A seminar course on new development in statistics.

**STAT 7240 Advanced Topics in Statistics 1 3 cr**

Special advanced research topics in statistics.

**STAT 7250 Advanced Topics in Statistics 2 3 cr**

Special advanced research topics in statistics.

**STAT 7260 Time Series 3 cr**

The auto-correlation function and spectrum, various processes, model identification, estimation and forecasting.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**STAT 7270 Bayesian Inference 3 cr**

Bayesian decision problems, priors, Jeffrey's Rule, robustness of posteriors, Bayesian justification of ANOVA.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of instructor.

**STAT 7290 Statistical Consulting 3 cr**

The role of a statistics consultant. Practical consulting experience.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of department.

**STAT 7310 Research Tools for Statistics 0 cr**

This course provides instruction in the use of a number of tools required for graduate level research in statistics. Topics include instruction in various software, such as LaTeX, R, SAS, etc. as well as Library usage, presentation and communication skills.

**STAT 7320 Research Project in Statistics 3 cr**

This course will provide the student with practical experience in doing research in the statistical sciences. Students will be matched with a faculty advisor and carry out a research project. Deliverables include a final research report and a presentation to the department.

**STAT 7350 Advanced Topics in Statistics 3 1.5 cr**

Special advanced research topics in statistics.

**STAT 7360 Advanced Topics in Statistics 4 1.5 cr**

Special advanced research topics in statistics.

## Supply Chain Management (SCM)

**SCM 7010 Advanced Supply Chain Management 3 cr**

Provides students at the graduate level with an in-depth examination of the major issues associated with the management of supply chains. The course content includes both managerial and technical matters, and addresses issues such as the importance of supply chain management in meeting global competition, internet and e-business application, supply chain integration and relationships, sharing risks and rewards, and the reduction of variance in supply chain performance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: A degree in business or discipline related to supply chain management or approval by instructor.

**SCM 7014 Seminar in Production and Operations Management 3 cr**

To critically review, gain a deeper understanding and academic appreciation of the core POM literature; to develop mature researchable ideas that fill research gaps in the area of POM as identified in the articles and in-class discussions; to pursue research topics in POM and conceptualize, craft, and shape intriguing research questions that may lead to long-term researchable programs; to present their research ideas/articles and critique the merits/shortcomings of others' research work in the area of POM

**SCM 7016 Simulation Models for Operations Management 3 cr**

Simulation is a powerful tool to analyze complex systems. Simulation is a method to mimic the behavior of real systems. This course introduces computer-based simulation and modeling with applications to supply chain and operations management where decision making can be enhanced through the modeling and analysis of complex systems. The course assumes a previous knowledge of probability and statistics.

**SCM 7018 Seminar in Production & Operations Management 3 cr**

The course emphasises empirical/conceptual research and aims to provide an opportunity for graduate students to gain a deeper understanding and an academic appreciation of the Production and Operations Management's literature. This course is a research-based seminar that is designed to be the driver for the graduate students' foundational research knowledge in Production and Operations Management.

**SCM 7020 Seminar in Supply Chain Management 3 cr**

This seminar course is designed to expose graduate students to cutting-edge research in supply chain management. It aims to develop an academic appreciation of the area literature by emphasizing empirical and conceptual papers and by assisting students in conducting independent research, critiquing articles, developing novel research ideas, and writing research papers that are both relevant and academically rigorous.

**SCM 7030 DOC SEM IN SC SUSTAINABILITY 3 cr**

This course adopts a broad view of supply chain sustainability. From a functional perspective, SCM includes logistics, purchasing, and a few aspects of marketing. Sustainability is also a multi-dimensional concept, spanning environmental, cultural, social and economic elements. The course has a special focus on sustainable transportation. Various research methods, from content analysis to analytical modeling to survey research are discussed. Delivery happens via a variety of interactive lectures, individual and small group exercises, discussions, and writing/presenting a supply chain sustainability term paper.

**SCM 7040 Logistics Management 3 cr**

Logistics Management is the part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements. This course provides a practical, management perspective of the following areas of logistics: distribution, transportation, international logistics, inventory control, sustainable logistics practices, key performance indicators, supply chain finance, leadership in a supply chain role, and an introduction to logistics technology including RFID and ERP systems.

**SCM 7042 Purchasing and Procurement in Supply Chains 3 cr**

Purchasing and procurement functions are about much more than bringing goods and services into an organization. They are the foundation of strong, collaborative relationships with suppliers. Since many companies source products from around the globe more frequently than ever, a procurement manager needs strong capabilities. These skills cannot just be learned on the job: they need to be taught. As well, the value of procurement is now recognized as an integral part of cost control within the organization. In this course, you'll learn the basics of procurement, including what a supply chain looks like, the purchasing cycle, essential tools and strategies for making the best purchasing relationships work, managing bids, and more.

**SCM 7044 Supply Relationship Management 3 cr**

Successful Supplier Relationship Management (SRM) needs effective contract and performance management in place for the selected suppliers. Also, a successful SRM programme needs full engagement from the key stakeholders across the business. However, engaging internal stakeholders in SRM activities is challenging and the ability to sell internally and externally is essential. Since maximising the value that is captured from major suppliers delivers significant business benefits, this course covers the approaches needed internally and externally to secure value delivery from suppliers.

**SCM 7046 Sustainable Supply Chain Management 3 cr**

Sustainability efforts can open many opportunities for businesses—product innovation can lead to first-mover advantage, environmental product differentiation can open new markets, green sourcing and waste reduction can reduce operating cost, etc. At the same time, they can present significant challenges—governments and communities are imposing higher standards on pollution, resource exploitation, etc. This course aims to provide students with an understanding of the sustainability challenges and opportunities facing supply chains today. We will look at some of the factors that are contributing to the adoption of sustainability strategies, such as legislations that are penalizing negative environmental and social impacts, and society's expectations of business in terms of health, human rights, and the environment. The supply chains today cannot be concerned only with creating shareholder value; their performance is also measured in terms of social, environmental and economic impact.

**SCM 7048 Advanced Supply Chain Management 3 cr**

Advanced Supply Chain Management (ASCM) provides a theoretical basis for multi-disciplinary analysis and improvement of supply chains and networks, focusing especially on supply chain modelling methods to support managerial decision making. Supply chains are often globally interconnected systems with a large variety of complex relationships. This is also affecting the ways in which goods and services are developed, produced, processed and delivered to the market.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: MSCI 7140.

**SCM 7050 Co-op in Supply Chain Management and Logistics 3 cr**

This course aims to provide students with a hands-on experience in Supply Chain Management and Logistics. Students will be placed in positions within organizations operating in the Province of Manitoba and Canada to experience supply chain management and logistics management in practice. A pre-employment training to students without significant work experience in North America may be required. The pre-employment training and placement of students will be performed in coordination with the Asper School of Business Graduate Co-operative Education Program, always striving to match the interests of the student with the interests of the hosting organization. This course is graded on a pass/fail basis.

**SCM 7052 Applied Project in Supply Chain Management and Logistics 3 cr**

This course aims to provide students with a hands-on experience in Supply Chain Management and Logistics. Students will explore and address real issues in the supply chain and logistics sector in the context of the Province of Manitoba and/or Canada under the supervision of a Faculty Member of the Department of Supply Chain Management, Asper School of Business, and in close connection with the target organization. This course is graded on a pass/fail basis.

## Surgery (SURG)

**SURG 7012 Surgery- Major Course in Surgical Problems (Part A & Part B) 3 cr**

A series of short-course modules offered by surgeon-researchers covering the diverse aspects of knowledge translation in surgical research and practice. A compulsory course for MSc students in the Department of Surgery.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside of Surgery require Graduate Chair permission.

**SURG 7022 Surgery- Specialty Rounds in Surgical Problems (Part A & Part B) 3 cr**

Under the mentorship of the student's advisor, independent study on the practice, theory and critical reflection methods of surgical research through the attendance to relevant specialty rounds and journal clubs; directed reading and reflective writings. Permission from Graduate Chair.

**SURG 7030 Advanced Surgery 3 cr**

Designed to expose students to specific surgery issues that are relevant to their thesis research at Department of Surgery Subspecialty Rounds; demonstrating an understanding of knowledge development and exchange, critical appraisal, practice-based evidence and their connections to translational activities. Permission from Graduate Chair.

**SURG 7040 Surgical Epidemiology and Biostatistics 3 cr**

Prepare students to design studies suitable for a wide variety of research questions including diagnostic, etiologic and prognostic, and treatment outcomes, with focus on surgical issues. It should also provide the students with the essential biostatistical and epidemiologic tools to critique medical literature. The evaluation will be based on submission of a complete proposal to answer a research question of each student's choice.

## Women's and Gender Studies (WOMN)

**WOMN 7170 Directed Readings in Women's Studies 3 cr**

Advanced study of selected topics in Women's Studies from an interdisciplinary perspective. The content of the course may vary from year to year and will be arranged by the coordinator of the Women's and Gender Studies Program in consultation with the appropriate representatives of departments. Students must complete a Reading Course Application Form available from the Women's and Gender Studies office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the Women's and Gender Studies coordinator and the instructor.

**WOMN 7270 Advanced Topics in Women's Studies 3 cr**

Advanced study of selected topics in Women's Studies from an interdisciplinary perspective. The content of the course may vary from year to year and will be arranged by the coordinator of the Women's and Gender Studies Program in consultation with the appropriate representatives of departments. Interdisciplinary analysis of contemporary issues, debates and theories in Women's Studies. Topics will vary from year to year and may include, for example, gender theory, sexualities, or feminist pedagogy. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: consent of the Women's and Gender Studies coordinator and course instructor.

# UNIVERSITÉ DE SAINT BONIFACE

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**Campus Address/General Office:** 200 Avenue de la Cathedrale Winnipeg,  
MB R2H 0H7

**Telephone (directory):** 204-237- 1818

**Telephone (reception):** 204 -233- 0210

**Toll free in Canada and USA:** 1- 888-233- 5112

**Fax:** 204- 237- 3240

**Email Address:** [info@ustboniface.ca](mailto:info@ustboniface.ca)

**Website:** [ustboniface.ca \(https://ustboniface.ca/\)](https://ustboniface.ca)

# Université de Saint-Boniface Profile and Programs Offered

## L'Université de Saint-Boniface

### Profil de l'université

L'Université de Saint-Boniface (l'Université), fondée en 1818, est située dans le quartier francophone au cœur même de la ville de Winnipeg. Ce quartier est situé sur les rives des rivières Rouge et Seine, dans l'est de Winnipeg.

L'Université de Saint-Boniface est le plus ancien établissement postsecondaire de l'Ouest canadien et est l'université de langue française au Manitoba. Elle est située à deux pas du centre-ville de Winnipeg, carrefour de nombreuses activités culturelles et sportives. L'Université est accessible à toute personne apte à poursuivre des études postsecondaires en français. Avec une vingtaine de programmes (<https://ustboniface.ca/programmes-detudes/>) et 1 400 étudiants et étudiantes provenant de 25 pays, l'Université offre une éducation universitaire générale et spécialisée ainsi qu'une formation technique et professionnelle. À l'Université, nous avons l'intime conviction que l'apprentissage doit se poursuivre toute la vie! Notre Division de l'éducation permanente offre une formation continue (<https://ustboniface.ca/division-education-permanente/>) (langues, développement professionnel, développement personnel, etc.) de qualité exceptionnelle ainsi que des programmes uniques destinés aux enfants d'âge scolaire.

Bien ancrée dans son milieu, l'Université contribue pleinement à la vitalité et à l'épanouissement de la francophonie manitobaine, canadienne et internationale. Grâce à son enseignement de qualité et à sa recherche dynamique, elle rayonne largement au-delà de ses frontières. Établissement à dimension humaine, l'Université se définit comme un milieu interculturel inclusif qui contribue au développement global de la personne.

### Formation universitaire

L'Université de Saint-Boniface offre une gamme de programmes (<https://ustboniface.ca/programmes-detudes/>) universitaires de premier cycle en arts, en travail social, en traduction, en sciences, en éducation et en administration des affaires, ainsi que des programmes d'études supérieures en éducation et en études canadiennes.

Les étudiants et les étudiantes peuvent être admis directement en arts, en sciences ou en administration des affaires selon les critères d'admission spécifiques. Les étudiants et les étudiantes qui ne répondent pas aux critères d'admission directe doivent compléter une première année universitaire (<https://ustboniface.ca/u1/>) (U1) avant de s'inscrire au programme de baccalauréat de leur choix.

Des études universitaires entreprises à l'Université de Saint-Boniface ouvrent également la voie à des programmes dans d'autres universités, notamment l'Université du Manitoba. Pour vous renseigner sur ces possibilités, veuillez communiquer avec le Service d'orientation pédagogique (<https://ustboniface.ca/orientation/>) de l'USB.

### Annuaire

L'annuaire (<http://ustboniface.ca/annuaire/>) de l'Université de Saint-Boniface est désormais disponible en ligne seulement.

### Admission

Vous voulez poursuivre vos études à l'Université de Saint-Boniface? La première étape est de déposer votre candidature à un des programmes de votre choix. Pour en savoir davantage, visitez la rubrique Futurs étudiants (<https://ustboniface.ca/futursetudiants/>) du site Web de l'USB.

### Inscription

Dès que vous recevrez une confirmation écrite de votre admission à un programme particulier, vous pourrez vous inscrire en remplissant un formulaire d'inscription disponible au Registrariat.

- Si vous choisissez d'étudier à l'Université de Saint-Boniface, vous devez vous inscrire auprès de cet établissement, même si vous comptez suivre un ou plusieurs cours à l'Université du Manitoba. Vous devrez toutefois payer des frais de cours auprès de l'Université du Manitoba pour les cours que vous y suivez.
- Si vous voulez vous inscrire à un ou à plusieurs cours à l'USB, mais que votre établissement d'appartenance est l'Université du Manitoba ou tout autre collège affilié à l'Université du Manitoba, vous devez vous inscrire auprès de votre établissement d'appartenance.
- Deux jours ouvrables après votre inscription, votre facture sera disponible dans votre portail MonUSB. Veuillez consulter l'**avis aux étudiants** pour vous renseigner davantage sur les factures.

Chaque faculté, école et programme peut avoir des règlements académiques précis. Il vous revient de prendre connaissance des règlements qui vous concernent et de les respecter. Pour connaître ces renseignements, veuillez consulter l'annuaire (<https://client-snap.dev8.leefrog.com/umanitoba-ca/external.html?link=http://ustboniface.ca/annuaire>), sous la rubrique de votre faculté ou école ou sous la rubrique Règlements académiques. Consultez également la section réservée à votre programme, qui pourrait contenir ses propres exigences.

### Exigences linguistiques

En général, les exigences linguistiques minimales pour tous les programmes d'études universitaires et collégiaux exigent l'inscription à un plein cours ou à deux demi-cours de français. La réussite de ce ou ces cours est une condition d'obtention du diplôme. Veuillez noter que ces exigences constituent un minimum seulement.

Les profils linguistiques servent à vous diriger vers les cours de langue appropriés et à proposer les mesures d'enrichissement qui permettront de combler les lacunes, le cas échéant. Il ne s'agit pas de tests d'admission, mais plutôt de tests de classement.

**Toute personne qui s'inscrit une première fois à l'USB fait dresser son profil linguistique en français par le Service de perfectionnement linguistique (SPL) avant de s'inscrire.**

Puisque certains programmes exigent aussi des connaissances de la langue anglaise, les personnes admises à ces programmes et qui connaissent peu l'anglais doivent également faire dresser leur profil linguistique en anglais avant de s'inscrire.

### Registrariat

Le Registrariat (<https://ustboniface.ca/registrariat/>) est le point d'entrée pour étudier à l'Université de Saint-Boniface. Entre autres, il offre de l'appui et de l'information sur l'admission à un programme, l'inscription aux cours, l'aide financière disponible et l'horaire des cours et des examens.

Le Registrariat est ouvert du lundi au vendredi de 8 h 30 à 16 h 30.

Registrariat

Université de Saint-Boniface

Téléphone : 204-235-4408

Numéro sans frais au Canada : 1-888-233-5112

registraire@ustboniface.ca (registra@ustboniface.mb.ca)

# Maîtrise en Études canadiennes et interculturelles-Université de Saint-Boniface

Term	Start Date	Canadian/US	International
Fall	September	June 1	March 1
Winter	January	October 1	July 1
Summer	May	February 1	November 1

**Head:** Paul Morris

**Campus Address/General Office:** Université de Saint-Boniface, 200 ave de la Cathédrale, Winnipeg R2H 0H7

**Telephone:** 204-237-1818 ext. 280

**Email Address:** etcan@ustboniface.mb.ca

**Website:** www.ustboniface.ca (<http://www.ustboniface.ca/>)

**Academic Staff:** Please refer to the website for Faculty: [www.ustboniface.ca](http://www.ustboniface.ca) (<http://www.ustboniface.ca/>)

**Maîtrise ès arts, études canadiennes et interculturelles**

## Program Information

The Maîtrise ès Arts, études canadiennes et interculturelles is offered by the Université de Saint-Boniface, an affiliated college of the University of Manitoba, **in French only**, and **only via the Internet**. Students are generally mid-career and are enrolled in the programme on a part-time basis, out of personal interest or for career enhancement. Graduates can pursue careers in the federal or provincial public service, in journalism, in the Foreign Service, or in the private sector; in addition, graduates of the programme may be admitted to doctoral programs, subject to program requirements.

Graduates of this program will receive a Maîtrise ès Arts en études canadiennes et interculturelles.

## Degree Requirements

In addition to the minimum course requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations, (p. 1350) students must complete a minimum number of 18 credit hours of graduate coursework. In addition, students must submit an acceptable thesis and pass a thesis oral examination.

All students must complete GRAD 7300 and GRAD 7500. Students newly admitted to a graduate program must successfully complete this course within the first term of registration, unless the course has been completed previously.

**Language Requirement:** Reading and comprehension skills in both French and English; coursework and the thesis may be written in either French or English, subject to availability of a bilingual instructor.

**Expected Time to Graduate:** 2 - 3 Years. Please refer to Time in Program (p. 1364).

## Registration Information

### Admission Requirements

In addition to the minimum admission requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations, (p. 1350) students must have taken four years of studies at the university level. A pre-M.A. program is not available at this time.

### Admission Deadlines

Students should complete and submit their online application with supporting documentation (if applicable) by the date indicated in the following table:



# Education-Université de Saint-Boniface

**Dean:** B. Pauget

**Associate Dean(s):** C. Lupien

**Head:** (and Graduate Chair) B. Pauget

**Campus Address/General Office:** 200 de la Cathédrale Avenue

**Telephone:** 204-233-0210 ext 302

**Fax:** 204-233-0217

**Email Address:** [etudessuperieuresFE@ustboniface.ca](mailto:etudessuperieuresFE@ustboniface.ca)

**Website:** [www.ustboniface.ca](http://www.ustboniface.ca) (<http://www.ustboniface.ca/>)

**Academic Staff:** Please refer to the website for Faculty information:  
<http://www.ustboniface.ca/>

## Education - St Boniface Program Information

The maîtrise en éducation program is offered by the Université de Saint-Boniface, an affiliated college of the University of Manitoba. The department offers the following specializations: Inclusive Special Education; Educational Administration; Guidance and Counselling; Language, Literacy and Curriculum. Some courses are the French equivalent of the courses offered at the Faculty of Education, University of Manitoba. Many courses are specific to French education in the Province of Manitoba.

## Degree Requirements

In addition to the minimum course requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations (p. 1350), students must complete the following, based on their program route:

**Thesis route:** A Thesis and 18 credit hours are required. At least 12 credit hours must be taken at the 7000 level in the Faculty of Education; 6 credit hours may be taken at the 5000/7000 level in the Faculty of Education or at the 3000 level or above in other faculties.

**Practicum route:** A practicum and 18 credit hours are required. At least 12 credit hours must be taken at the 7000 level in the Faculty of Education; 6 credit hours may be taken at the 5000/7000 level in the Faculty of Education or at the 3000 level or above in other faculties. Candidates who opt for the practicum route must pass an oral examination open to all members of the University community and the public.

**Comprehensive examination route:** 30 credit hours are required. At least 18 credit hours must be taken at the 7000 level in the Faculty of Education; 12 credit hours may be taken at the 5000/7000 level in the Faculty of Education or at the 3000 level or above in other faculties. The comprehensive examination features an oral and a written component and may take the form of a literature review or a school-based project

All students must complete GRAD 7300 and GRAD 7500. Students newly admitted to a graduate program must successfully complete this course within the first term of registration, unless the course has been completed previously.

## Language Requirement

The language of instruction and communication at USB is French. Students admitted to USB must be sufficiently proficient in French to be able to understand classroom lectures, to write assignments and to participate in classroom discussions in **French**. All coursework must be written in French, as well as theses, practicum reports and

comprehensive examinations. International students admitted to the M.en Éd. Program at USB will not be required to complete an English Language Proficiency Test. However, all students must have knowledge of written English in order to understand the regulations and policies of the Faculty of Graduate Studies as well as assigned course readings in English.

**Expected Time to Graduate:** 2 years. Please see Time in Program. (p. 1364)

## Registration Information

### Admission Requirements

The minimum admission requirements are those of the Faculty of Graduate Studies found in the Graduate Studies Regulations. (p. 1350)

All students must complete, during the program or prior to entry into the program, course EDUA 5801.

### Admission Deadlines

Students should complete and submit their online application with supporting documentation (if applicable) by the date indicated in the following table:

Term	Start Date	Canadian/US	International
Fall	September	June 1	March 1
Winter	January	October 1	July 1
Summer	May	February 1	November 1

## Courses taught at Université de Saint-Boniface

### A

- Anthropology (ANTH) (p. 1705)
- Arts Interdisciplinary (ARTS) (p. 1707)

### B

- Biological Sciences (BIOL) (p. 1708)

### C

- Canadian Studies St. Boniface (CDSB) (p. 1710)
- Chemistry (CHEM) (p. 1710)
- Computer Science (COMP) (p. 1713)

### E

- Economics (ECON) (p. 1714)
- Education Admin, Fndns & Psych (EDUA) (p. 1715)
- Education Curric, Tchg, & Lrng (EDUB) (p. 1720)
- Education St. Boniface (EDSB) (p. 1725)
- English (ENGL) (p. 1726)
- Entrepreneurship/Small Bus. (ENTR) (p. 1727)

### F

- Finance (FIN) (p. 1727)
- Français St. Boniface (FRAN) (p. 1728)

### G

- General Management (MGMT) (p. 1730)
- Geography (GEOG) (p. 1732)
- German (GRMN) (p. 1733)

### H

- History (HIST) (p. 1734)
- Human Res. Mgmt/Indus Relat. (HRIR) (p. 1737)

### I

- Intercultural Studies - CUSB (INTC) (p. 1738)
- Interdisciplinary Management (IDM) (p. 1738)
- International Business (INTB) (p. 1738)
- International Studies - CUSB (INTL) (p. 1739)

### M

- Management Info. Systems (MIS) (p. 1739)
- Management Science (MSCI) (p. 1739)
- Marketing (MKT) (p. 1739)
- Mathematics (MATH) (p. 1740)
- Microbiology (MBIO) (p. 1743)

### O

- Operations Management (OPM) (p. 1745)

### P

- Philosophy (PHIL) (p. 1745)
- Physics (PHYS) (p. 1747)
- Political Studies (POLS) (p. 1749)
- Psychology (PSYC) (p. 1751)

### R

- Religion (RLGN) (p. 1753)

### S

- Science Interdisciplinary (SCI) (p. 1754)
- Social Work (SWRK) (p. 1755)
- Sociology (SOC) (p. 1757)
- Spanish (SPAN) (p. 1759)
- Statistics (STAT) (p. 1762)
- Supply Chain Management (SCM) (p. 1762)

### T

- Theatre (THTR) (p. 1762)
- Traduction (St. Boniface) (TRAD) (p. 1763)

## Anthropology (ANTH)

### ANTH 1211 L'origine et l'antiquité de l'humanité 3 cr

Introduction à l'anthropologie physique et à l'archéologie. Évolution biologique, évolution et cultures des primates, fossiles démontrant la théorie de l'évolution, de l'origine et du développement de la culture humaine. On ne peut se faire créditer ANTH 1211 et ANTH 1210.

**Equiv To:** ANTH 1210

**Attributes:** Université de Saint-Boniface, Social Science, Recommended Intro Courses

### ANTH 1221 Anthropologie culturelle 3 cr

Étude comparative des sociétés et des cultures humaines. Les sujets suivants seront présentés : institutions familiales, sociales, économiques et politiques, langage vocal humain, systèmes de parenté, de rites et de croyances, stabilité et changements culturels. On ne peut se faire créditer ANTH 1221, ANTH 1220, ANTH 1520.

**Equiv To:** ANTH 1220, ANTH 1520

**Attributes:** Université de Saint-Boniface, Social Science, Recommended Intro Courses

### ANTH 2001 Culture, société et pouvoir 3 cr

Aperçu des idées centrales à l'analyse des relations sociales, en mettant l'emphase sur l'individu, l'identité, le genre, la « race », l'ethnicité, la classe sociale et la dynamique de caste. On ne peut se faire créditer ANTH 2001 et ANTH 2000, l'ancien ANTH 2391 ou ANTH 2390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un des ANTH 1221, ANTH 1220, ANTH 1520, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 2000

**Mutually Exclusive:** ANTH 2390, ANTH 2391

**ANTH 2011 Langage et culture 3 cr**

Considération générale de la nature du langage et des interrelations entre le langage et les autres aspects de la culture. Corrélations socioculturelles des variations linguistiques. Ethnographie de la communication. Origine et évolution du langage. On ne peut se faire créditer ANTH 2011, ANTH 2010 et ANTH 2370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un de ANTH 1221, ANTH 1220, ANTH 1520, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 2370

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 2013 Initiation à la recherche en sciences sociales 3 cr**

Cours permettant de comprendre et d'apprécier la recherche menée dans les différentes disciplines de sciences humaines. Enjeux épistémologiques et éthiques. Problématique et questions de recherche. Logique des différents types de devis de recherche. Techniques d'analyse et de cueillette de données, incluant l'ethnographie, l'observation directe, l'entrevue, le groupe de discussion, l'analyse documentaire, le travail d'archive et le sondage. Ce cours est aussi donner comme SOC 2013. On ne peut se faire créditer ANTH 2013 et SOC 2013, SOC 2292, SOC 2294, ou l'anciens ANTH 2831, SOC 2291, SOC 2290.

**Equiv To:** SOC 2013

**Mutually Exclusive:** ANTH 2831, SOC 2290, SOC 2291

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 2041 Les Amérindiens de l'Amérique du Nord : une étude socioculturelle 3 cr**

Survot ethnographique des cultures des peuples amérindiens de l'Amérique du Nord. L'étudiant(e) qui détient les crédits du ANTH 2041 ne peut se faire créditer aucun des cours ANTH 2040.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans un de: ANTH 1220 ou ANTH 1221 ou ANTH 1520] ou le consentement écrite du professeur.

**Equiv To:** ANTH 2040

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 2071 Religions amérindiennes et inuites 3 cr**

Étude comparative et interprétative des valeurs, croyances et pratiques religieuses propres aux traditions autochtones. Attention particulière accordée aux religions traditionnelles, à l'impact du christianisme sur ces religions, et à l'émergence de la spiritualité autochtone contemporaine en mettant l'accent sur l'expérience et les structures, fonctions et significations des mythes, récits et rituels qui composent l'idéologie religieuse autochtone.

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 2101 Introduction à l'archéologie 3 cr**

Introduction générale à l'étude des principes de l'archéologie et à l'analyse et l'interprétation des matériaux et artefacts rencontrés dans les études en archéologie. On ne peut se faire créditer ANTH 2101 et ANTH 2100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans ANTH 1210 ou ANTH 1211, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 2100

**ANTH 2381 Arts, symboles et cultures 3 cr**

Étude des contextes sociaux et des fonctions des comportements artistiques et symboliques humains dans une perspective comparative. On ne peut se faire créditer ANTH 2381 et ANTH 2380.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un de ANTH 1221, ANTH 1220, ANTH 1520, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 2380

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 2551 Culture et l'individu 3 cr**

Étude des corrélations entre le cycle de vie, les fonctions et dysfonctions psychologiques, et les institutions sociales et culturelles. Accent mis sur les rituels d'enculturation et du cycle de vie. On ne peut se faire créditer ANTH 2551 et ANTH 2550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un de ANTH 1221, ANTH 1220, ANTH 1520, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 2550

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 2861 Évolution et diversité humaine 3 cr**

Une introduction à l'étude de l'interaction des rôles de l'hérédité, de la culture et de l'environnement dans les diverses populations du genre humain et introduction aux principes biologiques de base expliquant les variations des populations humaines. On ne peut se faire créditer ANTH 2861 et ANTH 2860.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans ANTH 1211 ou ANTH 1210, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 2860

**ANTH 3321 Femmes, sociétés et cultures 3 cr**

Étude critique des rôles de la femme selon une approche interculturelle à partir d'analyses ethnographiques des sociétés et des cultures africaines, amérindiennes et asiatiques. On ne peut se faire créditer ANTH 3321 et le ANTH 3320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [une note minimale de C dans un des cours suivants : ANTH 1221 ou ANTH 1220 ou ANTH 1520] ou l'autorisation écrite du professeur.

**Equiv To:** ANTH 3320

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3381 Problèmes sociaux contemporains et l'anthropologie 3 cr**

Étude de la pauvreté, de la responsabilité sociale, du colonialisme, du racisme, de l'éducation, de la dégradation de l'écologie et de la violence du point de vue anthropologique. On ne peut se faire créditer ANTH 3381 et ANTH 3380.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: (une note minimale de C dans ANTH 2000 ou ANTH 2001 et un cours de 3 crédits parmi ANTH 2020, ANTH 2530, ou ANTH 2831) ou (une note minimale de C dans l'ancien ANTH 2390 ou ANTH 2391), ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 3380

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3461 Ethnologie des Amérindiens de l'Amérique du Nord 3 cr**  
Études ethnographiques et ethnologiques de quelques sociétés amérindiennes de l'Amérique du Nord. On étudiera aussi les changements survenus depuis les premiers contacts. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3461 et le ANTH 3460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans un des cours suivants: ANTH 1220 ou ANTH 1221 ou ANTH 1520] ou l'autorisation écrite du professeur.

**Equiv To:** ANTH 3460

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3471 Histoire de la pensée anthropologique 3 cr**  
Étude du développement des principaux paradigmes des courants théoriques et méthodologiques en anthropologie. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3471 et le ANTH 3470.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans [ANTH 2000 ou ANTH 2001 + un cours de 3 cr.hrs. de niveau 2000 du groupe B] ou [l'ancien ANTH 2391 ou l'ancien ANTH 2390] ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 3470

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3501 Peuples de l'Arctique 3 cr**  
Étude ethnographique des peuples autochtones des régions circumpolaires d'Asie, d'Amérique du Nord et du Groënland, avec une attention spéciale portée aux situations causées par différents contacts culturels. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3501 et le ANTH 3500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans un des cours suivants: ANTH 1220 ou ANTH 1221 ou ANTH 1520] ou l'autorisation écrite du professeur.

**Equiv To:** ANTH 3500

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3531 Peuples d'Amérique du Sud 6 cr**  
Étude de certaines cultures sudaméricaines, notamment celles des Andes, de l'Amazonie et de la Patagonie, Seront analysées les premières civilisations de même que l'adaptation des autochtones à la société contemporaine.

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3551 Sous-cultures canadiennes 3 cr**  
Étude anthropologique de la communauté, de l'ethnicité et du statut social dans la société canadienne. On ne peut se faire créditer ANTH 3551 et ANTH 3550.

**Equiv To:** ANTH 3550

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3751 Globalisation et mondialisation: Une perspective anthropologique 3 cr**  
Perspective anthropologique sur la mondialisation et sur l'expansion du capitalisme dans les zones périphériques du monde. Étude de la transformation des sociétés et cultures autochtones; de l'émergence des conflits ethniques; et de la résistance. Approche comparative de processus transnationaux et globaux particuliers. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3751 et le ANTH 3750.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans ANTH 2000 ou ANTH 2001 ou ANTH 1220 ou ANTH 1221 ou ANTH 1520 ou l'ancien ANTH 2390 ou l'ancien ANTH 2391 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 3750

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3811 Anthropologie des systèmes de croyances 3 cr**  
Étude comparative des systèmes de croyances, de rites sacrés et de cérémonies dans les sociétés et les cultures du monde. On ne peut se faire créditer ANTH 3811 et ANTH 3810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [une note minimale de C dans un des cours suivants : ANTH 1221 ou ANTH 1220 ou ANTH 1520] ou l'autorisation écrite du professeur.

**Equiv To:** ANTH 3810

**Attributes:** Université de Saint-Boniface, Social Science

**ANTH 3971 Ethnographie régionale 3 cr**  
Survol ethnographique de la culture d'une aire géographique d'intérêt pour le département ou l'étudiant. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois. On ne peut se faire créditer ANTH 3971 et ANTH 3970.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un des cours suivants : ANTH 1220, ANTH 1221, ANTH 1520, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** ANTH 3970

**Attributes:** Université de Saint-Boniface, Social Science

## Arts Interdisciplinary (ARTS)

**ARTS 1111 Introduction aux études universitaires (3) 3 cr**  
Cours offert sous forme de séminaires dont le but est de faciliter la transition vers l'université. Développement des connaissances, des compétences et des attitudes nécessaires pour bien réussir les études universitaires. Il y a un maximum de 30 inscriptions par section. On ne peut se faire créditer à la fois ARTS 1111 et ARTS 1110. Ce cours est offert uniquement aux étudiants qui ont complété moins de 60 crédits.

**Equiv To:** ARTS 1110

**ARTS 4011 Expérience de culmination: stage 3 cr**  
Stage en milieu de travail. Activité de fin d'études qui permet d'intégrer les connaissances, de parfaire les compétences fondamentales et d'acquérir une expérience de la pratique professionnelle.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: avoir complété au moins 45 crédits avec une moyenne minimale de 3 et l'autorisation écrite du décanat.

**ARTS 4013 Expérience de culmination: mémoire 3 cr**

Mémoire de baccalauréat. Activité de fin d'études qui permet d'intégrer les connaissances, de parfaire les compétences fondamentales et d'acquies une expérience de la pratique érudite.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: avoir complété au moins 45 crédits avec une moyenne minimale de 3 et l'autorisation écrite du décanat.

**ARTS 4015 Expérience de culmination: projet d'équipe 3 cr**

Projet d'équipe portant sur une étude de cas réel. Activité de fin d'études qui permet d'intégrer les connaissances, de parfaire les compétences fondamentales et d'acquies une expérience de la pratique professionnelle ou érudite.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: avoir complété au moins 45 crédits avec une moyenne minimale de 3 et l'autorisation écrite du décanat.

## Biological Sciences (BIOL)

**BIOL 1001 Biologie : Les fondements de la vie 3 cr**

Étude de certains principes unificateurs de la vie. Attention particulière à la biologie cellulaire, à la bioénergétique, à la division cellulaire, à la génétique et à l'évolution. Ne peut être utilisé dans un programme de majeure ou de spécialisation. On ne peut se faire créditer BIOL 1001 et BIOL 1000, BIOL 1020 ou BIOL 1021.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de Mathématiques 40S (50%), MATH 0401, MATH 1018 ou MSKL 0100.

**Equiv To:** BIOL 1000

**Mutually Exclusive:** BIOL 1020, BIOL 1021

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**BIOL 1011 Biologie : La diversité biologique et ses interactions 3 cr**

Introduction à la diversité (les procaryotes, les protistes, les champignons, les plantes et les animaux), à la forme et à la fonction des plantes et des animaux ainsi qu'aux principaux concepts de l'écologie. Ne peut être utilisé dans un programme de majeure ou de spécialisation. On ne peut se faire créditer BIOL 1011 et BIOL 1010, BIOL 1030 ou BIOL 1031.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de Mathématiques 40S (50%), MATH 0401, MATH 1018 ou MSKL 0100.

**Equiv To:** BIOL 1010

**Mutually Exclusive:** BIOL 1030, BIOL 1031

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**BIOL 1021 Biologie I: Thèmes et Principes 3 cr**

(Laboratoire requis) Les principes unificateurs à la base de la biologie dont la biologie cellulaire, la bioénergétique, la division cellulaire, la génétique et l'évolution. Pour ceux et celles qui veulent suivre un programme de sciences biologiques avec majeure ou spécialisation. On ne peut se faire créditer BIOL 1021 et BIOL 1020, BIOL 1001, BIOL 1000 ou BIOE 2590.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [Biologie 40S (50 %)], [un de Mathématiques 40S (50 %), MATH 0401, MATH 1018 ou MSKL 0100] et [un de Chimie 40S (50 %), CSKL 0100, CHEM 1018, Physique 40S (50 %), PSKL 0100 ou PHYS 1018]; ou BIOL 1001 ou BIOL 1000. Si BIOL 1001 (BIOL 1000) sert de préalable à BIOL 1021 (BIOL 1020), on ne peut se faire créditer BIOL 1001 et BIOL 1021 dans le cadre d'un même programme.

**Equiv To:** BIOL 1020

**Mutually Exclusive:** BIOE 2590, BIOL 1000, BIOL 1001

**Attributes:** Université de Saint-Boniface, Science

**BIOL 1031 Biologie II : Diversité biologique, fonction et interaction 3 cr**

(Laboratoire requis) Introduction à la biodiversité dont les eucaryotes, les protistes, les champignons, les plantes et les animaux, la forme et la fonction des plantes et des animaux et les principes de base de l'écologie. Pour ceux et celles qui veulent suivre un programme de sciences biologiques avec majeure ou spécialisation. On ne peut se faire créditer BIOL 1031 et BIOL 1030, BIOL 1011, BIOL 1000 ou BIOE 2590. Note : BIOL 1031 est préalable aux cours de biochimie (CHEM 2361) et aux cours plus avancés de microbiologie, et à la plupart des cours de sciences biologiques. Il prépare aussi aux études en agriculture, en sciences alimentaires, en dentisterie, en écologie humaine, en médecine, en optométrie, en pharmacie, en sciences vétérinaires, en éducation physique et en sciences.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans BIOL 1021 ou BIOL 1020.

**Equiv To:** BIOL 1030

**Mutually Exclusive:** BIOE 2590, BIOL 1010, BIOL 1011

**Attributes:** Université de Saint-Boniface, Science

**BIOL 1411 Anatomie du corps humain 3 cr**

(Labo requis) Discussions sur la micro-anatomie et la macro-anatomie incluant les changements qui se produisent de la conception à la vieillesse. Bien que ce cours fasse partie des cours au choix dans un programme en arts ou en sciences, il ne peut rencontrer les exigences de la spécialisation ni du programme de majeure en sciences biologiques. Aucun préalable n'est requis pour ce cours mais le cours de biologie du niveau secondaire est vivement recommandé. On ne peut se faire créditer BIOL 1411 et BIOL 1410.

**Attributes:** Université de Saint-Boniface

**BIOL 1413 Physiologie du corps humain 3 cr**

(Laboratoire requis) Étude des fonctions de tous les systèmes ainsi que des mécanismes de normalisation homéostatique. Bien que ce cours fasse partie des cours au choix dans un programme en arts ou en sciences, il ne peut satisfaire aux exigences de la spécialisation ni du programme de majeure en sciences biologiques. On ne peut se faire créditer BIOL 1413 et BIOL 1412, BIOL 2411 (BIOL 2410) ou BIOL 2421 (BIOL 2420). Ce préalable ne s'applique pas au programme de baccalauréat en sciences infirmières.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans BIOL 1411 ou BIOL 1410; ou une note minimale de C dans BIOL 1031 ou BIOL 1030.

**Equiv To:** BIOL 1412

**Mutually Exclusive:** BIOL 2410, BIOL 2411

**Attributes:** Université de Saint-Boniface

**BIOL 2201 Les invertébrés 3 cr**

(Laboratoire requis) Étude phylogénétique et biologique des invertébrés insistant sur les taxa et les groupes qui ont une importance phylogénétique particulière. On ne peut se faire créditer BIOL 2201 et BIOL 2200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030.

**Equiv To:** BIOL 2200, ZOO 2600, ZOO 2601

**Attributes:** Université de Saint-Boniface

**BIOL 2231 L'évolution et la structure morphologique des chordés 6 cr**

(Laboratoire requis) Étude de l'histoire évolutive de la structure et des adaptations des chordés basée sur les animaux fossilisés et sur les animaux vivants. Établissement des bases pour l'étude des groupes majeurs de chordés. On ne peut se faire créditer BIOL 2231 et BIOL 2210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030.

**Mutually Exclusive:** BIOL 2210

**BIOL 2261 Les champignons et les lichens 3 cr**

(Laboratoire requis) Introduction aux champignons et aux lichens. L'accent est mis sur les groupes taxinomiques majeurs, leur organisation et leurs structures, leurs cycles de vie, leur identification et leur importance écologique générale. On ne peut se faire créditer BIOL 2261 et BIOL 2260 ou l'ancien BOTN 2210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : BIOL 1031 ou BIOL 1030.

**Equiv To:** BOTN 2210, BOTN 2260

**Attributes:** Université de Saint-Boniface

**BIOL 2381 Introduction à la toxicologie 3 cr**

Survolt des principes généraux à la base des effets des substances toxiques sur les systèmes biologiques, tout en prenant en considération l'histoire, l'étendue et les applications de la toxicologie, les mécanismes d'action des toxines et certains types majeurs de toxines. On ne peut se faire créditer BIOL 2381 et BIOL 2380, ENVR 2180, ENVR 2190, AGRI 2180, AGRI 2190 (ou les anciens BIOL 2382).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [BIOL 1031, BIOL 1030 ou HEAL 1502] et [(CHEM 1101 ou CHEM 1100 et un de CHEM 1111, CHEM 1110, CHEM 1121, CHEM 1120, CHEM 1126 ou CHEM 1130) ou (un des anciens CHEM 1311, CHEM 1310 ou CHEM 1320)].

**Equiv To:** AGRI 2180, BIOL 2380, BOTN 2180, ENVR 2180, ZOO 2180

**Mutually Exclusive:** AGRI 2190, BIOL 2382, BOTN 2190, ENVR 2190, ZOO 2190

**Attributes:** Université de Saint-Boniface

**BIOL 2411 Physiologie du corps humain 1 3 cr**

Étude des principaux mécanismes de contrôle du corps (systèmes nerveux et endocrinien) ainsi que des systèmes musculaire et reproducteur. On ne peut se faire créditer BIOL 2411 et BIOL 2410 ou BIOL 3460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030 ou dans BIOL 1413 ou BIOL 1412 ou une note minimale de C+ dans BIOL 1001 ou BIOL 1000 et dans BIOL 1011 ou BIOL 1010.

**Equiv To:** BIOL 2410, ZOO 2530, ZOO 2531

**Mutually Exclusive:** BIOL 1412, BIOL 1413, BIOL 3460, ZOO 1330, ZOO 3530

**Attributes:** Université de Saint-Boniface

**BIOL 2421 Physiologie du corps humain 2 3 cr**

Étude de la régulation homéostatique par les systèmes effecteurs du corps (cardiovasculaire, respiratoire, digestif, rénal et immunitaire). On ne peut se faire créditer BIOL 2421 et BIOL 2420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de D dans BIOL 2411 ou BIOL 2410 ou un D dans BIOL 3460 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** BIOL 2420, ZOO 2541

**Attributes:** Université de Saint-Boniface

**BIOL 2501 Génétique 1 3 cr**

(Laboratoire requis) Principes de l'hérédité, de la gamétogénèse et des fondements cytologiques de la transmission héréditaire chez les plantes et les animaux. Concepts de dominance et d'interaction génétique, de détermination du sexe, de la transmission des caractères liés au sexe et des gènes liés, variations chromosomiques, génétique des populations et code génétique. NOTE : Ce cours ne peut pas être reconnu en microbiologie (MBIO). On ne peut se faire créditer BIOL 2501 et BIOL 2500 ou PLNT 2520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030.

**Equiv To:** BIOL 2500, BOTN 2461

**Mutually Exclusive:** MBIO 1410

**Attributes:** Université de Saint-Boniface

**BIOL 2521 Biologie cellulaire 3 cr**

Étude de la fonction des organites cellulaires conjointement avec leur structure microscopique ou leur ultrastructure, en insistant sur l'ensemble de la vie cellulaire en tant que système dynamique. On ne peut se faire créditer BIOL 2521 et BIOL 2520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030.

**Equiv To:** BIOL 2520, ZOO 2280, ZOO 2281

**Attributes:** Université de Saint-Boniface

**BIOL 3291 Plantes médicinales et hallucinogènes 3 cr**

Survolt botanique et historique des plantes médicinales, hallucinogènes et toxiques utilisées dans diverses cultures. On ne peut se faire créditer BIOL 3291 et BIOL 3290.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : Minimum de 30 heures crédits universitaires ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** BIOL 3290

**Attributes:** Université de Saint-Boniface

**BIOL 3301 Biologie évolutive 3 cr**

(Laboratoire requis) Introduction aux sujets principaux et aux méthodes de recherche en biologie évolutive. Les sujets incluent : génétique évolutive, adaptation, spéciation et reconstruction de l'histoire de l'évolution. On ne peut se faire créditer BIOL 3301 et BIOL 3300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans BIOL 2501, BIOL 2500 ou PLNT 2520 et un de BIOL 2240, BIOL 2261, BIOL 2260, BIOL 3260, BIOL 2210, BIOL 2231, BIOL 2201 ou BIOL 2200 avec une note minimale de C, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** BIOL 3300, BOTN 3001, ZOO 3001

**Attributes:** Université de Saint-Boniface

## Canadian Studies St. Boniface (CDSB)

### **CDSB 7011 Le Canada: Peuple et Territoire 6 cr**

Le Canada se définit par son vaste territoire et son extraordinaire diversité sociale et économique. Étude de la présence millénaire des divers groupes autochtones; le dualisme canadien; l'immigration massive menant à la création d'une société multiculturelle et multilingue; les régionalismes; la situation de la femme canadienne; l'évolution du fédéralisme canadien; l'état de la famille canadienne et ses variantes régionales et de certains autres thèmes pertinents.

**Equiv To:** CDSB 7010

### **CDSB 7021 Le Canada : Identités, mythes, images 6 cr**

Exploration en profondeur des diverses identités canadiennes en tentant de suivre l'évolution des images que les Canadiennes et les Canadiens se sont faites d'eux-mêmes au cours des siècles. Examen des mythes qui se sont développés chez les divers peuples canadiens depuis les débuts en retraçant leurs racines dans un passé plus ou moins lointain. Examen de l'historiographie nationale comme élément qui façonne l'identité canadienne.

**Equiv To:** CDSB 7020

### **CDSB 7031 Problèmes méthodologiques en études canadiennes 3 cr**

Cours qui aide à définir et à mener à terme un mémoire de maîtrise ou tout autre travail de recherche majeur en études canadiennes. Accent sur les approches interdisciplinaires appliquées aux problèmes canadiens et l'élaboration d'une recherche concrète dans ce domaine. Cette recherche peut être le mémoire de maîtrise.

**Equiv To:** CDSB 7030

### **CDSB 7041 Textes canadiens de base 3 cr**

Un certain nombre d'oeuvres sont indispensables à une connaissance approfondie du Canada. Familiarisation avec le plus grand nombre d'oeuvres possibles tirées de ce " canon "; évaluation de ces oeuvres de façon critique. On aura à présenter virtuellement une analyse critique d'une demi-douzaine d'oeuvres canadiennes, choisies en consultation avec la personne responsable du cours.

**Equiv To:** CDSB 7040

### **CDSB 7061 Peuples autochtones du Canada : Amérindiens, Inuit et Métis 3 cr**

Ce cours en ligne permettra de saisir la diversité des peuples autochtones du Canada, de comprendre les défis auxquels ils font face et d'analyser les rapports qu'ils entretiennent avec les autres composantes de la société canadienne et le reste du monde. L'accent sera mis sur leurs aspirations, leurs perspectives, leurs revendications, leurs réussites et leur contribution à la formation de l'identité canadienne.

### **CDSB 7073 Sujet choisi en études canadiennes et interculturelle 3 cr**

Étude d'un thème choisi en études canadiennes et interculturelles. Le contenu variera d'année en année. On peut se faire créditer CDSB 7073 plus d'une fois à condition que le sujet particulier ne soit pas le même.

### **CDSB 7081 Droits de la personne et histoire sociale au Canada 3 cr**

Ce cours en ligne propose une approche interdisciplinaire qui permettra de saisir les enjeux sociaux, culturels, économiques et politiques qui jalonnent l'histoire de la reconnaissance et de l'exercice des droits de la personne dans la société canadienne. La reconnaissance et l'exercice des droits de la personne, plus particulièrement au Canada, seront abordés dans la perspective de leur impact social tout au long de cette évolution.

### **CDSB 7171 La Charte canadienne des droits et libertés 3 cr**

Une étude systématique des droits et libertés garantis par la Charte à travers les jugements de la Cour intellectuelle de la protection des droits au Canada, ainsi qu'un survol des lois canadiennes relatives aux droits de la personne. Cours à double cote avec POLS 3171. On ne peut se faire créditer CDSB 7171 et POLS 3171.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : Une moyenne de « B » dans 120 crédits universitaires et l'approbation écrite du professeur.

### **CDSB 7173 Le Canada dans le système mondial 3 cr**

Aperçu du rôle et d'influence de l'État canadien au sein du système mondial depuis la Deuxième Guerre mondiale. Analyse des grandes mutations du système mondial et leurs effets sur la formulation et la conduite de la politique étrangère et de la défense canadienne. La participation canadienne au sein des institutions et forums multilatéraux en relation avec le processus de mondialisation. Cours à double cote avec POLS 3563. On ne peut se faire créditer CDSB 7173 et POLS 3563, POLS 3560 ou POLS 3561.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : Une moyenne de B dans 120 crédits universitaires et l'autorisation écrite du professeur.

### **CDSB 7271 Studies in Canadian Literature 3 cr**

Study of a selection of contemporary works of historical fiction from Canada. Analysis of the ways in which history, narrative and the nation interconnect. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Cross-listed with ENGL 3271. CDSB 7271 may not be held with ENGL 3271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor.

## Chemistry (CHEM)

### **CHEM 1101 Introduction à la chimie 1: Structures atomiques et moléculaires, et énergie chimique 3 cr**

Consolidation des concepts chimiques fondamentaux appris au secondaire. Description plus approfondie du tableau périodique des éléments, de la nature de l'énergie en chimie, des structures atomiques et moléculaires, et des concepts de réactivité chimique. On ne peut se faire créditer CHEM 1101 et CHEM 1100 (ou les anciens CHEM 1301, CHEM 1300).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [un de Chimie 40S (50%), CHEM 1018, CSKL 0100 (P) ou l'ancien CHEM 0900 (P)] et [un de Mathématiques appliquées 40S (50%), Mathématiques pré-calcul 40S (50%), l'ancien Mathématiques 40S (300) (50%), MATH 1018, ou MSKL 0100].

**Equiv To:** CHEM 1100

**Mutually Exclusive:** CHEM 1018, CHEM 1300, CHEM 1301

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**CHEM 1111 Interaction, réactivité et propriétés chimiques 3 cr**

Consolidation des concepts chimiques fondamentaux appris au secondaire. Descriptions plus approfondies de la réactivité chimique et des propriétés physiques de la matière. On ne peut se faire créditer CHEM 1111 et CHEM 1110 (ou les anciens CHEM 1311, CHEM 1310).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de CHEM 1101 ou CHEM 1100 ou un des anciens (CHEM 1301 ou CHEM 1300).

**Equiv To:** CHEM 1110

**Mutually Exclusive:** CHEM 1310, CHEM 1311

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**CHEM 1121 Introduction aux techniques chimiques 3 cr**

(Laboratoire autonome) Perfectionnement des compétences en matière d'observations, de manipulation sécuritaire de produits chimiques, de manipulation d'équipement de laboratoire, d'analyses quantitatives, de traitements de données et de communication scientifique. Démonstration de l'importance de la chimie pour la société via une introduction aux concepts de développement durable, à la sécurité chimique et aux différentes applications de la chimie. On ne peut se faire créditer CHEM 1121 et CHEM 1120 ou CHEM 1122 ou CHEM 1126 ou les anciens CHEM 1311 et CHEM 1310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(Chimie 40S (70%) ou CHEM 1018) et (un de Mathématiques pré-calcul 40S (70%), Mathématiques appliquées 40S (70%), MATH 1018 ou MSKL 0100 (B))] ou [un de CHEM 1101, CHEM 1100, CSKL 0100 (P) ou un des anciens [CHEM 1301, CHEM 1300, ou CHEM 0900 (P)].

**Equiv To:** CHEM 1120

**Mutually Exclusive:** CHEM 1122, CHEM 1126, CHEM 1310, CHEM 1311

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**CHEM 2101 Chimie organique 1 : Principes de la chimie organique 3 cr**

Introduction aux concepts de liaisons et de réactivité chez les molécules organiques. Propriétés et préparation des composés organiques renfermant un groupe fonctionnel. On ne peut se faire créditer CHEM 2101 et CHEM 2100, CHEM 1130 ou (les anciens CHEM 2211, CHEM 2210, CHEM 1320).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [(CHEM 1111 ou CHEM 1110) et un de (CHEM 1121, CHEM 1120, CHEM 1126)] ou un des anciens [CHEM 1311, CHEM 1310].

**Equiv To:** CHEM 2100

**Mutually Exclusive:** CHEM 1130, CHEM 1320, CHEM 2210, CHEM 2211

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2111 Chimie organique 2 : Principes de la synthèse organique 3 cr**

Introduction à la réactivité des composés organiques et aux stratégies de synthèse. L'application de l'interchangeabilité des groupes fonctionnels dans la synthèse des composés sera examinée. On ne peut se faire créditer CHEM 2111 et CHEM 2110 (ou les anciens CHEM 2221, CHEM 2220).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : CHEM 2101 ou CHEM 2100 ou un des anciens (CHEM 2211 ou CHEM 2210).

**Equiv To:** CHEM 2110

**Mutually Exclusive:** CHEM 2220, CHEM 2221

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2123 Chimie organique expérimentale 3 cr**

(Laboratoire autonome) introduction aux méthodes de synthèses organiques, aux techniques de purification et aux analyses de produits. Les théories et les applications de la spectroscopie IR et RMN du <sup>1</sup>H et du <sup>13</sup>C en chimie organique seront présentées. Développement des compétences en communication scientifique par l'entremise de diverses plateformes médiatiques ainsi que d'aptitudes pour la littérature chimique. On ne peut se faire créditer CHEM 2123 et CHEM 2122 (ou les anciens CHEM 2221, CHEM 2220).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(CHEM 1111 ou CHEM 1110) et (un de CHEM 1121, CHEM 1120 ou CHEM 1126)] ou un des anciens (CHEM 1311, CHEM 1310).

**Equiv To:** CHEM 2122

**Mutually Exclusive:** CHEM 2220, CHEM 2221

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2301 Chimie inorganique 1 : Structure et applications 3 cr**

Revue de la liaison chimique, de la structure et de la réactivité à travers le tableau périodique des éléments à partir d'exemples liant la chimie inorganique à la science des matériaux et à la biochimie. Aperçu des tendances périodiques et de leurs relations avec certaines propriétés des éléments, de la liaison chimique et de la réactivité de certains composés et matériaux inorganiques, accompagné d'applications variées de la chimie inorganique. On ne peut se faire créditer CHEM 2301 et CHEM 2300 (ou les anciens CHEM 2381, CHEM 2380, CHEM 2401, CHEM 2400).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(CHEM 1111 ou CHEM 1110) et (un de CHEM 1121, CHEM 1120 ou CHEM 1126)] ou [(un des anciens CHEM 1311 ou CHEM 1310)].

**Equiv To:** CHEM 2300

**Mutually Exclusive:** CHEM 2380, CHEM 2381, CHEM 2400, CHEM 2401

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2511 Introduction à la chimie analytique 3 cr**

Un cours de chimie analytique quantitative fournit une formation utile à presque tous les scientifiques. Ce cours outille les étudiants et étudiantes avec les principes théoriques à la base des méthodes analytiques, avec l'habileté de planifier et d'exécuter des expériences et ensuite d'interpréter les résultats. On ne peut se faire créditer CHEM 2511 et CHEM 2510 (ou les anciens CHEM 2471 et CHEM 2470).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(CHEM 1111 ou CHEM 1110) et un de (CHEM 1121, CHEM 1120 ou CHEM 1126)] ou [un des anciens (CHEM 1311 ou CHEM 1310)].

**Equiv To:** CHEM 2510

**Mutually Exclusive:** CHEM 2470, CHEM 2471

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2521 Introduction aux techniques de la chimie analytique 2 cr**

Introduction aux techniques traditionnelles et classiques d'analyses chimiques. Les expériences mettront l'emphase sur les déterminations quantitatives à l'aide de méthodes gravimétrique, titrimétrique et spectrophotométrique. On ne peut se faire créditer CHEM 2521 et CHEM 2520 (ou les anciens CHEM 2471 et CHEM 2470).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(CHEM 1111 ou CHEM 1110) et (un de CHEM 1121, CHEM 1120 ou CHEM 1126)] ou (un des anciens CHEM 1311 ou CHEM 1310)].

**Equiv To:** CHEM 2520

**Mutually Exclusive:** CHEM 2470, CHEM 2471

**Attributes:** Université de Saint-Boniface, Science



**CHEM 2523 Complément de techniques de la chimie analytique 1 cr**  
(Laboratoire autonome) activités de laboratoire en complément de CHEM 2521. Introduction pratique à des instruments choisis de la chimie analytique moderne. Applications de la chimie analytique à l'analyse environnementale, à la chimie alimentaire et aux domaines industriels et pharmaceutiques. Emphase sur la préparation des échantillons, les méthodes de calibration, le fonctionnement des instruments et l'interprétation des données. On ne peut se faire créditer CHEM 2523 et CHEM 3520 ou ENVR 3550 ou l'ancien CHEM 3590.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(CHEM 1111 ou CHEM 1110) et (un de CHEM 1121, CHEM 1120 ou CHEM 1126) ou (un des anciens CHEM 1311 ou CHEM 1310)]. Préalable ou corequis : CHEM 2521 ou CHEM 2520.

**Mutually Exclusive:** CHEM 3520, CHEM 3590, ENVR 3550

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2601 Chimie physique 1 3 cr**

Introduction aux principes théoriques de la spectroscopie atomique et moléculaire et leurs applications à l'étude des propriétés chimiques et physiques à l'échelle microscopique. Exploration des spectroscopies ultraviolet et visible, de vibration, de rotation et de résonance magnétique nucléaire. On ne peut se faire créditer CHEM 2601 et CHEM 2600 (ou les anciens CHEM 2261, CHEM 2260, CHEM 2281 et CHEM 2280).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(CHEM 1111 ou CHEM 1110) et (un de CHEM 1121, CHEM 1120 ou CHEM 1126)] ou (un des anciens CHEM 1311 ou CHEM 1310)] et [(un de MATH 1230, MATH 1501, MATH 1500, MATH 1510, MATH 1520) ou (un des anciens MATH 1530 ou MATH 1690)].

**Equiv To:** CHEM 2600

**Mutually Exclusive:** CHEM 2260, CHEM 2261, CHEM 2280, CHEM 2281

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2701 Biochimie I : molécules biochimiques et introduction à l'énergie métabolique 3 cr**

Le cours vise à faire découvrir le fonctionnement de la cellule en examinant les composés biochimiques les plus importants - les protéines, les glucides, les acides nucléiques ainsi que les lipides. Une introduction à la bioénergétique sera faite en utilisant les concepts d'énergie libre, de catabolisme ainsi que d'ATP. Ce cours est aussi donner comme MBIO 2701. On ne peut se faire créditer CHEM 2701 et CHEM 2700, MBIO 2701, MBIO 2700, MBIO 2730, CHEM 2730, ou les anciens (MBIO 2361, MBIO 2360, CHEM 2361, CHEM 2360, MBIO 2770, CHEM 2770, CHEM 2860).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [un de [(CHEM 1111 ou CHEM 1110) et un de (CHEM 1121 ou CHEM 1120 ou CHEM 1126)] ou un des anciens (CHEM 1311 ou CHEM 1310)] et un de (BIOL 1031 ou BIOL 1030).

**Equiv To:** CHEM 2700, MBIO 2700, MBIO 2701

**Mutually Exclusive:** CHEM 2360, CHEM 2361, CHEM 2730, CHEM 2770, CHEM 2860, MBIO 2360, MBIO 2361, MBIO 2730, MBIO 2770

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2711 Biochimie II : catabolisme, synthèse et voies d'information 3 cr**

Introduction aux processus métaboliques cellulaires de base incluant la production et l'utilisation de l'énergie moléculaire, la dégradation et la synthèse des molécules biochimiques, la synthèse de l'ADN, de l'ARN et des protéines et la régulation de ces processus. Ce cours est aussi donner comme MBIO 2711. On ne peut se faire créditer CHEM 2711 et CHEM 2710, MBIO 2711, MBIO 2710, CHEM 2750, MBIO 2750, ou les anciens (CHEM 2371, CHEM 2370, MBIO 2371, MBIO 2370, MBIO 2780, CHEM 2780).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [un de (CHEM 2701, CHEM 2700, MBIO 2701, MBIO 2700) ou un des anciens (MBIO 2361, MBIO 2360, CHEM 2361, CHEM 2360; CHEM 2860)] et [un de (CHEM 2101, CHEM 2100) ou un des anciens (CHEM 2211 ou CHEM 2210)].

**Equiv To:** CHEM 2710, MBIO 2710

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2750, CHEM 2780, MBIO 2370, MBIO 2371, MBIO 2750, MBIO 2780

**Attributes:** Université de Saint-Boniface, Science

**CHEM 2721 Principes et techniques de laboratoire en biochimie moderne 3 cr**

Le cours va fournir une introduction aux idées théoriques et pratiques des techniques utilisées dans le laboratoire de biochimie moderne. On ne peut pas se faire créditer CHEM 2721 et CHEM 2720, CHEM 2740, ou les anciens (CHEM 2371, CHEM 2370, CHEM 2780, MBIO 2371, MBIO 2370, MBIO 2780).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de (CHEM 1111 ou CHEM 1110) et un de (CHEM 1121, CHEM 1120 ou CHEM 1126) (ou les anciens CHEM 1311 ou CHEM 1310). Ce cours peut être utilisé pour "Advanced Level Science requirements" en Chimie ou Microbiologie.

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2740, CHEM 2780, MBIO 2370, MBIO 2371, MBIO 2780

**Attributes:** Université de Saint-Boniface, Science

**CHEM 3331 Applications de la spectroscopie en chimie inorganique 3 cr**

Introduction à la synthèse et à la purification de composés inorganiques, et étude de leurs propriétés à l'aide de techniques spectroscopiques. Les expériences fourniront une formation solide de base dans les aspects théorique et pratique des spectroscopies UV-Vis, IR et RMN 1H et 13C tel qu'appliquées à la chimie inorganique. On ne peut se faire créditer CHEM 3331 et CHEM 3320 ou CHEM 3620 ou (les anciens CHEM 3380 et CHEM 3400).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(CHEM 2123, CHEM 2122, CHEM 2601 ou CHEM 2600) ou (un des anciens CHEM 2221, CHEM 2220, CHEM 2261, CHEM 2260, CHEM 2281 ou CHEM 2280)]. Préalable ou corequis : [(CHEM 2301 ou CHEM 2300) ou (un des anciens CHEM 2381, CHEM 2380, CHEM 2401 ou CHEM 2400)].

**Mutually Exclusive:** CHEM 3320, CHEM 3380, CHEM 3400, CHEM 3620

**Attributes:** Université de Saint-Boniface, Science

**CHEM 3701 Chimie biophysique 3 cr**

Application de la chimie physique aux problèmes biologiques avec l'accent sur l'interprétation quantitative. Les sujets comprennent la cinétique enzymatique, la bioénergétique, les processus de transport ainsi que la spectroscopie. On ne peut se faire créditer CHEM 3701 et CHEM 3700 (ou les anciens CHEM 3571, CHEM 3570).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [un de (CHEM 2701, CHEM 2700, MBIO 2701, ou MBIO 2700) ou un des anciens (CHEM 2361, CHEM 2360, CHEM 2860, MBIO 2361 ou MBIO 2360)] et [un de MATH 1230, MATH 1501, MATH 1500, MATH 1510, MATH 1520].

**Equiv To:** CHEM 3700

**Mutually Exclusive:** CHEM 3570, CHEM 3571

**Attributes:** Université de Saint-Boniface, Science

**CHEM 3761 Laboratoire avance de biochimie 4 cr**

(Laboratoire autonome) cours axé sur le laboratoire qui présente des méthodes avancées de purification et d'analyse structurale et fonctionnelle de biomolécules importantes. On ne peut se faire créditer CHEM 3761 et CHEM 3760 (ou l'ancien CHEM 4700).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [un de (CHEM 2711, CHEM 2710, MBIO 2711, MBIO 2710) et un de (CHEM 2721, CHEM 2720)] ou [un des anciens CHEM 2371, CHEM 2370, MBIO 2371, MBIO 2370].

**Equiv To:** CHEM 3760

**Mutually Exclusive:** CHEM 4700

**Attributes:** Université de Saint-Boniface, Science

**CHEM 4361 Signalisation et régulation de l'expression génétique 3 cr**

Biochimie de la réponse cellulaire aux stimuli externes, en mettant l'accent sur les animaux. Les récepteurs à la surface des cellules, les ligands, la signalisation au noyau, la phosphorylation, la protéolyse, la transcription et les gradients dans le typage cellulaire. On ne peut se faire créditer CHEM 4361 et CHEM 4360.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de (CHEM 2711, CHEM 2710, MBIO 2711 ou MBIO 2710) ou un des anciens (CHEM 2371, CHEM 2370, MBIO 2371, MBIO 2370).

**Equiv To:** CHEM 4360

**Attributes:** Université de Saint-Boniface, Science

**CHEM 4371 Glycobiologie et activation des protéines 3 cr**

Le rôle des biomolécules contenant des glucides en biochimie et leur importance dans la connaissance des maladies génétiques. L'importance de la protéolyse limitée dans l'activation des biomolécules. On ne peut se faire créditer CHEM 4371 et CHEM 4370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de (CHEM 2711, CHEM 2710, MBIO 2711 ou MBIO 2710) ou un des anciens (CHEM 2371, CHEM 2370, MBIO 2371, MBIO 2370).

**Equiv To:** CHEM 4370

**Attributes:** Université de Saint-Boniface, Science

**CHEM 4621 Biochimie des acides nucléiques 3 cr**

La structure des acides nucléiques; synthèse et détermination des séquences; interactions avec les protéines et les médicaments. On ne peut se faire créditer CHEM 4621 et CHEM 4620.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de (CHEM 2711, CHEM 2710, MBIO 2711 ou MBIO 2710) ou un des anciens (CHEM 2371, CHEM 2370, MBIO 2371, MBIO 2370).

**Equiv To:** CHEM 4620

**Attributes:** Université de Saint-Boniface, Science

**CHEM 4631 Biochimie des protéines 3 cr**

Les structures et fonctions des protéines, leurs propriétés physiques et chimiques et les méthodes utilisées pour les étudier. On ne peut se faire créditer CHEM 4631 et CHEM 4630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de (CHEM 2711, CHEM 2710, MBIO 2711, MBIO 2710) ou (un des anciens CHEM 2371, CHEM 2370, MBIO 2371, MBIO 2370).

**Equiv To:** CHEM 4630

**Attributes:** Université de Saint-Boniface, Science

**CHEM 4711 Projet de recherche en chimie ou biochimie 6 cr**

Un projet de recherche dans n'importe quel aspect de la chimie ou de la biochimie, choisi en consultation avec l'administrateur du cours ou un superviseur approprié de la Faculté. Des rapports écrits et des présentations orales à la fin du projet seront nécessaires. Cours normalement offert seulement lors de leur dernière année du programme de chimie. On ne peut se faire créditer CHEM 4711 et CHEM 4710, MBIO 4531 ou MBIO 4530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : autorisation écrite de la professeure ou du professeur.

**Equiv To:** CHEM 4710

**Mutually Exclusive:** BTEC 4000, MBIO 4530, MBIO 4531

**Attributes:** Université de Saint-Boniface, Science

## Computer Science (COMP)

**COMP 1011 Introduction à l'informatique I 3 cr**

(Laboratoire requis) Introduction à la programmation par un langage procédural évolué. On ne peut se faire créditer COMP 1011 et COMP 1010, COMP 1013 ou COMP 1012.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : n'importe quel cours de mathématiques de 12e année ou de niveau 40S, ou l'équivalent.

**Equiv To:** COMP 1010

**Mutually Exclusive:** COMP 1012, COMP 1013

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**COMP 1013 Programmation informatique pour scientifiques et ingénieurs 3 cr**

(Laboratoire requis) Une introduction à la programmation informatique propre à la résolution de problèmes en science et en génie. Les étudiants développent des algorithmes pour le traitement numérique, l'analyse statistique et les opérations sur des matrices. On ne peut se faire créditer COMP 1013 et aucun des COMP 1012, COMP 1010, COMP 1011.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : Mathématiques 40S (précalcul) ou l'ancien Mathématiques 40S (300). Concomitant : MATH 1500 ou MATH 1501 (ou équivalent).

**Equiv To:** COMP 1012

**Mutually Exclusive:** COMP 1010, COMP 1011

**Attributes:** Université de Saint-Boniface

**COMP 1021 Introduction à l'informatique II 3 cr**

(Laboratoire requis) Introduction à la programmation orientée objet, aux structures de données informatiques et à l'algorithmique. On ne peut se faire créditer COMP 1021 et COMP 1020.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [Une note minimale de C dans un de COMP 1011, COMP 1010, COMP 1013 ou COMP 1012] ou [Informatique 40S (75%) et n'importe quel cours de mathématiques de 12e année ou de niveau 40S, ou l'équivalent].

**Equiv To:** COMP 1020

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**COMP 1261 Introduction aux services informatiques modernes I 3 cr**

Le traitement de texte, les chiffriers, les systèmes pour la gestion de données et le traitement graphique. Aucune connaissance préalable en informatique n'est nécessaire. On ne peut s'y inscrire si on est inscrit à un programme de majeure ou de spécialisation en informatique.

**Equiv To:** COMP 1260

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**COMP 2191 Introduction au calcul scientifique 3 cr**

Informatique appliquée présentant des concepts tels que l'approximation par polynômes, la résolution d'équations non linéaires, les systèmes linéaires, la simulation et la géométrie analytique. On ne peut se faire créditer COMP 2191 et COMP 2190.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans un de COMP 1021, COMP 1020, COMP 1013 ou COMP 1012] et [une note minimale de C dans un de MATH 1230, MATH 1501, MATH 1500, MATH 1510, MATH 1520 ou MATH 1690]. Préalable ou concomitant : un de MATH 1220, MATH 1301, MATH 1300 ou MATH 1310.

**Equiv To:** COMP 2190

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

## Economics (ECON)

**ECON 1011 Introduction à la microéconomie 3 cr**

Étude des principes de base de la microéconomie, plus particulièrement l'offre et la demande, la détermination des prix, les structures de marché, l'allocation des ressources, le comportement des consommateurs et des entreprises ainsi que quelques exemples d'interventions du gouvernement dans les marchés. Des sujets comme l'inégalité économique, l'équité, les effets externes, les biens collectifs ou autres enjeux politiques ou de microéconomie peuvent aussi être traités dans ce cours. On ne peut se faire créditer ECON 1011 et ECON 1201, ECON 1200, ECON 1211, ECON 1210, ECON 1221 ou ECON 1220.

**Equiv To:** ECON 1010

**Mutually Exclusive:** ECON 1200, ECON 1201, ECON 1210, ECON 1211, ECON 1220, ECON 1221

**ECON 1021 Introduction à la macroéconomie 3 cr**

Étude des principes de base de la macroéconomie, plus particulièrement l'offre et la demande agrégées, les indicateurs économiques que sont le chômage et l'inflation, le PIB et le niveau de vie, les finances publiques et la politique budgétaire, la monnaie et la politique monétaire. Quelques éléments de l'économie mondiale tels que taux de change et balance des paiements peuvent aussi être traités dans ce cours. On ne peut se faire créditer ECON 1021 et ECON 1201, ECON 1200, ECON 1211, ECON 1210, ECON 1221 ou ECON 1220.

**Equiv To:** ECON 1020

**Mutually Exclusive:** ECON 1200, ECON 1201, ECON 1210, ECON 1211, ECON 1220, ECON 1221

**ECON 1211 Introduction aux politiques et aux problèmes économiques canadiens 3 cr**

Une étude de principes majeurs qui sous-tendent et de certains facteurs qui influencent l'économie canadienne et de ses régions. L'étudiant(e) qui détient les crédits du ECON 1211 ne peut se faire créditer aucun des cours ECON 1210, l'ancien ECON 1200, l'ancien ECON 1201, ECON 1010, ECON 1020, ECON 1011 ou ECON 1021.

**Equiv To:** ECON 1210

**Mutually Exclusive:** ECON 1010, ECON 1011, ECON 1020, ECON 1021, ECON 1200, ECON 1201

**Attributes:** Université de Saint-Boniface, Social Science, Recommended Intro Courses

**ECON 1221 Introduction aux politiques et aux problèmes économiques mondiaux 3 cr**

Une étude de principes majeurs qui marquent l'économie mondiale et l'environnement. L'étudiant(e) qui détient les crédits du ECON 1221 ne peut se faire créditer aucun des cours ECON 1220, l'ancien ECON 1200, l'ancien ECON 1201, ECON 1010, ECON 1020, ECON 1011 ou ECON 1021.

**Equiv To:** ECON 1220

**Mutually Exclusive:** ECON 1010, ECON 1011, ECON 1020, ECON 1021, ECON 1200, ECON 1201

**Attributes:** Université de Saint-Boniface, Social Science, Recommended Intro Courses

**ECON 2311 Problèmes économiques du Canada 6 cr**

Application de la théorie économique aux problèmes actuels du Canada: les disparités régionales, l'agriculture, l'échange, la pratique concurrentielle, la propriété étrangère et l'éducation, etc. L'étudiant(e) ne peut se faire créditer à la fois le ECON 2311 et le ECON 2310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans six heures-crédits au niveau 1000 en sciences économiques.

**Equiv To:** ECON 2310

**Attributes:** Université de Saint-Boniface, Social Science

**ECON 2451 Théorie microéconomique et ses applications 1 3 cr**

Théorie de la demande du consommateur, de la production et des coûts, de la demande des facteurs de production et de la structure des marchés dans une perspective historique et institutionnelle. L'étudiant(e) qui détient les crédits du ECON 2451 ne peut se faire créditer aucun des cours ECON 2450 ou ECON 2700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans ECON 1010 ou ECON 1011 ou l'ancien ECON 1200 ou l'ancien ECON 1201] ou [une note minimale de C dans chacun de ECON 1210 (ou ECON 1211) et ECON 1220 (ou ECON 1221)].

**Equiv To:** ECON 2450

**Attributes:** Université de Saint-Boniface, Social Science

**ECON 2461 Théorie microéconomique et ses applications 2 3 cr**

Théorie du marché des facteurs de production, de la distribution et de l'équilibre général, économie du bien-être et faillite des marchés, dans une perspective historique et institutionnelle. L'étudiant(e) qui détient le crédits du ECON 2461 ne peut se faire créditer aucun des cours ECON 2460 ou ECON 3700.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un des cours suivants: ECON 2450 ou ECON 2451 ou ECON 2700.

**Equiv To:** ECON 2460

**Attributes:** Université de Saint-Boniface, Social Science

**ECON 2471 Théorie macroéconomique et ses applications 1 3 cr**

Étude des fluctuations dans le revenu national, la production, l'emploi la monnaie et les prix ainsi qu'étude des politiques de stabilisation, dans une perspective historique et institutionnelle. L'analyse s'effectue à partir d'un modèle macroéconomique d'une économie fermée. L'étudiant(e) qui détient les crédits du ECON 2471 ne peut se faire créditer aucun des cours ECON 2470 ou ECON 2800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans ECON 1020 ou ECON 1021 ou l'ancien ECON 1200 ou l'ancien ECON 1201] ou [une note minimale de C dans chacun de ECON 1210 (ou ECON 1211) et ECON 1220 (ou ECON 1221)].

**Equiv To:** ECON 2470

**Attributes:** Université de Saint-Boniface, Social Science

**ECON 2481 Théorie macroéconomique et ses applications 2 3 cr**

Théorie du revenu national, de l'emploi, de l'inflation, de la balance des paiements. Politiques de stabilisation et croissance économique. L'analyse s'effectue à partir d'un modèle macroéconomique d'une économie ouverte dans une perspective historique et institutionnelle. L'étudiant(e) qui détient le crédits du ECON 2481 ne peut se faire créditer aucun des cours ECON 2480 ou ECON 3800.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un des cours suivants: ECON 2470 ou ECON 2471 ou ECON 2800.

**Equiv To:** ECON 2480

**Attributes:** Université de Saint-Boniface, Social Science

**ECON 3301 Histoire économique du Canada 6 cr**

Étude de la croissance économique du Canada en soulignant l'influence de l'Europe et des États-Unis. L'étudiant(e) ne peut se faire créditer à la fois le ECON 3301 et le ECON 3300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: aucun.

**Equiv To:** ECON 3300

**Attributes:** Université de Saint-Boniface, Social Science

**ECON 3641 L'économie et le système financier 3 cr**

Les flux des fonds prêtables et le système financier. L'épargne et l'investissement: l'offre et la demande d'actifs financiers des ménages et des entreprises. Théorie bancaire et intermédiaires financiers. L'arbitrage parmi les marchés financiers et les pays; politiques gouvernementales avec attention particulière au contexte canadien. L'étudiant(e) qui détient les crédits du ECON 3641 ne peut se faire créditer aucun des cours ECON 3640 ou FIN 3460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un des cours suivants: ECON 2450 ou ECON 2451 ou ECON 2460 ou ECON 2461 ou ECON 2700 ou ECON 3700.

**Equiv To:** ECON 3640

**Mutually Exclusive:** FIN 3460

**Attributes:** Université de Saint-Boniface, Social Science

**ECON 3651 Théorie et politique monétaires 3 cr**

La demande et l'offre de monnaie. La structure des taux d'intérêts. Les outils de la politique monétaire. La gestion monétaire par la banque centrale et le gouvernement. L'étudiant(e) ne peut se faire créditer à la fois le ECON 3651 et le ECON 3650.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: une note minimale de C dans un des suivants: ECON 2470 ou ECON 2471 ou ECON 2480 ou ECON 2481 ou ECON 2800 ou ECON 3800.

**Equiv To:** ECON 3650

**Attributes:** Université de Saint-Boniface, Social Science

**ECON 3661 La pensée économique et les institutions sociales 6 cr**

L'évolution de la pensée économique dans son interaction avec l'évolution des institutions sociales et les conditions matérielles et intellectuelles des diverses époques. L'étudiant(e) ne peut se faire créditer à la fois le ECON 3661 et le ECON 3660.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans six heures-crédits au niveau 1000 en sciences économiques] ou autorisation écrite du professeur.

**Equiv To:** ECON 3660

**Attributes:** Université de Saint-Boniface, Social Science

## Education Admin, Fndns & Psych (EDUA)

**EDUA 1801 Psychologie de l'apprentissage et de l'enseignement I:****Théorie et pratique 3 cr**

Étude des concepts théoriques reliés à la nature de l'apprentissage et du développement en milieu scolaire, ou autre, et des pratiques qui en découlent.

**Attributes:** Université de Saint-Boniface

**EDUA 2011 Psychologie du Développement 3 cr**

Étude des principes de base du développement humain et de leur importance dans l'établissement de procédés efficaces de communication en classe. Étude d'un développement normal et des problèmes communs en éducation.

**Attributes:** Université de Saint-Boniface

**EDUA 2031 Psychologie de l'Enfance Exceptionnelle 3 cr**

Initiation à l'étude des besoins des enfants nécessitant une approche spéciale qui leur permet de se développer au maximum de leur potentiel. Examen particulier du rôle de l'enseignante ou de l'enseignant en vue d'identifier et de combler ces besoins.

**Attributes:** Université de Saint-Boniface

**EDUA 2041 Psychologie de l'Enfant 3 cr**

Étude de l'interaction entre l'enfant et son entourage. Analyse particulière de l'influence des parents, des adultes, des frères et des sœurs et de l'école sur l'évolution psychologique, affective, sociale et morale de l'enfant.

**Attributes:** Université de Saint-Boniface

**EDUA 2801 Psychologie de l'apprentissage et de l'enseignement II:****Éducation spéciale inclusive 3 cr**

Étude des approches et des pratiques visant à répondre aux besoins diversifiés de tous les élèves, incluant les méthodes et les ressources disponibles pour inclure tous les élèves dans les classes et les écoles régulières.

**Attributes:** Université de Saint-Boniface

**EDUA 2901 Le rôle de l'école dans la société 3 cr**

Étude du système scolaire canadien et manitobain, dans le contexte d'une société diversifiée. Ce cours vise, dans un premier temps, à faire prendre conscience des enjeux historique, philosophique, sociologique et transculturel liés à l'enseignement. Dans un deuxième temps, il amènera les étudiantes et étudiants à comprendre le rôle de l'enseignant et de l'enseignante au sein de l'organisation du point de vue professionnel, légal et administratif.

**EDUA 3011 Mesure et Évaluation 3 cr**

Théorie et application pratique dans la préparation, l'utilisation et l'interprétation de tests composés par les instituteurs et les institutrices; utilisation et interprétation de divers types de tests standards; techniques de statistiques connexes.

**Attributes:** Université de Saint-Boniface

**EDUA 3021 Principes de Programmation Scolaire 3 cr**

Analyse des principes fondamentaux qui gouvernent l'élaboration des programmes scolaires et étude de l'application de ces principes à certains programmes actuels.

**Equiv To:** EDUA 3020

**Attributes:** Université de Saint-Boniface

**EDUA 3051 Troubles Particuliers de L'Apprentissage 3 cr**

Initiation à l'étude de certains troubles perçus dans le développement des élèves. Étude du rôle de l'enseignante ou de l'enseignant dans le dépistage de ces troubles et application de programmes particuliers de rééducation.

**Attributes:** Université de Saint-Boniface

**EDUA 3061 Informatique En Éducation I 3 cr**

Applications pédagogiques des ordinateurs. Exploitation des logiciels, des progiciels et des didactiques applicables à l'enseignement.

**Attributes:** Université de Saint-Boniface

**EDUA 3071 Développement du Langage chez le Jeune Enfant 3 cr**

Étude des expériences sensorimotrices et des étapes de la communication prélinguistique et linguistique allant de l'expression vocale au développement syntaxique. Appréciation de l'importance de l'environnement linguistique et de la cognition dans le développement, l'acquisition et l'apprentissage de la langue première. Analyse particulière du développement d'une langue seconde aux niveaux préscolaire et primaire en immersion. Il est préférable mais non obligatoire de suivre le EDUA 2011 au préalable.

**Attributes:** Université de Saint-Boniface

**EDUA 3201 Diversité culturelle dans les écoles 3 cr**

Les écoles accueillent un grand nombre d'élèves provenant de groupes sociaux marginalisés selon, entre autres, leur race, leur ethnie, leur langue maternelle, leur religion, leur orientation sexuelle ou leur statut socioéconomique. Étude de la question de la diversité culturelle, prise dans un sens large, dans le contexte de l'enseignement. Acquisition des connaissances ainsi que des attitudes et des stratégies nécessaires pour favoriser l'équité et la qualité des apprentissages des élèves, peu importe leurs antécédents, leurs particularités ou leurs circonstances.

**EDUA 3305 Intégration et identité professionnelles 6 cr**

Développement de l'habileté à faire le lien entre la pratique et la théorie et à mettre en oeuvre une gestion efficace de sa pratique pédagogique. On ne peut se faire créditer EDUA 3305 et l'ancien EDUA 3303.

**Mutually Exclusive:** EDUA 3303

**EDUA 3313 Perspectives autochtones en contexte scolaire 3 cr**

Introduction aux perspectives culturelles autochtones et métisses en contexte scolaire : dimensions historique, anthropologique, éthique et pédagogique. Développement de compétences professionnelles relatives à l'enseignement dans un environnement autochtone et métis.

**EDUA 3323 La pratique réflexive dans la formation professionnelle 3 cr**

Analyse d'expériences vécues lors du stage pratique menant à une prise de conscience de son propre style d'enseignement.

**EDUA 3993 Éducation française en contextes minoritaire et d'immersion 3 cr**

Étude des aspects historique, démographique, culturel, linguistique, identitaire et des approches pédagogiques qui encadrent le phénomène de l'éducation française en milieu minoritaire au Manitoba (écoles d'immersion et écoles françaises).

**EDUA 5011 Introduction à L'Administration Scolaire 3 cr**

Étude des concepts, des tâches et des processus de l'administration tels qu'ils s'appliquent à l'éducation. On ne peut se faire créditer le EDUA 5011.

**Equiv To:** EDUA 5010

**Attributes:** Université de Saint-Boniface

**EDUA 5021 Principes d'Élaboration de Curriculum 3 cr**

Étude des différentes approches d'élaboration de curriculum, des facteurs qui en influencent le processus d'élaboration et des aspects de l'implantation. Participation de l'enseignant ou de l'enseignante à l'élaboration du curriculum. On ne peut se faire créditer le EDUA 5021.

**Equiv To:** EDUA 5020

**Attributes:** Université de Saint-Boniface

**EDUA 5031 Gestion des établissements scolaires 3 cr**

Étude des modes fondamentaux d'organisation et du rôle de l'administration au sein d'un établissement scolaire. Attention particulière accordée à la prise de décision, à la communication, à la planification et à l'évaluation. On ne peut se faire créditer le EDUA 5031.

**Equiv To:** EDUA 5030

**Attributes:** Université de Saint-Boniface

**EDUA 5041 Administration du personnel scolaire 3 cr**

Étude des rapports de l'administratrice ou de l'administrateur avec le personnel, en mettant l'accent sur la politique de gestion, le perfectionnement et la motivation du personnel. On ne peut se faire créditer le EDUA 5041.

**Equiv To:** EDUA 5040

**Attributes:** Université de Saint-Boniface

**EDUA 5061 Principes de la supervision en enseignement 3 cr**

Étude des modèles théoriques d'enseignement et de supervision et de leur application dans la pratique. On ne peut se faire créditer le EDUA 5061, EDUA 5060.

**Equiv To:** EDUA 5060

**Attributes:** Université de Saint-Boniface

**EDUA 5071 Comportement organisationnel en éducation 3 cr**

Étude des théories et des recherches en sciences du comportement et en sciences sociales qui ont trait au comportement des individus et des groupes dans une structure organisationnelle. Analyse de la portée de ces théories et recherches par rapport à l'administration des établissements scolaires. On ne peut se faire créditer le EDUA 5071.

**Equiv To:** EDUA 5070

**Attributes:** Université de Saint-Boniface

**EDUA 5081 Courants Actuels en Administration Scolaire 1 3 cr**

Étude des fondements théoriques et de l'application pratique des développements récents et des nouveaux courants en administration scolaire.

**Equiv To:** EDUA 5080

**Attributes:** Université de Saint-Boniface

**EDUA 5091 Courants Actuels en Administration Scolaire 2 3 cr**

Prolongement de l'étude de certains sujets abordés dans le EDUA 5081 en vue d'approfondir les études entreprises dans ces domaines.

**Equiv To:** EDUA 5090

**Attributes:** Université de Saint-Boniface

**EDUA 5101 Questions importantes en administration scolaire 3 cr**

Étude de sujets d'importance en administration scolaire. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer le EDUA 5101 (EDUA 5100).

**Equiv To:** EDUA 5100

**Attributes:** Université de Saint-Boniface

**EDUA 5241 Problèmes en rapport avec l'éducation interculturelle 3 cr**

Étude de problèmes particuliers auxquels les minorités culturelles font face dans le milieu scolaire. On ne peut se faire créditer le EDUA 5241.

**Equiv To:** EDUA 5240

**EDUA 5431 Introduction à la dramathérapie 3 cr**

Ce cours offre aux intervenants en milieu scolaire (enseignants, conseillers, etc.) une introduction à la dramathérapie, y compris son histoire, ses processus clés et le choix des approches courantes.

**EDUA 5481 Techniques de counselling 3 cr**

Acquisition de techniques de counselling telles que l'attention et l'écoute, le reflet du contenu et des émotions, la rétroaction et la révélation de soi, la focalisation et le résumé. On ne peut se faire créditer le EDUA 5481 et EDUA 5480. Une note de réussite ou échec sera attribuée pour ce cours.

**Equiv To:** EDUA 5480

**Attributes:** Université de Saint-Boniface

**EDUA 5491 Stage en counselling 3 cr**

Situation réelle de counselling où les étudiantes et les étudiants auront l'occasion, sous la supervision de professionnels compétents et avec l'appui de leur professeur ou de leur professeure, de mettre en pratique les techniques de counselling qu'ils ont apprises. Une note de réussite ou échec sera attribuée pour ce cours. On ne peut se faire créditer le EDUA 5491 et EDUA 5490.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables ou concomitants: EDUA 5501 ou EDUA 5500 ou EDUA 5481 ou EDUA 5480 ou l'autorisation de la professeure ou du professeur.

**Equiv To:** EDUA 5490

**Attributes:** Université de Saint-Boniface

**EDUA 5501 Théories de counselling scolaire 3 cr**

Étude de la philosophie et des théories du counselling. Sujets importants en orientation et en counselling scolaires. On ne peut se faire créditer le EDUA 5501.

**Equiv To:** EDUA 5500

**Attributes:** Université de Saint-Boniface

**EDUA 5521 Counselling et éthique 3 cr**

Introduction au code de déontologie des conseillères et des conseillers. Discussion des problématiques morales en lien avec les sujets suivants: consentement libre et éclairé, confidentialité, tenue des dossiers, respect des limites, formation et compétence, supervision clinique, multiculturalisme et diversité. Possibilité de mettre en pratique des modèles de prise de décision. On ne peut se faire créditer le EDUA 5521 (EDUA 5520).

**Equiv To:** EDUA 5520

**EDUA 5531 Counselling au secondaire 3 cr**

Étude du counselling au secondaire. Rôle et fonctions de la conseillère ou du conseiller à l'école secondaire. Étude des divers services offerts par le conseiller. Éducation, orientation, personnel, etc. On ne peut se faire créditer EDUA 5531 et EDUA 5530.

**Equiv To:** EDUA 5530

**Attributes:** Université de Saint-Boniface

**EDUA 5541 Counselling de Groupes 3 cr**

Étude des groupes, de l'animation de groupe et de l'acquisition des compétences connexes, particulièrement en ce qui a trait à la fonction de la conseillère ou du conseiller en milieu scolaire. On ne peut se faire créditer le EDUA 5541 et EDUA 5540.

**Equiv To:** EDUA 5540

**Attributes:** Université de Saint-Boniface

**EDUA 5551 Psychologie des Relations Humaines 3 cr**

Étude des relations interpersonnelles. Approche de type laboratoire visant à augmenter la sensibilité personnelle des étudiantes et des étudiants aux autres personnes. Cours qui s'adresse particulièrement au personnel enseignant, administratif et professionnel en milieu scolaire. On ne peut se faire créditer le EDUA 5551.

**Equiv To:** EDUA 5550

**Attributes:** Université de Saint-Boniface

**EDUA 5571 Éducation familiale 3 cr**

Étude de la sexualité humaine et des relations familiales, axée sur les résultats de la recherche, les ressources et les méthodes pédagogiques, le développement, ainsi que la collaboration avec les membres de la famille et la collectivité. On ne peut se faire créditer le EDUA 5571.

**Equiv To:** EDUA 5570

**Attributes:** Université de Saint-Boniface

**EDUA 5581 Orientation de carrières 3 cr**

Étude et application des théories sous-tendant l'orientation de carrières, le choix de carrière et la prise de décision; évaluation et conception de programmes de connaissance de soi aux fins de prises de décision dans une contexte de counselling. On ne peut se faire créditer le EDUA 5581.

**EDUA 5601 Introduction à l'éducation inclusive 6 cr**

Survol des préoccupations dans le domaine de l'éducation inclusive. Étude des barrières à l'inclusion en ce qui concerne les lois, la pédagogie, les attitudes et les organisations, de même que les modalités d'inclusion exemplaires. On ne peut se faire créditer le EDUA 5601.

**Equiv To:** EDUA 5600

**Attributes:** Université de Saint-Boniface

**EDUA 5621 L'enseignement aux enfants au moyen de la communication alternative et augmentée 3 cr**

Examen des problématiques liées à la communication alternative et augmentée, des services, des ressources, de l'enseignement inclusif et des stratégies d'apprentissage. On ne peut se faire créditer EDUA 5621 et EDUA 5620.

**Equiv To:** EDUA 5620

**EDUA 5631 Évaluation et programmation en éducation inclusive 6 cr**

Étude des modalités d'évaluation basées sur le curriculum et sur le fonctionnement de la classe en vue de guider l'instruction des élèves éprouvant des difficultés d'apprentissage et de comportement en contexte d'inclusion. On ne peut se faire créditer le EDUA 5631 et EDUA 5630.

**Equiv To:** EDUA 5630

**Attributes:** Université de Saint-Boniface

**EDUA 5661 Gestion des programmes d'orthopédagogie et de soutien 3 cr**

Étude des modalités d'évaluation basées sur le curriculum et sur le fonctionnement de la classe en vue de guider l'instruction des élèves éprouvant des difficultés d'apprentissage et de comportement en contexte d'inclusion. On ne peut se faire créditer le EDUA 5631.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable ou concomitant: le EDUA 5601 ou l'équivalent.

**Equiv To:** EDUA 5660

**Attributes:** Université de Saint-Boniface

**EDUA 5671 Stratégies pour l'organisation de classes et d'écoles inclusives 3 cr**

Étude de l'organisation et de la mise en oeuvre à l'échelle de l'école de mécanismes de soutien visant à favoriser l'accès à ces écoles, l'apprentissage, la socialisation, le comportement, les rapports avec la famille, la participation de professionnels de la santé et les services communautaires. Analyse des stratégies d'organisation visant à améliorer la consultation, la coopération, la collaboration et le perfectionnement professionnel. On ne peut se faire créditer le EDUA 5671 et EDUA 5670.

**Equiv To:** EDUA 5670

**Attributes:** Université de Saint-Boniface

**EDUA 5681 Promotion d'un comportement responsable en milieu scolaire 3 cr**

Étude des besoins des enfants ayant des problèmes de comportement en milieu scolaire. Analyse de la conceptualisation des troubles du comportement, des procédures d'identification et d'évaluation de ces troubles, ainsi que des stratégies d'intervention. Conception des stratégies d'intervention appropriées en milieu scolaire. On ne peut se faire créditer EDUA 5681 et EDUA 5680.

**Equiv To:** EDUA 5680

**Attributes:** Université de Saint-Boniface

**EDUA 5701 Psychologie sociale de l'éducation 3 cr**

Examen des facteurs sociaux qui influencent le rendement et l'adaptation de l'élève à l'école. Importance accordée au fonctionnement des petits groupes et aux interactions en classe, ainsi qu'à l'analyse de la structure sociale de l'école et du rôle social de l'enseignant et de l'enseignante. On ne peut se faire créditer le EDUA 5701 (EDUA 5700).

**Equiv To:** EDUA 5700

**Attributes:** Université de Saint-Boniface

**EDUA 5731 Courants Actuels en Psychologie de l'Éducation 1 3 cr**

Examen des courants théoriques et des applications pratiques récents ou en émergence dans ce domaine. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer EDUA 5731 (EDUA 5730).

**Equiv To:** EDUA 5730

**Attributes:** Université de Saint-Boniface

**EDUA 5741 Courants actuels en psychologie de l'éducation 2 3 cr**

Étude des fondements théoriques et des applications pratiques de développements récents et de nouveaux courants dans ce domaine.

**Equiv To:** EDUA 5740

**Attributes:** Université de Saint-Boniface

**EDUA 5751 Psychologie de l'Enseignement en Contexte Scolaire 3 cr**

Étude des théories fondamentales d'apprentissage telles qu'elles sont appliquées à l'enseignement en salle de classe et utilisées dans l'élaboration des programmes. Analyse du traitement de l'information cognitive et des aspects comportemental, développemental et psychosocial.

**Equiv To:** EDUA 5750

**Attributes:** Université de Saint-Boniface

**EDUA 5761 Psychologie de l'Enseignement en Contexte Scolaire 3 cr**

Conçu principalement, mais non exclusivement, à l'intention des enseignantes, des enseignants et du personnel scolaire. Étude critique des fondements théoriques et des modèles d'enseignement principaux. Intégration et application d'approches et de stratégies d'enseignement existantes ou nouvelles. On ne peut se faire créditer le EDUA 5761 et EDUA 5760.

**Equiv To:** EDUA 5760

**Attributes:** Université de Saint-Boniface

**EDUA 5801 Introduction à la recherche en éducation 3 cr**

Étude de l'investigation scientifique dans le domaine de l'éducation. Examen des méthodes de recherche et d'analyse statistique dans le contexte éducatif. Cours particulièrement recommandé aux étudiantes et aux étudiants qui s'intéressent à l'évaluation et à la mise en application des résultats de la recherche. On ne peut se faire créditer le EDUA 5801.

**Equiv To:** EDUA 5800

**Attributes:** Université de Saint-Boniface

**EDUA 5811 Théories de Construction de Tests 3 cr**

Étude des problèmes reliés à l'analyse d'items, à la validité, à la fidélité et à l'utilisation des tests dans le processus d'évaluation en milieu scolaire. Considération des tests normatifs et critériés. On ne peut se faire créditer le EDUA 5811.

**Equiv To:** EDUA 5810

**Attributes:** Université de Saint-Boniface

**EDUA 5851 Application de l'Informatique en Éducation 2 3 cr**

Cours avancé sur l'utilisation de logiciels d'apprentissage dans les classes ordinaires et dans l'enseignement aux élèves ayant des difficultés d'apprentissage. On ne peut se faire créditer le EDUA 5851 et EDUA 5850.

**Equiv To:** EDUA 5850

**Attributes:** Université de Saint-Boniface

**EDUA 5901 Éducation et Processus du Développement 1 3 cr**

Survol du processus du développement de la conception à la puberté. Importance accordée aux fondements biologiques, au développement cognitif et aux aspects sociaux du comportement dans leurs rapports avec le processus éducatif. On ne peut se faire créditer le EDUA 5901.

**Equiv To:** EDUA 5900

**Attributes:** Université de Saint-Boniface

**EDUA 5911 Éducation et Processus de Développement 2 3 cr**

Étude de la croissance et du développement à l'âge postérieur à la puberté. Attention particulière accordée à leurs effets sur l'apprentissage au niveau secondaire. On ne peut se faire créditer le EDUA 5911.

**Equiv To:** EDUA 5910

**Attributes:** Université de Saint-Boniface

**EDUA 5921 Le Jeu Chez l'Enfant 3 cr**

Examen du rôle du jeu dans l'apprentissage chez l'enfant, en incluant la perspective historique. Discussion du jeu en tant que partie intégrante du développement de l'enfant. Distinction entre les activités ludiques et non ludiques, considération des attributs conceptuels, perceptuels, linguistiques et physiques du jeu. On ne peut se faire créditer le EDUA 5921.

**Equiv To:** EDUA 5920

**Attributes:** Université de Saint-Boniface

**EDUA 5931 Observation du Comportement de l'Enfant 3 cr**

Étude des techniques d'observation qualitatives qui peuvent être utilisées en milieu scolaire pour mieux comprendre le comportement de l'enfant, ses modes de penser et ses motivations. On ne peut se faire créditer le EDUA 5931.

**Equiv To:** EDUA 5930

**Attributes:** Université de Saint-Boniface

**EDUA 5951 L'inclusion et la diversité 3 cr**

Étude des enjeux de la diversité pour la pratique en orthopédagogie en contexte scolaire. Analyse des considérations éthiques et pratiques de la diversité qui influencent la nature et l'efficacité de l'orthopédagogie auprès des membres de la communauté scolaire.

**EDUA 5953 L'inclusion et l'approche écologique 3 cr**

Étude et analyse de l'inclusion scolaire, en lien avec le paradigme de la dénormalisation ainsi que du Processus de production du handicap (PPH), des stratégies visant à éliminer les barrières à l'inclusion et d'une renégociation du rôle des intervenants, dont celui de l'orthopédagogue.

**EDUA 7011 Administration scolaire en tant que champ d'étude et d'application 3 cr**

Aperçu de l'administration scolaire. Importance particulière accordée à quelques-unes des grandes traditions intellectuelles du domaine de l'administration scolaire et analyse de certaines forces qui influencent la pratique de l'administration. On ne peut se faire créditer le EDUA 7011.

**EDUA 7021 La politique en éducation 3 cr**

Étude des caractéristiques politiques des organismes scolaires: répartition des pouvoirs dans la communauté, gouvernement local, changements politiques et rôle des divers systèmes de valeurs en éducation. On ne peut se faire créditer le EDUA 7021.

**EDUA 7031 Le financement scolaire 3 cr**

Étude des dimensions économiques et financières de l'éducation. Analyse des coûts et des dépenses, des sources et des types de revenus, de la productivité et de l'efficacité, de la planification et du budget. On ne peut se faire créditer le EDUA 7031.

**EDUA 7041 Aspects légaux en éducation 3 cr**

Étude des questions légales dans le monde de l'éducation. On ne peut se faire créditer le EDUA 7041 (EDUA 7040).

**Equiv To:** EDUA 7040

**EDUA 7051 Perspectives théoriques de l'administration scolaire 3 cr**

Étude des tendances en matière de théorie organisationnelle et de pensée administrative ainsi que de la portée de celles-ci sur l'étude et l'administration d'organisations scolaires. On ne peut se faire créditer le EDUA 7051.

**Equiv To:** EDUA 7050

**EDUA 7061 Planification organisationnelle et développement éducationnel 3 cr**

Revue des diverses approches à la planification et au développement éducationnel. Importance particulière accordée au développement systématique des organismes d'enseignement. On ne peut se faire créditer les EDUA 7061.

**EDUA 7071 Analyse des Organismes D'Enseignement 3 cr**

Application de méthodes d'analyse organisationnelle aux établissements d'enseignement. On ne peut se faire créditer le EDUA 7071.

**EDUA 7081 Principes d'organisation et de mise en application du curriculum 3 cr**

Revue des approches de modification et d'application du curriculum. Importance particulière accordée aux approches systématiques de modification des programmes en éducation. On ne peut se faire créditer le EDUA 7081.

**EDUA 7091 Séminaire - Problèmes administratifs en éducation 3 cr**

Application de concepts théoriques à des situations concrètes. On ne peut se faire créditer le EDUA 7091.

**EDUA 7101 Sujets particuliers en administration scolaire 1 3 cr**

Lecture sur des sujets d'importance en administration scolaire.

**EDUA 7111 Sujets particuliers en administration scolaire 2 3 cr**

Recherche-action sur des sujets d'importances en administration scolaire. Le contenu de ce cours variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer EDUA 7111 (EDUA 7100).

**Equiv To:** EDUA 7110

**EDUA 7211 Éducation et société 3 cr**

Étude du rapport qui existe entre l'éducation et la société. Regard particulier sur l'apprentissage ethnique, la famille, le statut socioéconomique et le rôle que joue l'école en tant qu'agent de socialisation dans un contexte canadien. On ne peut se faire créditer le EDUA 7211.

**EDUA 7231 Critique sociale en éducation 3 cr**

Examen critique de l'éducation. Regard particulier sur les diverses perspectives qui remettent en question une interprétation traditionnelle de l'éducation et de la scolarisation. On ne peut se faire créditer EDUA 7231 et EDUA 7230.

**Equiv To:** EDUA 7230

**EDUA 7241 Valeurs en éducation 3 cr**

Étude de la place occupée par les valeurs en éducation. Approfondissement de la notion de valeur et de son omniprésence dans le domaine de l'éducation, ainsi que des approches, des tendances et des questions relatives aux valeurs en éducation. On ne peut se faire créditer EDUA 7241.

**Equiv To:** EDUA 7240

**EDUA 7281 Séminaire sur l'éducation interculturelle 2 3 cr**

Analyse critique des approches et de la recherche en éducation interculturelle. On ne peut se faire créditer EDUA 7281 (EDUA 7280).

**Equiv To:** EDUA 7280

**EDUA 7511 Séminaire sur des sujets d'actualité en counselling 3 cr**

Progrès d'ordre professionnel, théorique et scientifique. Questions actuelles importantes. Problèmes sociaux particuliers en counselling. On ne peut se faire créditer EDUA 7511.

**Equiv To:** EDUA 7510

**EDUA 7521 Séminaire - Stage en counselling 6 cr**

Expérience supervisée en counselling individuel et de groupe, Analyse d'études de cas au moyen d'enregistrements. Exige un minimum de 180 heures de stage. Une note de réussite ou échec sera attribuée pour ce cours.

**Equiv To:** EDUA 7520

**EDUA 7531 Groupes en counselling: théorie et pratique 6 cr**

Étude de théories, de fondements logiques, d'objectifs et de recherches. Acquisition d'une compréhension expérientielle du travail en groupe par la participation aux activités en salle de classe. Acquisition de techniques d'animation de counselling de groupe au moyen d'expériences de counselling de groupe sous supervision.

**Equiv To:** EDUA 7530

**EDUA 7541 Programmes d'orientation de carrières 3 cr**

Cours destiné aux conseillères et aux conseillers qui souhaitent approfondir leurs connaissances des programmes d'orientation de carrières. Examen et évaluation de programmes et de diverses techniques de counselling. Elaboration de programmes innovateurs qui répondent aux besoins de ceux et celles qui ont recours aux services de counselling. On ne peut se faire créditer le EDUA 7541.

**EDUA 7551 Théories de counselling 3 cr**

Objectifs du counselling, évaluation des résultats du counselling, théories de la personnalité et du counselling. On ne peut se faire créditer le EDUA 7551 (EDUA 7550).



**EDUA 7561 Counselling et diversité en milieu scolaire 3 cr**

Étude des enjeux de la diversité pour la pratique en counselling en contexte scolaire. Analyse des considérations éthiques, théoriques et pratiques de la diversité qui influencent la nature et l'efficacité du counselling auprès d'une clientèle issue de divers milieux. On ne peut pas se faire créditer EDUA 7561 et EDUA 7560.

**Equiv To:** EDUA 7560

**EDUA 7601 Séminaire en éducation inclusive 6 cr**

Forum de discussions sur des sujets reliés à divers handicaps. Étude en profondeur de problèmes reliés aux besoins professionnels particuliers des étudiants et des étudiantes. On ne peut se faire créditer le EDUA 7601.

**Equiv To:** EDUA 7600

**Mutually Exclusive:** EDUA 7602, EDUA 7652

**EDUA 7611 Séminaire sur l'éducation des enfants aux prises avec des troubles de comportement 3 cr**

Cours à l'intention des enseignants et des enseignantes, et des conseillers et des conseillères scolaires. Études des connaissances théoriques et des outils nécessaires à l'élaboration et à la mise en oeuvre des programmes éducatifs pour les élèves aux prises avec des troubles de comportement.

**EDUA 7621 Séminaire sur la déficience intellectuelle 3 cr**

Examen des résultats de la recherche portant sur les problèmes liés à l'enseignement aux personnes ayant une déficience intellectuelle et à leur apprentissage.

**EDUA 7651 Stage en éducation inclusive 6 cr**

Un minimum de 200 heures de stage supervisées s'inscrivant dans un contexte d'éducation inclusive. Des séminaires sont prévus afin de créer un cadre qui facilite l'étude dirigée et la discussion. On ne peut se faire créditer EDUA 7651. Une note réussite ou échec sera attribuée pour ce cours.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: 18 crédits au niveau 5000 en éducation inclusive ou l'équivalent.

**Attributes:** Université de Saint-Boniface

**EDUA 7721 Psychologie de l'apprentissage en salle de classe 3 cr**

Examen des développements récents en psychologie cognitive et de leurs applications dans le domaine de l'apprentissage en salle de classe ou dans d'autres milieux éducatifs. Étude approfondie des théories du traitement de l'information, de la cognition incarnée et de l'acquisition de la connaissance, en rapport avec le processus d'apprentissage et la gestion de classe.

**EDUA 7741 Sujets particuliers en psychologie de l'éducation I 3 cr**

Lecture et recherche sur des sujets d'importance en psychologie de l'éducation. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On se peut se faire créditer EDUA 7741 (EDUA 7740).

**EDUA 7761 Techniques d'entrevue avec les enfants et les adolescents et adolescentes 3 cr**

Étude des principes et des méthodes d'entrevue et de counselling auprès d'enfants, d'adolescents et d'adolescentes, de parents, d'enseignants et d'enseignantes, ou de toute autre personne intervenant auprès de l'enfant. Intégration de la théorie et de la pratique relatives au processus de communication et d'observation diagnostique et thérapeutique en situation naturelle auprès de l'enfant.

**EDUA 7771 Informatique avancée en psychologie de l'éducation 3 cr**

Recours aux innovations récentes de la technologie de l'enseignement assisté par ordinateur, en tenant compte des besoins de la clientèle étudiante de cycle supérieur de la Faculté d'éducation.

**EDUA 7801 Méthodes de recherche en éducation 3 cr**

Étude des devis expérimentaux et des techniques de collecte de données dans la recherche éducative dans le milieu: devis quasi expérimentaux, enquête et techniques d'observation, simulation, analyse du contenu et sociométrie. On ne peut se faire créditer le EDUA 7800 et EDUA 7801.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: le EDUA 5801 ou l'ancien EDUA 6801 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** EDUA 7800

**EDUA 7841 Méthodes de recherche qualitative en éducation 3 cr**

Introduction aux méthodes de recherche qualitative. Discussion de l'éthique de la recherche et des théories qui sous-tendent la recherche qualitative. Cours axé sur les démarches à suivre pour effectuer une recherche, y compris la méthodologie et la collecte et l'analyse de données. On ne peut se faire créditer EDUA 7841 et EDUA 7840.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : EDUA 5801 ou l'équivalent.

**EDUA 7901 Les troubles de santé mentale chez les enfants et adolescents 3 cr**

Étude des troubles de santé mentale chez les enfants et les adolescents en contexte scolaire.

## Education Curric, Tchg, & Lrng (EDUB)

**EDUB 1061 Langue et Littérature 3 cr**

Initiation au monde de la littérature : comment comprendre et se produire dans différentes situations à l'aide de stratégies propres à son style et au contexte.

**Equiv To:** EDUB 1060

**Attributes:** Université de Saint-Boniface

**EDUB 1411 L'Enseignement des Sciences de la Nature au Secondaire 3 cr**

Principes généraux sous-tendant l'enseignement des sciences, le développement conceptuel, les théories d'apprentissage, la culture scientifique, le caractère de la science, les interactions entre les sciences, la technologie, la société et l'environnement. Accent mis sur les modèles pédagogiques qui tiennent compte du développement conceptuel chez les apprenants et apprenantes afin de soutenir l'enseignement de divers thèmes scientifiques. Cours obligatoire pour ceux et celles qui veulent enseigner les programmes de sciences de la nature au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 1501 Éducation au Secondaire 3 cr**

Étude des prémisses qui sous-tendent les objectifs de l'éducation au secondaire, le rôle de l'enseignant ou de l'enseignante au secondaire et les programmes d'études dans les écoles.

**Attributes:** Université de Saint-Boniface

**EDUB 2011 Stages et Séminaires II 3 cr**

Poursuite plus poussée de la pratique de l'enseignement dans les écoles, soutenue par des discussions en petits groupes portant sur le matériel de simulation et sur les pratiques observées dans les écoles.

**Attributes:** Université de Saint-Boniface

**EDUB 2021 Communication 3 cr**

Activités dont le but est de développer l'adresse en communication sous toutes ses formes. Étude de la dynamique de dons de communication oraux et écrits qui s'appliquent plus à l'enseignant et à l'enseignante dans son interaction avec les individus et les groupes. Étude de la communication tant verbale que non verbale.

**Attributes:** Université de Saint-Boniface

**EDUB 2041 Littérature pour adolescents 3 cr**

Aperçu de la littérature appropriée aux élèves de la 7<sup>e</sup> à la 12<sup>e</sup> année. Critères d'évaluation littéraire et problèmes dont l'étude sera placée dans un contexte historique, social et psychologique.

**Attributes:** Université de Saint-Boniface

**EDUB 2081 Perfectionnement de l'Expression Orale I 3 cr**

Comparaison de son expression orale en français à la norme internationale (au plan de la structure de la phrase, de la phonétique et du vocabulaire). Suite à ce diagnostic, perfectionnement de la langue parlée.

**Attributes:** Université de Saint-Boniface

**EDUB 2121 Littérature Pour Enfants 3 cr**

Aperçu général de la littérature enfantine créatrice disponible dans les divers moyens de communication; établissement de critères pour l'évaluation de livres et de matériaux connexes; problèmes du lecteur en difficulté et du non-lecteur. Établissement des normes en vue de porter un jugement d'appréciation sur la littérature enfantine en mettant l'accent sur l'analyse critique et l'interprétation de la littérature replacée dans son contexte historique, sociologique et psychologique.

**Attributes:** Université de Saint-Boniface

**EDUB 2171 Atelier en Art (dessin) à l'Élémentaire 3 cr**

Cours pratique. Étude des techniques et du matériel appropriés permettant d'acquérir des notions de l'enseignement créatif à l'élémentaire et au primaire.

**Attributes:** Université de Saint-Boniface

**EDUB 2181 La Bibliothèque, Source de Référence 3 cr**

Utilisation des livres et des bibliothèques comme sources de références et de recherche au niveau universitaire.

**Attributes:** Université de Saint-Boniface

**EDUB 2191 Perfectionnement de l'Expression Orale II 3 cr**

Comparaison de son expression orale en français à la norme internationale (au plan de la structure de la phrase, de la phonétique et du vocabulaire). Suite à ce diagnostic, perfectionnement de la langue parlée.

**Attributes:** Université de Saint-Boniface

**EDUB 2201 Enseignement de l'Anglais au Primaire d'Immersion 3 cr**

Étude de la philosophie de l'apprentissage de l'anglais au primaire d'immersion, afin de pouvoir identifier les transferts et interférences dans l'apprentissage des deux lectures (anglaise et française) et de tenir compte de ceux-ci dans l'enseignement. Concomitant : EDUB 3211.

**Attributes:** Université de Saint-Boniface

**EDUB 2211 Perfectionnement du français oral et écrit 3 cr**

(Laboratoire requis) Ce cours permettra aux étudiantes et aux étudiants d'améliorer leurs compétences langagières en français, tant à l'oral qu'à l'écrit, dans le but d'enseigner en français à tous les niveaux. Ce cours est accompagné de séances de travaux dirigés d'une durée d'une heure et demie par semaine. Ces séances obligatoires permettront de mettre en pratique les notions théoriques présentées dans le cadre du cours.

\*Ce cours de perfectionnement ne compte pas pour le baccalauréat en éducation. Les cours additionnels pour le perfectionnement linguistique sont au-delà des 60 crédits du baccalauréat en éducation.

**EDUB 2341 TCH FR SR2 3 cr**

**Equiv To:** EDUB 2340

**EDUB 2501 Sujets Particuliers en Éducation au Secondaire 3 cr**

Étude de thèmes et de questions reliés à l'enseignement au secondaire et au développement de l'identité professionnelle de l'enseignante ou de l'enseignant débutant. Coordination des activités qui varieront d'année en année avec des expériences en milieu scolaire.

**Attributes:** Université de Saint-Boniface

**EDUB 2511 L'intégration de la langue dans toutes les matières 3 cr**

Initiation à la langue comme outil d'enseignement et d'apprentissage et aux moyens offerts aux enseignants et aux enseignantes pour intégrer la langue dans toutes les matières et enrichir la compréhension du contenu.

**Attributes:** Université de Saint-Boniface

**EDUB 3011 Pratique du Microenseignement 3 cr**

Étude du comportement de l'enseignante ou de l'enseignant. Utilisation de vidéos fournissant le décor pour la pratique contrôlée de quelques-uns des éléments de l'enseignement, en particulier de l'analyse et de l'application des techniques suivantes : l'exposition, l'interrogation, la discussion et la démonstration. On ne peut se faire créditer le EDUB 3011 et le EDUB 3161.

**Equiv To:** EDUB 3161

**Attributes:** Université de Saint-Boniface

**EDUB 3013 Microenseignement et pratiques pédagogiques 3 cr**

Réflexions sur la mise en pratique d'habiletés d'enseignement par l'analyse de leçons, d'activités ou de cours.

**Equiv To:** EDUB 3010

**Attributes:** Université de Saint-Boniface

**EDUB 3021 Sujets Particuliers en Sciences Humaines 3 cr**

Étude de sujets choisis dans le domaine de l'enseignement des sciences humaines.

**Attributes:** Université de Saint-Boniface

**EDUB 3031 La Lecture au Secondaire 3 cr**

Étude des habiletés de base en lecture et des relations de celles-ci avec les divers contenus disciplinaires du niveau secondaire. Examen de divers outils susceptibles de contribuer au développement des habiletés en lecture ainsi que diverses techniques d'évaluation.

**Attributes:** Université de Saint-Boniface

**EDUB 3101 Méthodologie de la lecture à l'élémentaire I 3 cr**

Étude de l'apprentissage et de l'enseignement de la lecture à l'élémentaire dans les écoles franco-manitobaines et les écoles d'immersion. Compréhension en lecture, analyse des structures textuelles, lecture à voix haute et analyse du mot. Survol des habiletés préalables à la lecture et de quelques techniques d'évaluation de la lecture.

**Attributes:** Université de Saint-Boniface

**EDUB 3161 Stages et séminaires III 3 cr**

Choix d'expérience initiale ou d'enrichissement dans un des domaines suivants : niveau scolaire primaire ou intermédiaire, situation en éducation spécialisée ou expérience dans un service communautaire relié de façon ponctuelle à l'éducation totale. Aspects théoriques et pratiques traités en ateliers d'initiation et en discussions de groupes. Une note de réussite ou d'échec sera attribuée pour ce cours. On ne peut se faire créditer le EDUB 3161 et le EDUB 3011.

**Attributes:** Université de Saint-Boniface

**EDUB 3171 Stages Et Séminaires Iii 3 cr**

Cours qui fournira de multiples occasions de rédiger différents genres de textes en français. Composition, transcription et révision de textes. Familiarisation avec le processus de l'écrit qui peut être adapté et appliqué aux niveaux primaire, élémentaire et secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 3211 Enseignement du Français au Primaire d'Immersion 3 cr**

Enseignement du français langue seconde au primaire. Étude des principes de la communication orale et écrite dans la salle de classe, de la nouvelle pédagogie dans l'enseignement de la lecture et de l'écrit et de l'intégration des savoirs et des matières. Concomitant : EDUB 2201.

**Attributes:** Université de Saint-Boniface

**EDUB 3251 Sujets Particuliers - Curriculum et Pédagogie 3 cr**

Étude de sujets choisis en enseignement et apprentissage en immersion.

**Attributes:** Université de Saint-Boniface

**EDUB 3261 L'Acquisition et l'Apprentissage du Français en Contexte d'Immersion 3 cr**

Cours théorique. Familiarisation avec les théories explicatives de l'acquisition et l'apprentissage d'une langue seconde et les approches pédagogiques qui en découlent. On ne peut se faire créditer le EDUB 3261.

**Attributes:** Université de Saint-Boniface

**EDUB 3271 Développement Langagière en Immersion Française à l'Élémentaire 3 cr**

Étude des aspects pratiques de l'enseignement en situation d'immersion à l'élémentaire. Sensibilisation aux méthodes et aux techniques susceptibles de développer les compétences en français langue seconde.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: EDUB 3261.

**Attributes:** Université de Saint-Boniface

**EDUB 3281 Développement Langagière en Immersion Française 3 cr**

Étude des aspects pratiques de l'enseignement en situation d'immersion au secondaire. Sensibilisation aux méthodes et aux techniques susceptibles de développer les compétences en français langue seconde.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: EDUB 3261.

**Attributes:** Université de Saint-Boniface

**EDUB 3291 Principes et pratiques de l'évaluation des apprentissages 3 cr**

Ce cours permettra aux étudiantes et aux étudiants de comprendre les approches et les principes permettant d'évaluer la progression des apprentissages et le degré d'acquisition des compétences des élèves.

**EDUB 3305 Introduction à l'enseignement 3 cr**

Ce cours fournira des occasions d'exploration, de discussion et de réflexion professionnelle sur divers aspects théoriques de l'enseignement. Le cours est destiné aux étudiantes et étudiants en première année du baccalauréat en éducation. On ne peut se faire créditer EDUB 3305 et l'ancien EDUB 1011.

**Mutually Exclusive:** EDUB 1011

**EDUB 3307 Stages en milieu scolaire 1 3 cr**

Ces stages en milieu scolaire seront effectués sous la surveillance du personnel de la Faculté et de l'école d'accueil et présenteront aux étudiantes et étudiants des occasions d'observation, de consultation et de mise en application des aspects théoriques de l'enseignement et de l'apprentissage. Le cours est destiné aux étudiants en première année du baccalauréat en éducation. On ne peut se faire créditer EDUB 3307 et l'ancien EDUB 1011. Une note de réussite ou d'échec sera attribuée pour ce cours.

**Mutually Exclusive:** EDUB 1011

**EDUB 3311 Perfectionnement du français 3 cr**

Approfondissement des notions de la grammaire des particularités orthographiques du français. Étude des outils et des stratégies à l'autocorrection. Bref aperçu des anglicismes, de la cohérence textuelle et des stratégies de lecture et d'écriture. \*Ce cours de perfectionnement ne compte pas pour le baccalauréat en éducation. Les cours additionnels pour le perfectionnement linguistique sont au-delà des 60 crédits du baccalauréat en éducation.

**EDUB 3321 Analyse grammaticale et rédaction 3 cr**

Revision des notions grammaticales. Apprentissage des diverses techniques de rédaction. Etude contrastive de l'anglais et du français. Maîtrise de la revision linguistique.

**EDUB 3991 Étude Individuelle 3 cr**

Étude individuelle et recherche dirigées vers un sujet d'intérêt.

**Attributes:** Université de Saint-Boniface

**EDUB 3993 Étude Individuelle 3 cr**

Étude individuelle et recherche dirigées vers un sujet d'intérêt

**Equiv To:** EDUB 3990

**Attributes:** Université de Saint-Boniface

**EDUB 4011 Stages pratiques 9 cr**

Période d'application, en milieu scolaire, des connaissances acquises, sous la surveillance du personnel de la Faculté et de l'école qui reçoit le ou la stagiaire. Une note de réussite ou d'échec sera attribuée pour ce cours.

**Attributes:** Université de Saint-Boniface

**EDUB 4013 Stages 3 cr**

Période d'application, en milieu scolaire, des connaissances acquises, sous la surveillance du personnel de la Faculté et de l'école qui reçoit le ou la stagiaire.

**Mutually Exclusive:** EDUB 4010

**Attributes:** Université de Saint-Boniface

**EDUB 4021 Didactique - Élémentaire 6 cr**

Étude des programmes actuels au niveau élémentaire et des méthodes pratiques d'enseignement.

**Attributes:** Université de Saint-Boniface

**EDUB 4023 Didactique - Élémentaire 6 cr**

Étude des programmes actuels au niveau élémentaire et des méthodes pratiques d'enseignement.

**Attributes:** Université de Saint-Boniface

**EDUB 4051 Méthodologie générale 3 cr**

Étude des fondements et de l'application de la méthodologie.

**Attributes:** Université de Saint-Boniface

**EDUB 4061 Didactique en anglais (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en anglais au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4071 L'enseignement du français de base au secondaire 3 cr**

Étude de l'enseignement et de l'apprentissage du français langue seconde aux niveaux intermédiaire et secondaire. Familiarisation avec l'approche communicative en tenant compte du programme d'études et des ressources disponibles au Manitoba.

**Attributes:** Université de Saint-Boniface

**EDUB 4081 Didactique en géographie (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en géographie au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4091 Didactique en langues vivantes (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en langues vivantes au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4101 Didactique en histoire (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en histoire au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4103 Didactique en biologie (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en biologie au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4113 Didactique en chimie (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en chimie au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4117 Didactique en musique 3 cr**

Étude des programmes et des méthodes d'enseignement de la musique au primaire, à l'intermédiaire et au secondaire.

**EDUB 4123 Didactique en informatique (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en informatique au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4131 Didactique en théâtre (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en théâtre au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4133 Didactique en sciences générales (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en sciences générales au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4141 Didactique en art (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en art au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4151 Didactique en sciences de l'écologie humaine II 3 cr**

Étude des programmes et des méthodes d'enseignement en sciences de l'écologie humaine au niveau secondaire.

**Equiv To:** EDUB 4153

**Attributes:** Université de Saint-Boniface

**EDUB 4161 Didactique en éducation physique (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en éducation physique au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4171 Didactique en physique (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en physique au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4181 Didactique en mathématiques (secondaire) 3 cr**

Étude des programmes et des méthodes d'enseignement en mathématiques au niveau secondaire.

**Attributes:** Université de Saint-Boniface

**EDUB 4201 Didactique du/en français au secondaire 3 cr**

Cours axé sur des questions didactiques soulevées par les programmes d'études de français langue première et ceux de français langue seconde - immersion établis, pour les niveaux 7e années à Secondaire 4, par la Division du Bureau de l'éducation française, du ministère d'Éducation, Citoyenneté et Jeunesse Manitoba.

**EDUB 5201 Lectures dirigées en curriculum, en enseignement et en apprentissage 1 3 cr**

Lectures et recherches traitant de domaines particuliers de l'étude du curriculum.

**EDUB 5221 Courants actuels en curriculum, en enseignement et en apprentissage 1 3 cr**

Étude de la théorie qui sous-tend les courants actuels et les problématiques émergentes dans le domaine et de leurs applications pratiques.

**Equiv To:** EDUB 5220

**EDUB 5231 Courant Actuels en Curriculum, en Enseignement et en Apprentissage 2 3 cr**

Approfondissement de thèmes choisis qui ont fait l'objet d'études dans le EDUB 5221.

**Equiv To:** EDUB 5230

**EDUB 5261 Introduction aux fondements de la lecture 3 cr**

Étude de la nature de la lecture par rapport à diverses composantes du développement humaine telles que le langage, la vue, l'ouïe, la cognition et la motivation. On ne peut se faire créditer le EDUB 5261.

**Attributes:** Université de Saint-Boniface

**EDUB 5271 Enseignement de la lecture 3 cr**

Étude des fondements du programme d'enseignement de la lecture; objectifs du programme, conditions d'apprentissage, démarches et matériel pédagogiques et évaluation des apprentissages. On ne peut se faire créditer le EDUB 5271.

**Attributes:** Université de Saint-Boniface

**EDUB 5321 Séminaire sur les Arts Langagiers 1 3 cr**

Séminaire de recherche et de lecture, qui comprend une analyse approfondie des fondements théoriques de l'étude et de l'enseignement des arts langagiers à l'élémentaire et de la recherche qui sous-tend ces fondements. Réflexion sur la portée pratique de ces théories dans l'enseignement en ce qui a trait à la communication orale, à l'écoute et à la création dramatique. On ne peut se faire créditer le EDUB 5321.

**Attributes:** Université de Saint-Boniface

**EDUB 5331 L'enseignement de la langue et de la littératie dans les matières 3 cr**

Étude de la façon dont on aborde la littératie dans les diverses matières (sciences, mathématiques, sciences humaines, etc.). Examen attentif des stratégies concernant la lecture, l'écriture et l'étude, des ressources et de l'évaluation de ces ressources, des procédures, des recherches à l'appui. On ne peut se faire créditer le EDUB 5331.

**Attributes:** Université de Saint-Boniface

**EDUB 5341 Fondements de la littératie 3 cr**

Étude de la nature de la littératie par rapport aux dimensions du développement humain et de l'enseignement telles que le langage, la vision, l'audition, la cognition, la motivation et l'objectif de l'enseignement. On ne peut se faire créditer EDUB 5341 et EDUB 5261.

**Equiv To:** EDUB 5261

**Attributes:** Université de Saint-Boniface

**EDUB 5351 Problématiques Actuelles en Langue et en Littératie 3 cr**

Étude de sujets particuliers qui vise à faire connaître les courants actuels en enseignement de la langue et de la littératie.

**EDUB 5361 Fondements de la Littérature 3 cr**

Étude de la nature et de la psychologie de la littérature enfantine à l'élémentaire. Aperçu du matériel existant, établissement de critères d'évaluation de ce matériel et résultats des recherches portant sur l'élaboration, le niveau d'intérêt et l'utilisation du matériel. On ne peut se faire créditer le EDUB 5361.

**Attributes:** Université de Saint-Boniface

**EDUB 5371 Littérature pour Adolescents et Adolescentes 3 cr**

Étude de la nature et de la psychologie de la littérature destinée aux élèves de la 7<sup>e</sup> à la 12<sup>e</sup> année. Aperçu du matériel existant, établissement de critères d'évaluation de ce matériel et résultats des recherches portant sur l'élaboration, le niveau d'intérêt et l'utilisation du matériel. On ne peut se faire créditer le EDUB 5371.

**Attributes:** Université de Saint-Boniface

**EDUB 5391 Enseignement de l'écrit 3 cr**

Organisation et mise en oeuvre des programmes de l'écrit. Présentation de stratégies en rapport avec la motivation, d'activités et d'exercices propices à l'apprentissage de l'écrit, et d'exercices de révision et d'évaluation. On ne peut se faire créditer EDUB 5391 et EDUB 5390.

**Equiv To:** EDUB 5390

**EDUB 5431 Développements Récents en Curriculum: Humanités 3 cr**

Examen des courants théoriques et des applications pratiques récents ou en émergence dans ce domaine.

**Attributes:** Université de Saint-Boniface

**EDUB 5471 Courants Actuels en Curriculum: Mathématiques et Sciences Naturelles 3 cr**

Examen des courants théoriques et des applications pratiques récents ou en émergence dans ce domaine.

**Equiv To:** EDUB 5470

**Attributes:** Université de Saint-Boniface

**EDUB 5531 Théorie et pratique de l'enseignement du français 6 cr**

Étude de la théorie actuelle et des nouvelles pratiques de l'enseignement du français langue seconde. Examen attentif de l'analyse des procédures pédagogiques et de la tâche d'enseignement. Initiation à la recherche dans le domaine de l'enseignement d'une langue seconde. On ne peut se faire créditer le EDUB 5531.

**Attributes:** Université de Saint-Boniface

**EDUB 5533 Théorie et Pratique de l'Enseignement du Français Langue Seconde 3 cr**

Ce cours fournit une mise à jour des théories et des pratiques de l'enseignement et de l'apprentissage en français langue seconde (immersion et français de base).

**EDUB 5535 L'utilisation des médias en enseignement du français de base 3 cr**

Appréciation critique des médias, et ce, à partir d'une étude approfondie du sujet. Utilisation des médias pour appuyer des thèmes explorés en situation de salle de classe et développement des stratégies pédagogiques qui en découlent.

**EDUB 5537 Théorie et Pratique des Arts Visuels et l'Enseignement du Français de Base 3 cr**

Examen des approches et des méthodes récentes dans l'enseignement des arts visuels et application des théories apprises au moyen d'exercices pratiques et de projets. Familiarisation avec le langage plastique et développement d'un esprit critique face aux diverses disciplines en arts visuels dans la classe de français de base. Ce cours favorisera l'expression artistique individuelle.

**EDUB 5539 L'enseignement du français de base et les TIC 3 cr**

Liens entre l'apprentissage, la pédagogie et les TIC. Mise à l'essai et évaluation des logiciels éducatifs. Utilisation pédagogique des logiciels comme Word, Excel, et Power Point. Développement des compétences techniques avec un certain nombre de logiciels. Intégration des compétences théoriques et techniques dans la création des activités pédagogiques. Consultation et évaluation de sites Web. Création d'un plan de site Web pour une unité d'apprentissage. Cours en ligne.

**EDUB 5541 Enseignement du français 6 cr**

Revue critique du programme d'études : buts et objectifs, divers aspects de la discipline du français, théorie et pratique de l'enseignement, recherche et évaluation des techniques méthodologiques pour un meilleur enseignement du français. On ne peut se faire créditer le EDUB 5541.

**Attributes:** Université de Saint-Boniface

**EDUB 5543 Les arts dramatiques et l'enseignement du français de base 3 cr**

Exploration de l'art dramatique comme approche dans le classe de français langue seconde. Familiarisation avec le langage du domaine et la documentation récente. Ateliers pratiques reliés aux divers aspects de l'art dramatique pertinents à l'enseignement des compétences langagières.

**EDUB 5545 French Immersion for Teachers Intermediate C/D 3 cr**

Ce cours de perfectionnement linguistique vise les enseignantes et enseignants du français langue seconde, ou des personnes qui se destinent à l'enseignement du français langue seconde, et qui veulent se perfectionner en français grâce à l'approche communicative.

**EDUB 5547 French Immersion for Teachers Advanced/ Perfectionnement 3 cr**

Ce cours de perfectionnement linguistique vise les enseignantes et enseignants du français langue seconde, ou des personnes qui se destinent à l'enseignement du français langue seconde, et qui veulent se perfectionner en français grâce à l'approche communicative.

**EDUB 5549 Didactique en français de base 3 cr****EDUB 5761 Courants Actuels en Enseignement des Mathématiques 3 cr**

Lectures et recherches sur l'enseignement des mathématiques (sujets particuliers).

**Equiv To:** EDUB 5760

**Attributes:** Université de Saint-Boniface

**EDUB 5771 Diagnostic et intervention en enseignement des mathématiques à l'élémentaire 3 cr**

Méthodes diagnostiques et ressources orthopédagogiques en enseignement des mathématiques à l'élémentaire. On ne peut se faire créditer le EDUB 5771.

**Equiv To:** EDUB 5770

**Mutually Exclusive:** EDUB 5773

**Attributes:** Université de Saint-Boniface

**EDUB 5773 Identification des besoins et intervention pédagogique inclusive en numératie 3 cr**

Méthodes d'évaluation des besoins particuliers des élèves dans le domaine de la numératie; stratégies et ressources pour différencier, adapter, modifier ou individualiser l'enseignement et l'apprentissage des mathématiques. On ne peut se faire créditer EDUB 5773 et EDUB 5771.

**Mutually Exclusive:** EDUB 5771

**EDUB 7071 Ouvrages marquants de recherche en lecture 3 cr**

Examen, analyse et synthèse critiques des ouvrages marquants de recherche en lecture dans les domaines de la psychologie, de la psycholinguistique, de la sociologie et de la pédagogie de la lecture. On ne peut se faire créditer le EDUB 7071, EDUB 7070.

**EDUB 7111 Recherche sur l'acquisition de la langue et de la littérature 3 cr**

Exploration des problématiques propres à l'acquisition de la langue et de la littérature susceptibles d'intéresser les enseignantes et enseignants sur le plan professionnel. Les participantes et participants feront une analyse critique des théories qui sous-tendent l'acquisition de la langue et de la littérature, de la recherche publiée et d'observations en salle de classe. Ils auront l'occasion d'effectuer leur propre recherche sur l'acquisition de la langue et de la littérature dans un milieu éducatif. On ne peut se faire créditer le EDUB 7111.

**Equiv To:** EDUB 7110

**EDUB 7161 L'enseignante et l'enseignant de langue en tant que chercheurs 3 cr**

Examen de paramètres caractéristiques des enseignantes et des enseignants en tant que chercheurs dans le contexte de leur propre salle de classe. Trois principes fondamentaux guident les participantes et participants: voix, conversation et communauté. Sous cet angle particulier, les enseignantes et enseignants de langue effectuent une recherche en salle de classe dans le but de comprendre la langue et l'enseignement par l'entremise des élèves interrogés dans le domaine du curriculum. On ne peut se faire créditer le EDUB 7161 (EDUB 7160).

**EDUB 7181 La recherche en rédaction 3 cr**

Analyse critique de la recherche et des méthodes de recherche en rédaction et en pédagogie. Regard particulier sur les études classiques, l'histoire, les courants actuels et la recherche ainsi que les méthodes d'évaluation en rapport avec l'étude et l'enseignement de la rédaction. On ne peut se faire créditer le EDUB 7181 ou EDUB 7180.

**Attributes:** Université de Saint-Boniface

**EDUB 7191 Recherches sur le rôle de la langue dans l'apprentissage 3 cr**

Analyse critique des résultats de la recherche afin de comprendre la façon dont la langue peut faciliter l'apprentissage dans tous les domaines scolaires. Regard sur le rôle que joue la langue pour faciliter l'apprentissage des matières. Examen particulier de la recherche portant sur l'expression orale, la lecture et l'écriture en tant qu'outils servant à l'apprentissage. On ne peut se faire créditer EDUB 7191.

**Equiv To:** EDUB 7190

**EDUB 7201 La littérature et l'élaboration de politiques 3 cr**

Un séminaire portant sur l'élaboration de politiques en littérature et leurs effets sur notre conceptualisation d'un curriculum littéraire et nos définitions de la littérature. Regard particulier sur le concept de fonctionnalité en littérature et les politiques sur l'enseignement de la littérature. On ne peut se faire créditer le EDUB 7201.

**Equiv To:** EDUB 7200

**EDUB 7241 La sociolinguistique et la pédagogie du Français langue seconde 3 cr**

Ce cours explore le domaine de la sociolinguistique et cible en particulier la perspective microscopique (régionale) portant sur l'éducation en Français langue seconde ou additionnelle au Manitoba.

**EDUB 7341 Sujets particuliers en curriculum: humanités et sciences humaines 3 cr**

Lecture et recherche sur des sujets d'importance dans le domaine du curriculum en humanités et en sciences humaines.

**Equiv To:** EDUB 7340

**Attributes:** Université de Saint-Boniface

**EDUB 7361 Sujets particuliers en curriculum: Mathématiques et sciences naturelles 1 3 cr**

Lecture et recherche sur des sujets d'importance pour le développement du curriculum dans ces domaines spécialisés.

**Equiv To:** EDUB 7360

**EDUB 7371 SP CURR M&S N 2 3 cr**

**Equiv To:** EDUB 7370

## Education St. Boniface (EDSB)

**EDSB 5011 L'éducation bilingue, l'immersion et l'acquisition précoce d'une langue seconde 3 cr**

Étude du développement linguistique de l'enfant tout en considérant un grand nombre de facteurs socioaffectifs et cognitifs qui influencent le développement linguistique, facteurs permettant de réfléchir à toute la question de l'immersion et d'appliquer ces connaissances à la situation qui existe au Manitoba.

**Equiv To:** EDSB 5010

**Attributes:** Université de Saint-Boniface

**EDSB 5031 Histoire de l'éducation française au Manitoba 3 cr**

Les fondements de l'éducation française au Manitoba. Examen, dans une perspective historique, des événements majeurs, de nature sociologique et politique, qui ont marqué le développement de l'éducation française au Manitoba. On ne peut se faire créditer le EDSB 5031.

**Equiv To:** EDSB 5030

**Attributes:** Université de Saint-Boniface

**EDSB 5041 Théories d'Apprentissage en Situation d'Immersion 3 cr**

Étude des connaissances théoriques concernant les processus, les mécanismes et les facteurs reliés à l'apprentissage d'une langue seconde. Développement d'une compréhension plus englobante de l'expérience pratique en immersion.

**Equiv To:** EDSB 5040

**Attributes:** Université de Saint-Boniface

**EDSB 5061 Théories d'Apprentissage en Milieu Minoritaire 3 cr**

Familiarisation avec les recherches en éducation compensatoire et bilingue et dégagement des implications en regard de l'apprentissage en milieu minoritaire.

**Equiv To:** EDSB 5060

**Attributes:** Université de Saint-Boniface

**EDSB 5071 Difficultés dans l'Enseignement du Langage Écrit 3 cr**

Familiarisation avec les principes et les méthodes de prévention des difficultés d'apprentissage du langage écrit en tenant compte du contexte franco-manitobain.

**Equiv To:** EDSB 5070

**Attributes:** Université de Saint-Boniface

**EDSB 5081 Stage et Séminaires de Recherche-Action 6 cr**

Utilisation du processus et des méthodes de recherche-action en vue de la résolution de problèmes éducatifs pratiques. Cours qui exige un minimum de 150 heures consacrées au stage de recherche. Pour s'inscrire à ce cours, il faut être en fonction dans le milieu éducatif.

**Equiv To:** EDSB 5080

**Attributes:** Université de Saint-Boniface

## English (ENGL)

### ENGL 1061 Anglais langue seconde I 3 cr

Révision et approfondissement de la grammaire anglaise. Élargissement du vocabulaire propre à la langue soutenue et sensibilisation aux pièges posés par les gallicismes d'ordre lexical et syntaxique. Étude des principes fondamentaux de rédaction: style, organisation et argumentation. Étude pratique de l'anglais parlé dans diverses situations. Expressions idiomatiques. Amélioration de la prononciation. Apprentissage des principes de base et exercices pratiques d'art oratoire en anglais. On ne peut se faire créditer le ENGL 1061.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Admission sur recommandation du SPL. Voir section 9.14 (Profil linguistique en anglais) de l'annuaire de l'USB.

**Equiv To:** ENGL 1041

**Attributes:** Université de Saint-Boniface, Humanities

### ENGL 1071 Anglais langue seconde II 3 cr

Suite d'ENGL 1061. Révision et approfondissement de la grammaire anglaise. Élargissement du vocabulaire propre à la langue soutenue et sensibilisation aux pièges posés par les gallicismes d'ordre lexical et syntaxique. Étude des principes fondamentaux de rédaction, notamment sur le plan du style, l'usage idiomatique, et le vocabulaire. Étude pratique de l'anglais parlé dans diverses situations. Expressions idiomatiques. Amélioration de la prononciation. Apprentissage des principes de base et exercices pratiques de l'art oratoire en anglais. On ne peut se faire créditer ENGL 1071. Une note minimale de C (60%) est requise pour réussir ENGL 1071.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [une note minimale de C dans ENGL 1061] ou la recommandation du Service de perfectionnement linguistique.

**Equiv To:** ENGL 1051

**Attributes:** Université de Saint-Boniface, Humanities

### ENGL 1081 Pratique avancée de l'anglais 3 cr

(Laboratoire requis) Acquisition de compétences avancées en anglais à l'écrit et à l'oral. Exercices pratiques de compréhension, d'expression orale, de rédaction de rapports et de correspondance.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: Une note minimale de C en ENGL 1071 ou la recommandation du Service de perfectionnement linguistique.

### ENGL 1201 Representative Literary Works 6 cr

An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose and drama from various historical periods. Texts for each section will be announced. Students may not hold credit for ENGL 1201 and any of: ENGL 1200, English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted.

**Equiv To:** ENGL 1200

**Attributes:** Université de Saint-Boniface, Humanities, Recommended Intro Courses, Written English Requirement

### ENGL 1301 Literature Since 1900 6 cr

An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose and drama from Canada, Britain, the United States and other countries. Texts for each section will be announced. Students may not hold credit for ENGL 1301 and any of: ENGL 1300, English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted.

**Equiv To:** ENGL 1300

**Attributes:** Université de Saint-Boniface, Humanities, Recommended Intro Courses, Written English Requirement

### ENGL 2001 Intermediate Writing and Research 6 cr

Designed to teach students how to read, write, and research at the university level, this courses stresses effective expository writing, prose reading, and research skills. Note : Credit in ENGL 2001 is acceptable toward a degree in Arts or Science, but does not satisfy the humanities requirement in the Faculty of Arts. It may not be held for credit in the 30 hours for a Major (General) or the 18 hours for a Minor but may be held for credit in the 48 hours for the Major (Advanced). On ne peut se faire créditer ENGL 2001 et ENGL 2000.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: none.

**Equiv To:** ENGL 2000

**Attributes:** Université de Saint-Boniface, Written English Requirement

### ENGL 2071 Literature of the Sixteenth Century 6 cr

A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for ENGL 2071 and ENGL 2070.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite : a grade of C or better in one of : ENGL 1201, ENGL 1200, ENGL 1301, ENGL 1300, or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340.

**Equiv To:** ENGL 2070

**Attributes:** Université de Saint-Boniface, Humanities

### ENGL 2091 Literature of the Seventeenth Century 6 cr

A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for ENGL 2091 and ENGL 2090.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite : a grade of C or better in one of : ENGL 1201, ENGL 1200, ENGL 1301, ENGL 1300, or a grade of C or better in each of ENGL 1400 (or the former ENGL 1310) and ENGL 1340.

**Equiv To:** ENGL 2090

**Attributes:** Université de Saint-Boniface, Humanities

### ENGL 2161 British Literature since 1900 6 cr

A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for both ENGL 2160 and ENGL 2161.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites : a grade of C or better in one of : ENGL 1201, ENGL 1200, ENGL 1300, ENGL 1301 or a grade of C or better in each of ENGL 1310 and ENGL 1340.

**Equiv To:** ENGL 2160

**Attributes:** Université de Saint-Boniface, Humanities

### ENGL 2961 Drama 1 3 cr

An introduction to dramatic forms and conventions. Students may not hold credit for both ENGL 2961 and ENGL 2960.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite : a grade of C or better in one of ENGL 1201, ENGL 1200, ENGL 1300, ENGL 1301 or both of ENGL 1310 and ENGL 1340.

**Equiv To:** ENGL 2960

**Attributes:** Université de Saint-Boniface, Humanities

### ENGL 3011 Shakespeare 6 cr

Critical study of the works of this author, including historical context. Students may not hold credit for ENGL 3011 and any of: ENGL 3010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of "C" or better in six hours of English at the 2000 level.

**Equiv To:** ENGL 3010

**Attributes:** Université de Saint-Boniface, Humanities

**ENGL 3141 Studies in the Victorians 3 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre Handbook for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit. Students may not hold credit for ENGL 3141 and any of: ENGL 3140.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of "C" or better in six hours of English at the 2000 level.

**Equiv To:** ENGL 3140

**Attributes:** Université de Saint-Boniface, Humanities

**ENGL 3271 Studies in Canadian Literature 3 cr**

Students may not hold credit for ENGL 3271 and any of: ENGL 3270. As the course content will vary from year to year, students may take this course more than once for credit.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of C or better in six hours of English at the 2000 level.

**Equiv To:** ENGL 3270

**Attributes:** Université de Saint-Boniface, Humanities

**ENGL 3671 Studies in the Novel 6 cr**

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre Handbook for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit. Students may not hold credit for both ENGL 3671 and ENGL 3670.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of "C" or better in six hours of English at the 2000 level.

**Equiv To:** ENGL 3670

**Attributes:** Université de Saint-Boniface, Humanities

**ENGL 3961 Special Topics in Drama 3 cr**

Advanced study of selected topics. Students may not hold credit for ENGL 3961 and ENGL 3960.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: a grade of C or better in 6 hours of English at the 2000 level.

NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English Handbook for detailed course descriptions. Students can earn multiple credits for this course only when the topic subtitle is different.

**Equiv To:** ENGL 3960

**Attributes:** Université de Saint-Boniface, Humanities

## Entrepreneurship/Small Bus. (ENTR)

**ENTR 4511 Entrepreneurship et création d'entreprises 3 cr**

Ce cours porte sur la création d'entreprise. Lancement d'une entreprise; caractéristiques de l'entrepreneur; plan d'entreprise; définition du projet; détermination du marché; fonctions administratives; problèmes particuliers au lancement d'une entreprise, aide gouvernementale. On ne peut se faire créditer ENTR 4100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: ACC 1101, ACC 1100 et MKT 2211 ou MKT 2210 (D), et [GMGT 2030 (D) ou GMGT 2061 (D) ou GMGT 2060 (D) ou (GMGT 2081 (D)) ou GMGT 2080 (D)].

**Mutually Exclusive:** ENTR 4100

## Finance (FIN)

**FIN 2201 Gestion financière 3 cr**

(Laboratoire requis) Introduction aux principes de la gestion financière de l'entreprise en particulier dans le choix du financement, le choix de l'investissement et de la gestion des fonds. On ne peut se faire créditer FIN 2201 et FIN 2200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [ACC 1101 ou ACC 1100 avec une note minimale de D], [MATH 1230 ou MATH 1501 ou MATH 1500 ou MATH 1520 avec une note minimale de C], [STAT 1001 ou STAT 1000 ou STAT 1150 avec une note minimale de C], [ECON 1011 (ou ECON 1010) et ECON 1021 (ou ECON 1020) ou l'ancien ECON 1201 (ou l'ancien ECON 1200) avec une note minimale de C].

**Equiv To:** FIN 2200

**FIN 3411 Investissements 3 cr**

Introduction aux marchés de capitaux à l'efficacité des opérations de couverture, les différents concepts financiers, aux modèles de fixation de prix sur les gains en capital, à la théorie et à la gestion de portefeuille, aux options et les marchés à terme, aux investissements internationaux et à l'efficacité des marchés. Les étudiants apprendront les concepts financiers, manipuleront des outils et des techniques, ainsi que leur utilisation dans les prises de décision d'investissement. Les étudiants doivent avoir une bonne connaissance du logiciel Excel, car les travaux du cours exigent l'analyse des données sur des feuilles de calcul. On ne peut se faire créditer FIN 3411 et FIN 3410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [une note minimale de C+ dans FIN 2201 ou FIN 2200] et [une note minimale de C dans MATH 1220 ou MATH 1301 ou MATH 1300 ou MATH 1310] et [une note minimale de C dans STAT 2001 ou STAT 2000 ou STAT 2150].

**Equiv To:** FIN 3410

**FIN 3451 Finance internationale 3 cr**

Introduction à l'étude des aspects internationaux du financement d'une compagnie et des marchés internationaux de capitaux.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: FIN 2201 avec une note minimale de C+.

**Equiv To:** FIN 3450

**FIN 3481 Financement d'entreprise: Théories et pratiques 3 cr**

Approfondir la compréhension que les étudiants ont de la théorie financière et des techniques financières ainsi que de leur application aux politiques financières d'entreprise. Parmi les sujets étudiés, on compte: le coût du capital, le choix des investissements, la structure financière, les politiques de dividende, le crédit-bail, les options réelles, les fusions et les acquisitions ainsi que d'autres sujets spéciaux. On ne peut se faire créditer FIN 3481 et FIN 3480.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [une note minimale de C+ dans FIN 2201 ou FIN 2200] et [une note minimale de C dans MATH 1220 ou MATH 1301 ou MATH 1300 ou MATH 1310] et [une note minimale de C dans STAT 2001 ou STAT 2000 ou STAT 2150].

**Equiv To:** FIN 3480



**FIN 4401 Pratiques de gestion financière 3 cr**

Ce cours a pour but d'approfondir et de consolider la compréhension des concepts de base de finance déjà acquis aux cours d'introduction et intermédiaire, et comment appliquer ces connaissances par moyen des simulations de cas et des vraies situations d'affaires. Les grands problèmes d'éthique, de la responsabilité sociale des entreprises, des règles de gouvernance d'entreprise, et du leadership seront aussi discutés. La pensée critique et le travail d'équipe joueront des rôles importants dans l'analyse de ces cas. On ne peut se faire créditer FIN 4401 et FIN 4400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de D dans FIN 3481 ou FIN 3480.

**Equiv To:** FIN 4400

## Français St. Boniface (FRAN)

**FRAN 1021 L'art de parler 3 cr**

Correction et amélioration du français parlé (structures de phrases, aspects grammaticaux d'erreurs courantes). Distinction entre la langue parlée et la langue écrite. Prise de conscience des différents registres de la langue en fonction des différentes situations de communication. Apprentissage des techniques de l'expression orale : exposé, débat, discours.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 1091 Rédaction universitaire 3 cr**

(Laboratoire requis) Initiation aux méthodes de travail universitaire : les techniques du résumé, du compte rendu et de la dissertation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans (FRAN 1007 et FRAN 1009) ou l'ancien FRAN 1001, si on les a suivis.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 1111 Grammaire et laboratoire 3 cr**

(Laboratoire requis). Approfondissement des notions de la grammaire. Attention particulière accordée à l'analyse de la phrase. On ne peut s'inscrire à FRAN 1111 et à FRAN 1007 ou FRAN 1009 de façon concomitante.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 2523 Atelier de théâtre 6 cr**

Initiation à la pratique de l'art théâtral. Ateliers sur les grandes théories du théâtre, les techniques de l'art dramatique, les écoles de jeu depuis le XVIIIe siècle et les divers aspects pratiques d'une production théâtrale : jeu de lumières, conception et plantation d'un décor. On ne peut se faire créditer FRAN 2523 et l'ancien FRAN 2521.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans FRAN 1091] et [une note minimale de C dans FRAN 1021 ou FRAN 1111].

**Mutually Exclusive:** FRAN 2521

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 2531 Introduction au théâtre 1 3 cr**

Étude de plusieurs œuvres, des principaux aspects techniques et des diverses théories dramatiques - du théâtre grec au théâtre du XIXe siècle.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans FRAN 1091] et [une note minimale de C dans FRAN 1021, ou FRAN 1111, ou l'ancien FRAN 1071].

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 2541 Introduction au théâtre 2 3 cr**

Étude de plusieurs œuvres, des principaux aspects techniques et des diverses théories dramatiques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans FRAN 1091] et [une note minimale de C dans FRAN 1021, ou FRAN 1111, ou l'ancien FRAN1071].

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 2641 Le discours amoureux dans la littérature française 3 cr**

Étude des diverses formes du discours amoureux et de ses stratégies rhétoriques et linguistiques dans la littérature romanesque française.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans FRAN 1091] et [une note minimale de C dans FRAN 1021, ou FRAN 1111, ou l'ancien FRAN 1071].

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 2881 Civilisation canadienne-française 3 cr**

Étude des éléments représentatifs du peuple canadien-français : grands courants de pensées, mouvements de l'histoire, évolution de la société et de la mentalité.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans le FRAN 1091] et [une note minimale de C dans un des FRAN 1021 ou FRAN 1071 ou FRAN 1111].

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 2931 Initiation à la linguistique 3 cr**

Approfondissement des principaux concepts de la linguistique moderne. Du signe au signe linguistique. Introduction aux différents niveaux d'analyse linguistique : phonétique et phonologique, morphologie flexionnelle et lexicale, sémantique, syntaxe.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans FRAN 2103.

**Mutually Exclusive:** FRAN 2103

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3121 Histoire du français 1 3 cr**

Histoire externe du français. Présentation de la notion de parenté linguistique et des familles de langues. La sous-famille des langues romanes et les origines de la langue française. Les conditions politiques et sociohistoriques de la du français et de son institutionnalisation. Histoire de l'évolution de statut du français en France, au Canada et dans le monde. On ne peut se faire créditer FRAN 3121 et l'ancien FRAN 2123 ou l'ancien FRAN 3951.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans FRAN 2103.

**Mutually Exclusive:** FRAN 2123, FRAN 3951

**FRAN 3531 Le théâtre québécois 3 cr**

Aperçu historique et étude du théâtre québécois de Lescarbot à Tremblay. Étude des oeuvres de Gratien Gélinas, de Marcel Dubé, de Michel Tremblay, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 2223 et FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3541 Le théâtre de l'Ouest 3 cr**

Étude d'oeuvres d'auteurs franco-manitobains, tels que Roger Auger, Claude Dorje, Marcien Ferland, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 2223 et FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3641 Le rire dans la littérature française 3 cr**

Étude du développement de la veine comique à travers la littérature française, de son origine au Moyen-Age jusqu'aux temps modernes en passant par ses manifestations au cours des différents siècles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : note minimale de C dans FRAN 2223 et dans FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3651 Littérature et vision tragique du monde 3 cr**

Étude du développement de la veine tragique à travers la littérature française, de son origine au Moyen-Age jusqu'aux temps modernes en passant par ses manifestations au cours des différents siècles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 2223 et dans FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3661 L'esprit de la Révolution française 3 cr**

Le maintien des formes classiques qui atteignent, au début du XVIII<sup>e</sup> siècle, un summum d'élégance et de raffinement et l'apparition, d'une part, des idées nouvelles qui entraîneront la chute de l'ancien régime et, d'autre part, d'une sensibilité annonciatrice d'un âge nouveau.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 2223 et dans FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3671 Études de poésie 3 cr**

Études des formes poétiques de la Renaissance (Marot, poètes de la Pléiade, poètes baroques), du Romantisme (Lamartine, Musset, Vigny, Hugo), du Parnasse (Gautier) et du début du Symbolisme (Baudelaire).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 2223 et FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3731 Initiation aux littératures francophones 3 cr**

Introduction générale portant sur l'ensemble de la production littéraire dans les pays francophones autres que le Canada français et la France. Étude des contextes socio-historiques qui ont favorisé l'épanouissement de cette littérature. Étude de thèmes majeurs, de structures et d'esthétiques particulières retrouvés dans une sélection d'oeuvres choisies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 2223 et FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3851 Littérature de l'Ouest : poésie, nouvelles 3 cr**

Étude de la poésie et des nouvelles produites dans l'Ouest francophone du Canada depuis le siècle dernier. l'évolution des styles et des thèmes par l'analyse de textes choisis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans FRAN 2223 et FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3861 Littérature de l'Ouest : roman 3 cr**

Étude des romans produits dans l'Ouest francophone du Canada depuis le siècle dernier. Évolution du genre romanesque de style et d'inspiration classique et traditionnelle jusqu'à l'expression moderne et post-moderne des écrivains franco-canadiens de l'Ouest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 2223 et FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3931 Lexicologie et lexicographie 3 cr**

Objectifs de la lexicologie; étude des unités lexicales dans le cadre de la théorie linguistique; analyses lexicales à partir de textes choisis.

Problèmes théoriques et pratiques de la lexicographie.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le FRAN 2931.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3941 Syntaxe du français contemporain 3 cr**

Approfondissement des notions de base en syntaxe. Le concept de grammaticalité et l'objet d'étude de la syntaxe. Étude des catégories grammaticales et analyse de l'organisation syntaxique du français. La représentation en arbres syntagmatiques et l'analyse des constituants de la phrase. Syntaxe et lexicologie. On ne peut se faire créditer FRAN 3941 et l'ancien FRAN 2941.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans FRAN 2931.

**Mutually Exclusive:** FRAN 2941

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 3991 Création littéraire: conte et nouvelle 3 cr**

Création de contes, de nouvelles et d'autres textes fictifs à partir d'une étude détaillée des genres narratifs. Une partie du cours sera consacrée à l'étude des divers types de phrase et des contextes où ils pourraient être employés.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans FRAN 2223 et FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4071 Sujets particuliers 3 cr**

Contenu variable d'année en année selon les besoins des étudiantes et des étudiants, et selon la spécialité du professeur ou de la professeure. Il est possible de se faire créditer ce cours plus d'une fois pourvu que le contenu du cours soit chaque fois différent.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un cours FRAN de niveau 3000.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4081 Littérature et cinéma 3 cr**

Étude d'oeuvres littéraires et de leur réalisation cinématographique conduisant à un examen de problèmes de l'adaptation à l'écran d'une oeuvre littéraire ainsi qu'à une comparaison des techniques d'expression des deux arts et à une réflexion sur la création dans les deux langages spécifiques, le langage textuel et le langage visuel.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : note minimale de C dans un cours FRAN niveau 3000 (littérature).

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4121 Histoire du français 2 3 cr**

Histoire interne du français. Étude du processus de changement linguistique et des principaux facteurs qui l'influencent à partir du cas de l'évolution de la langue française. Étude de la formation lexicale et morphosyntaxique du français et de l'élaboration de son orthographe. On ne peut se faire créditer FRAN 4121 et l'ancien FRAN 2123.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: une note minimale de C dans FRAN 2931 et FRAN 3121 (ou l'ancien FRAN 2123).

**Mutually Exclusive:** FRAN 3123

**FRAN 4551 L'âge d'or du théâtre français 3 cr**

Étude thématique, dramatique et esthétique de six pièces représentatives de l'école classique du théâtre français (XVIIe siècle).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un cours de littérature FRAN de niveau 3000.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4561 Le théâtre français du XVIIIe siècle 3 cr**

Étude du renouveau des formes dramatiques dans quelques oeuvres du théâtre français du XVIIIe siècle.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un cours de littérature FRAN de niveau 3000.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4591 Création littéraire: théâtre 3 cr**

Étude des procédés d'écriture d'une pièce de théâtre. Ateliers d'écriture, débouchant sur la création d'une pièce.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un cours de FRAN - théâtre, niveau 3000.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4661 Nouveaux visages du roman 3 cr**

Étude détaillée de quelques oeuvres romanesques produites depuis le début des années 1980 (romans de Le Clézio, Perec, Duras, Sarraute, etc.).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un cours de littérature FRAN de niveau 3000.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4731 Littérature africaine 3 cr**

Introduction à la littérature des pays africains francophones. Étude de textes qui ont marqué le XXe siècle, avec un accent mis sur les productions après l'ère des Indépendances.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 3343 et FRAN 3731.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4741 Littérature maghrébine 3 cr**

Étude d'une sélection d'oeuvres francophones écrites par des auteurs maghrébins. Exploration de certains aspects particuliers à cette littérature : histoire, culture, thèmes, structures, langue, technique et style.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 3343 et FRAN 3731.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4751 Littérature antillaise 3 cr**

Introduction générale à la littérature antillaise avec une mise en situation historique et socioculturelle. Étude des thèmes majeurs, des particularités stylistiques dans quelques oeuvres choisies parmi les plus représentatives des tendances littéraires depuis le XIXe siècle.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 3343 et FRAN 3731.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4931 La langue dans la littérature 3 cr**

Aperçu historique des usages et des perceptions de la « langue littéraire » chez différents auteurs écrivant en français depuis le XVIe siècle jusqu'au XXIe siècle. Étude des tensions qui résultent de la coprésence de diverses normes langagières et variétés linguistiques et de ses effets sur la création littéraire. Analyse de plusieurs oeuvres littéraires du monde francophone.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans FRAN 2103 et dans FRAN 2303.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4971 Sociolinguistique 3 cr**

Initiation aux rapports que l'on peut établir entre la langue et la société, aux domaines d'étude et aux méthodes de la sociolinguistique.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans le FRAN 2931.

**Attributes:** Université de Saint-Boniface, Humanities

**FRAN 4991 Création littéraire : poésie 3 cr**

Mise en pratique des techniques de création poétique (étude des rythmes, des images, des sonorités, etc.) pour la réalisation d'oeuvres poétiques originales.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un cours de littérature FRAN de niveau 3000.

**Attributes:** Université de Saint-Boniface, Humanities

## General Management (GMGT)

**GMGT 1011 Les entreprises et la société 3 cr**

Analyse de la nature, du rôle, de l'impact et de l'importance des entreprises dans la société. Les activités internes des entreprises (ex. finances, marketing, opérations) seront discutées, mais la majorité du cours étudiera des relations entre les entreprises et les parties prenantes clés dans l'environnement externe (y inclut les gouvernements, les propriétaires, les clients, les communautés, les fournisseurs, et les générations à venir). Le étudiant et les étudiantes examineront les contextes institutionnels variés (ex. économiques, politico-légaux, et socioculturels) et appliqueront la pensée critique aux relations entre entreprises et la société, avec considération des modèles alternatifs de gestion. Accent sur les sujets sociaux contemporains en management (ex. le développement durable, la responsabilité sociale des entreprises). On ne peut se faire créditer à la fois GMGT 1011 et GMGT 1010.

**Equiv To:** GMGT 1010

**GMGT 2001 INT TO COMMUNIC 3 cr**

**Equiv To:** GMGT 2000

**GMGT 2011 Business Communications and Critical Thinking 3 cr**

(Lab required) An introduction to theoretical, cultural and ethical bases of effective communication. Students will develop interpersonal, oral and written communication skills at individual, group and organizational levels and will also develop analytical, problem-solving, rhetorical and critical thinking abilities required in organizational and business settings. Recommend that GMGT 2011 be taken in their first 30 credit hours. Not to be held for credit with GMGT 2010 or GMGT 2001 or GMGT 2000.

**Equiv To:** GMGT 2000, GMGT 2001, GMGT 2010

**GMGT 2061 Management et théorie des organisations 3 cr**

Analyse des principaux concepts qui sous-tendent la formation des organisations et leur gestion interne. L'accent est mis sur l'analyse des différentes approches théoriques relatives à la théorie des organisations et au management. On ne peut se faire créditer le GMGT 2061 et GMGT 2081 ou GMGT 2031.

**Equiv To:** GMGT 2060, GMGT 2080, GMGT 2081

**Mutually Exclusive:** GMGT 2030

**GMGT 2071 Introduction au comportement organisationnel 3 cr**

Analyse de l'impact du comportement humain sur l'organisation formelle et informelle. Les sujets traités sont le leadership, les groupes de travail, les conflits au sein de l'organisation et la communication. On ne peut se faire créditer le GMGT 2071 et GMGT 2070 ou GMGT 2030.

**Equiv To:** GMGT 2070

**Attributes:** Université de Saint-Boniface, Recommended Intro Courses

**GMGT 2081 Introduction au management et à la théorie de l'organisation 3 cr**

Analyse des principaux concepts régissant la formation d'organisations et leur gestion interne. L'accent est mis sur l'analyse de différentes approches théoriques concernant l'organisation et sa gestion. L'étudiant (e) ne peut se faire créditer à la fois le GMGT 2080 et le GMGT 2030.

**Equiv To:** GMGT 2060, GMGT 2061, GMGT 2080

**Mutually Exclusive:** GMGT 2030

**Attributes:** Université de Saint-Boniface, Recommended Intro Courses

**GMGT 2121 Les entreprises et le gouvernement 3 cr**

Analyse des rapports entre le gouvernement et les entreprises au niveau de la conception, de la modification et de la mise en place des politiques gouvernementales affectant l'entreprise. Analyse des moyens dont disposent les entreprises pour influencer la prise de décision des gouvernements.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: ECON 1200 ou ECON 1201 (D).

**Equiv To:** GMGT 2120

**GMGT 2141 Introduction aux communications 3 cr**

Communication orale dans le milieu des affaires. Rédaction de documents écrits venant appuyer les activités d'écoute et de parole. Apprentissage des connaissances grammaticales, syntaxiques et lexicales. Apprendre à s'exprimer en public.

**GMGT 3301 Droit commercial 3 cr**

Sommaire historique du droit, organisation des tribunaux, constitution du Canada, attributions législatives du gouvernement fédéral et des assemblées provinciales. Notions juridiques et problèmes attenants à: l'organisation des entreprises, la rédaction des contrats, le mandant et le mandataire, les effets négociables, les débits et les procédures de faillite.

**Equiv To:** GMGT 3300

**GMGT 3561 Séminaire en management 3 cr**

Analyse de la gestion d'organisation: Réflexion critique sur des sujets d'actualité pertinents. L'étudiant(e) ne peut se faire créditer à la fois le GMGT 3561 et le GMGT 3020 ou le GMGT 3560.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: GMGT 2061 (D) ou GMGT 2060 (D) ou GMGT 2081 (D) ou GMGT 2080 (D) et GMGT 2071 (D) ou GMGT 2070 (D).

**Equiv To:** GMGT 3020

**GMGT 3581 Éthique et responsabilité sociale 3 cr**

Le rôle social de l'entreprise. L'environnement interne et externe de l'entreprise; les problèmes sociaux et les activités de responsabilité sociale; l'éthique professionnelle du gestionnaire contemporain, la comptabilité sociale; les groupes défavorisés; etc. On ne peut se faire créditer GMGT 3581.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: GMGT 2071 ou GMGT 2070 ou et GMGT 1011 ou GMGT 1010.

**Equiv To:** GMGT 3580

**GMGT 4011 Gestion stratégique des organisations 3 cr**

Étude de la gestion stratégique des organisations. L'étude de cas permettra à l'étudiante ou à l'étudiant d'intégrer les connaissances acquises tout en mettant l'accent sur les questions qui entourent l'élaboration des stratégies et la gestion des politiques établies. Ce cours ne sera suivi qu'à la fin du programme ou avec l'autorisation écrite du professeur ou de la professeure.

**Equiv To:** GMGT 4010

**GMGT 4121 Commerce International 3 cr**

Étude des échanges internationaux à travers les politiques économiques internationales, les ententes régionales, les tarifs commerciaux, les institutions internationales et le financement des échanges.

**Equiv To:** GMGT 4120

**GMGT 4151 Gestion des organisations sans but lucratif 3 cr**

Description et analyse de la dynamique des organismes sans but lucratif (OSBL) : leur environnement spécifique, leur fonctionnement interne et leurs modes d'intervention dans la communauté. Approfondissement de la compréhension de la spécificité du secteur tertiaire, ce qui rend apte à y intervenir efficacement soit en tant que gestionnaires, soit en tant que bénévoles. On ne peut pas obtenir de crédits à la fois pour GMGT 4151 et GMGT 4150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : GMGT 2061 ou GMGT 2060, GMGT 2081 ou GMGT 2080, GMGT 2071 ou GMGT 2070, HRIR 2440 ou HRIR 2441.

**Equiv To:** GMGT 4150

**GMGT 4211 Séminaire en gestion et capitalisme 3 cr**

Étude des institutions, des évolutions et des débats associés au capitalisme moderne et de leurs implications pour la gestion. Exploration d'autres perspectives de gestion et des interactions bidirectionnelles dans le contexte d'enjeux plus vastes. Cours conçu de manière à présenter une diversité de perspectives afin de ne pas en privilégier une par rapport aux autres. On ne peut se faire créditer le GMGT 4211 et le GMGT 4210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: GMGT 1011 (D) ou GMGT 1010 (D) ou GMGT 2121 (d) ou GMGT 2120 (D).

**Equiv To:** GMGT 4210

**GMGT 4551 Développement d'habiletés de gestionnaire 3 cr**

Développement de certaines habiletés nécessaires au succès professionnel. Les principaux apprentissages sont: la gestion du stress, la communication orale, la négociation, la recherche d'emploi, les techniques de créativité et d'innovation, la gestion des relations vie privée/vie professionnelle.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: GMGT 2070 (D).

## Geography (GEOG)

### **GEOG 1281 Introduction à la géographie humaine 3 cr**

Étude des divers aspects du milieu humain: la population, l'habitat et les ressources naturelles. L'étudiant ne peut se faire créditer avec le GEOG 1280, ou GEOG 1200 ou GEOG 1201.

**Equiv To:** GEOG 1280

**Mutually Exclusive:** GEOG 1200, GEOG 1201

### **GEOG 1291 Introduction à la géographie physique 3 cr**

Étude des divers aspects de l'environnement physique: le climat, le relief, les sols et la végétation. L'étudiant ne peut se faire créditer avec GEOG 1290, ou GEOG 1200 ou GEOG 1201.

**Equiv To:** GEOG 1290

**Mutually Exclusive:** GEOG 1200, GEOG 1201

### **GEOG 2211 Géographie économique (HS) 6 cr**

Introduction à l'expression spatiale des activités économiques. Le cours traite du concept de ressource, de la localisation et de l'utilisation des ressources naturelles, des théories sur les facteurs de localisation des activités industrielles, de l'agriculture et des fondements du développement régional.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un minimum de 3 heures-crédits de géographie de niveau 1000 ou l'autorisation écrite du professeur.

**Equiv To:** GEOG 2210

**Mutually Exclusive:** GEOG 2870

**Attributes:** Université de Saint-Boniface

### **GEOG 2213 Géographies autochtones et relations interculturelles 3 cr**

L'étude de la relation des peuples autochtones du Canada au milieu, au territoire, à l'urbanisation, au changement culturel et au colonialisme. Concepts et méthodes en géographie historique, sociale, culturelle et critique. L'étudiant ne peut se faire créditer GEOG 2213 et GEOG 3771 Sujets particuliers en géographie: Géographie autochtones et relations interculturelles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un minimum de 6 crédits de géographie de niveau 1000 ou l'autorisation professorale.

**Mutually Exclusive:** GEOG 3771

### **GEOG 2215 Géographie sociale et culturelle 3 cr**

Étude des dimensions socio-culturelles à la base de l'organisation de l'espace, ainsi que de la construction et du développement des paysages humains. Ce cours offre une approche différenciée des expressions possibles du monde social (genre, ethnicité ou classe sociale) par une analyse des processus qui les façonnent et par l'examen de leurs interactions avec les structures spatiales. On ne peut se faire créditer GEOG 2215 et GEOG 3771 Sujets particuliers en géographie: Géographie autochtones et relations interculturelles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un minimum de 6 crédits de géographie de niveau 1000 ou l'autorisation professorale.

**Mutually Exclusive:** GEOG 3771

### **GEOG 2331 Espace, populations et migrations : perspectives géographiques 3 cr**

Étude des facteurs qui déterminent le nombre et la répartition des populations. Analyse des variations dans la fécondité, la mortalité et les migrations, ainsi qu'analyse des causes et conséquences de ces variations. On ne peut se faire créditer GEOG 2331 et: GEOG 2330, GEOG 2481 ou GEOG 2480.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans un cours de géographie de 3 crédits de niveau 1000 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** GEOG 2330

**Mutually Exclusive:** GEOG 2480, GEOG 2481

### **GEOG 2541 Météorologie et climatologie (PS) 3 cr**

Étude de la nature, des contrôles et des observations du temps et des variations spatio-temporelles du climat.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un minimum de 3 heures-crédits de géographie de niveau 1000, ou l'autorisation écrite du professeur.

**Equiv To:** GEOG 2540

**Attributes:** Université de Saint-Boniface

### **GEOG 2551 Géomorphologie (PS) 3 cr**

Vue d'ensemble des reliefs variés de la surface du globe et des processus géomorphologiques responsables de leur formation. (Laboratoire hebdomadaire).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un minimum de 3 crédits de géographie de niveau 1000 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** GEOG 2550

**Attributes:** Université de Saint-Boniface

### **GEOG 2651 Géographie politique I 3 cr**

Étude des relations qui existent entre l'État et son territoire: sa localisation, ses frontières et ses disparités régionales. On ne peut se faire créditer GEOG 2651 et GEOG 2430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un minimum de 3 crédits de géographie de niveau 1000 ou l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** GEOG 2430

**Attributes:** Université de Saint-Boniface

### **GEOG 2661 Géographie politique II 3 cr**

Étude des rapports de force entre les États et leurs relations avec l'espace, les ressources, la population et les groupes ethniques. On ne peut se faire créditer GEOG 2661 et GEOG 2430.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans GEOG 2651 ou l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** GEOG 2430

**Attributes:** Université de Saint-Boniface

### **GEOG 3411 Géographie de l'eau 3 cr**

L'eau, élément essentiel de la géographie physique. Bilan d'eau, cycle hydrologique, infiltration, percolation et écoulement, eaux souterraines, hydrologie fluviale et marine. Cours d'eau, lacs et océans, environnement. On ne peut se faire créditer GEOG 3411 et GEOG 3410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans le GEOG 1291 ou GEOG 1290 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** GEOG 3410

**Attributes:** Université de Saint-Boniface

**GEOG 3421 L'eau, enjeu géostratégique 3 cr**

L'eau, un enjeu stratégique d'importance: un survol historique des enjeux liés à l'eau et les enjeux actuels, la répartition inégale de la ressource .eau. et son partage équitable, les solutions techniques, économiques, institutionnelles et juridiques envisagées et le droit international.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le GEOG 1280 ou GEOG 1281, et les deux GEOG 2651 et GEOG 2661 (ou le GEOG 2430, ou l'autorisation écrite du professeur.

**Equiv To:** GEOG 3420

**Attributes:** Université de Saint-Boniface

**GEOG 3431 Géographie de Canada (A) 3 cr**

Étude du Canada par région. On ne peut se faire créditer GEOG 3431 et GEOG 3430, GEOG 2560, GEOG 2570 ou GEOG 3701.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un minimum de 6 crédits de géographie de niveau 1000, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** GEOG 2570

**Mutually Exclusive:** GEOG 2560, GEOG 3700, GEOG 3701

**Attributes:** Université de Saint-Boniface

**GEOG 3481 Particularités de la géographie du Canada (A) 3 cr**

Étude des problèmes propres à la géographie canadienne: régions, urbanisme, milieu rural, ressources, utilisation du sol.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un des cours suivants: GEOG 2560, GEOG 2570, GEOG 3431 ou GEOG 3430, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** GEOG 3480

**Attributes:** Université de Saint-Boniface

**GEOG 3501 Géographie de l'Europe (A) 6 cr**

Vue générale sur la géographie du continent européen et plus spécifiquement sur l'Union européenne. L'accent sera placé sur quelques pays.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un minimum de 6 heures-crédits de géographie de niveau 1000, ou l'autorisation écrite du professeur.

**Equiv To:** GEOG 3500

**Attributes:** Université de Saint-Boniface

**GEOG 3761 Sujets particuliers en géographie 6 cr**

Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un cours (3 crédits) de niveau 2000 ou 3000 avec une note minimale de C. Préalable : l'autorisation du professeur ou de la professeure.

**Equiv To:** GEOG 3760

**GEOG 3771 Sujets particuliers en géographie 3 cr**

Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** GEOG 2213, GEOG 2215

**GEOG 3821 Les territoires de la francophonie mondiale (A, HS) 3 cr**

La mise en place des espaces francophones partout dans le monde : le développement et l'éclatement des empires français et belge. La territorialité et l'identité au sein de la francophonie internationale. Répartition géographique et développement institutionnel. Ententes politiques et aspirations territoriales. On ne peut se faire créditer GEOG 3821 et GEOG 3820.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un minimum de 6 crédits de géographie de niveau 1000.

**Equiv To:** GEOG 3820

**Attributes:** Université de Saint-Boniface

**GEOG 3831 L'espace francophone panaméricain (A, HS) 3 cr**

L'étude des communautés francophones des Amériques dans le temps et dans l'espace. La mise en place de la francophonie panaméricaine et les circonstances de son éclatement. Ses enjeux économiques, sociaux, politiques et culturels. Les infrastructures, les institutions et les réseaux francophones.

**Equiv To:** GEOG 3830

**Attributes:** Université de Saint-Boniface

**GEOG 3841 Les espaces francophones de l'Afrique, de l'Asie et de l'Océanie (A, HS) 3 cr**

L'étude des communautés francophones africaines, asiatiques et océaniques. Les étapes de la colonisation et de la décolonisation, l'évolution vers l'indépendance et l'accession au statut d'État souverain. La mise en place des infrastructures, des institutions et des réseaux francophones.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans GEOG 3821.

**Equiv To:** GEOG 3840

**Attributes:** Université de Saint-Boniface

## German (GRMN)

**GRMN 1123 Introduction à l'allemand 1 3 cr**

Trois heures de cours plus une heure de laboratoire de langue par semaine. Le cours est destiné aux étudiants et aux étudiantes n'ayant aucune connaissance de l'allemand ou n'en ayant qu'une connaissance minime. Le cours comporte une initiation à la grammaire fondamentale, mais l'accent est mis sur le développement d'aptitudes à la lecture et à la conversation. On ne peut se faire créditer GRMN 1123 et l'ancien GRMN 1121 ou GRMN 1120. On ne peut s'inscrire à ce cours si on a déjà obtenu des crédits pour l'allemand 40S ou GRMN 2100 ou GRMN 2101.

**Mutually Exclusive:** GRMN 1120, GRMN 1121

**GRMN 1125 Introduction à l'allemand 2 3 cr**

Trois heures de cours plus une heure de laboratoire de langue par semaine. Le cours est destiné aux étudiants et aux étudiantes n'ayant aucune connaissance de l'allemand ou n'en ayant qu'une connaissance minime. Le cours comporte une initiation à la grammaire fondamentale, mais l'accent est mis sur le développement d'aptitudes à la lecture et à la conversation. On ne peut se faire créditer GRMN 1125 et l'ancien GRMN 1121 ou GRMN 1120. On ne peut s'inscrire à ce cours si on a déjà obtenu des crédits pour l'allemand 40S ou GRMN 2100 ou GRMN 2101.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : GRMN 1123.

**Mutually Exclusive:** GRMN 1120, GRMN 1121

**GRMN 2103 Allemand intermédiaire 1 (A) L 3 cr**

Trois heures de cours et une heure de conversation par semaine. Révision de la grammaire, exercices, développement des compétences orales pratiques, conversation et usage moderne. Introduction à la prose et à la poésie allemande. On ne peut se faire créditer GRMN 2103 et GRMN 2101 ou GRMN 2100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : Allemand 40S ou une note minimale de C dans GRMN 1121, GRMN 1120 ou GRMN 1125, ou l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** GRMN 2100, GRMN 2101

**GRMN 2105 Allemand intermédiaire 2 (A) L 3 cr**

Trois heures de cours et une heure de conversation par semaine. Révision de la grammaire, exercices, développement des compétences orales pratiques, conversation et usage moderne. Exploration plus approfondie de la prose et de la poésie allemande. On ne peut se faire créditer GRMN 2105 et GRMN 2101 ou GRMN 2100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : Allemand 40S ou une note minimale de C dans GRMN 2103, ou l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** GRMN 2100, GRMN 2101

**GRMN 3201 Deutsche sprachpraxis I 6 cr**

Usage de l'allemand contemporain par la conversation, l'écriture et les exercices pratiques; étude de textes fictifs et non-fictifs et de films. L'accent est mis sur l'acquisition de vocabulaire et sur les particularités stylistiques et structurelles. On ne peut se faire créditer le GRMN 3201 et le GRMN 3200.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans GRMN 2100 ou GRMN 2101.

**Equiv To:** GRMN 3200

**Attributes:** Université de Saint-Boniface, Humanities

**GRMN 3211 Allemand commercial 6 cr**

Initiation, au moyen d'exercices oraux et écrits, au vocabulaire commercial et aux techniques d'écriture dans le domaine des affaires. Révision de la grammaire allemande avec l'accent sur la composition et la conversation appliquées au domaine commercial. On ne peut se faire créditer GRMN 3211 et GRMN 3210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans GRMN 2101 ou GRMN 2100 ou le GRMN 2110] ou l'autorisation écrite du professeur ou de la professeure.

**Mutually Exclusive:** GRMN 3230

**Attributes:** Université de Saint-Boniface, Humanities

**GRMN 3601 Sujets particuliers 3 cr**

Contenu variable en fonction des besoins et des intérêts des étudiantes et des étudiants et de la professeure ou du professeur. On ne peut se faire créditer GRMN 3601 et GRMN 3600. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans GRMN 2101 ou GRMN 2100, ou l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Humanities

# History (HIST)

**HIST 1203 Introduction à la civilisation occidentale I (E) 3 cr**

Aperçu de l'histoire politique, sociale et culturelle du monde occidental de l'Antiquité à 1648. Étude de l'Antiquité gréco-romaine, du Moyen-Âge en Europe occidentale et orientale, de la Réforme et des guerres de religions. Approche globale de l'histoire, situant les interactions de l'Occident avec le reste du monde, notamment le monde musulman et l'Asie. On ne peut se faire créditer HIST 1203 et HIST 1200, ou HIST 1350, ou HIST 1360, ou l'ancien HIST 1201.

**Mutually Exclusive:** HIST 1200, HIST 1201, HIST 1350, HIST 1360

**HIST 1205 Introduction à la civilisation occidentale II (E) 3 cr**

Aperçu de l'histoire politique, sociale et culturelle du monde occidental de 1648 à nos jours. Étude des explorations maritimes, des révolutions, de l'émergence de l'État-nation, de la révolution industrielle et des guerres du XXe siècle. Approche globale de l'histoire, soulignant les interactions entre l'Occident et le reste du monde. On ne peut se faire créditer HIST 1205 et HIST 1200, ou HIST 1350, ou HIST 1360, ou l'ancien HIST 1201.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: Une note minimal de C dans HIST 1203 ou l'autorisation professorale.

**Mutually Exclusive:** HIST 1200, HIST 1201, HIST 1350, HIST 1360

**HIST 1401 Histoire du Canada, des origines à 1800 (C) 3 cr**

Étude générale de l'histoire du Canada, des <<origines>> à 1800. Analyse des personnages, institutions et processus ayant marqué l'histoire du Canada durant cette période. Étude de la diversité géographique, sociale et sociale et culturelle du Canada. Sociétés amérindiennes, colonisations européennes, Régime français, Conquête britannique, etc. On ne peut se faire créditer HIST 1401 et HIST 1440, ou HIST 1390, ou HIST 1400 ou l'ancien HIST 1441.

**Mutually Exclusive:** HIST 1390, HIST 1400, HIST 1440, HIST 1441

**HIST 1403 Histoire du Canada, de 1800 à aujourd'hui (C) 3 cr**

Étude générale de l'histoire du Canada, du XIXe siècle à aujourd'hui. Analyse des personnages, des institutions et des processus ayant marqué l'histoire du Canada durant cette période: immigration, rébellions, Acted'Union, industrialisation, Confédération, développement de l'Ouest, rôle du Canada dans les guerres mondiales, crise et prospérité économiques, enjeux constitutionnels, le Canada et le monde. On ne peut se faire créditer HIST 1403 et HIST 1440, ou HIST 1390, ou HIST 1400, ou l'ancien HIST 1441.

**Mutually Exclusive:** HIST 1390, HIST 1400, HIST 1440, HIST 1441

**HIST 2041 Histoire des États-Unis jusqu'en 1877 (A) 3 cr**

Une vue générale du développement du peuple américain et de l'établissement jusqu'à la période de Reconstruction. L'étudiant(e) ne peut se faire créditer à la fois le HIST 2041 et le HIST 2230.

**Mutually Exclusive:** HIST 2230

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 2089 Histoire contemporaine de la Chine (B) 3 cr**

Étude de l'histoire contemporaine de la Chine, de 1912 à nos jours. Analyse des dimensions politiques, économiques et culturelles de la chute de l'Empire chinois, de l'émergence des partis nationalistes et communistes, de la guerre civile, de la République populaire de Chine et des autres Chines à Taiwan et outre-mer. On ne peut se faire créditer HIST 2089 et l'ancien HIST 3121 Sujets spéciaux 2: Histoire de la chine, HIST 3121 ou HIST 2654 ou HIST 2650.

**Mutually Exclusive:** HIST 2650, HIST 2654, HIST 3121

**HIST 2213 Histoire des guerres du Vietnam (B) 3 cr**

Étude des dimensions locale, régionale, nationale et internationale des trois guerres du Vietnam (1946-1954, 1965-1975, 1978-1989). Analyse des conflits, tels des affrontements au niveau local, régional, national et international, impliquant le Vietnam, la France, les États-Unis, mais ainsi que la Chine et le Cambodge. On ne peut se faire créditer HIST 2213 et l'ancien HIST 3121 Sujets spéciaux 1: Histoire des guerres du Vietnam.

**Mutually Exclusive:** HIST 3121

**HIST 2215 Introduction à l'histoire de l'Afrique (R) 3 cr**

Introduction aux principaux développements politiques, économiques et culturels de l'Afrique de l'émergence des civilisations à nos jours. Approche globale de l'histoire visant à étudier les relations entre les populations du continent africain entre elles et avec le reste du monde. On ne peut se faire créditer HIST 2215 et HIST 2500.

**Mutually Exclusive:** HIST 2500

**HIST 2217 Histoire des sciences (T) 3 cr**

Étude générale de l'histoire des sciences, des <<origines>> à nos jours. Analyse des mutations de la pensée scientifique notamment durant les périodes de l'Antiquité, du Moyen Âge, de la Modernité et de l'Époque contemporaine et sur les espaces européen, asiatique, américain et africain. Introduction à l'épistémologie: notions de science, de vérité et d'objectivité.

**HIST 2219 Introduction à l'histoire du genre (T) 3 cr**

Analyse historique de différents thèmes reliés à l'histoire du genre de l'Antiquité à nos jours. Parmi les thèmes abordés: corps et sexualité, genre et relations à l'autre et, masculinité et, féminité, dans la Rome antique, l'Europe, le monde musulman, les empires et les guerres mondiales. Introduction au genre comme catégorie d'analyse.

**HIST 2221 L'Amérique latine de l'indépendance à nos jours (A) 3 cr**

Étude historique de l'Amérique latine des XIXe et XXe siècles. Analyse des moments majeurs correspondant à des changements importants tant du points de vue socio-économiques que politique, tels que les débuts de l'indépendance (1820-1850), le libéralisme oligarchique (1860-1920), le populisme et ses crises (1930-1980), le néolibéralisme (1990-). On ne peut se faire créditer HIST 2221 et HIST 2150.

**Equiv To:** HIST 2150

**HIST 2283 Histoire des francophones de l'Ouest canadien (C) 3 cr**

Étude historique et thématique du fait français de l'Ouest canadien (Man., Sask., Alb., C.-B.) de ses premiers établissements au XVIIIe siècle jusqu'aux communautés actuelles. Différents événements, processus historiques et thèmes (socio-économie, politique, culture, religion) seront analysés. La francophonie ouest-canadienne se compose de communautés minoritaires ayant des histoires propres sans être isolées les unes des autres.

**HIST 2285 Histoire du cinéma (T) 3 cr**

Analyse du cinéma comme produit, agent et médium de représentation de l'Histoire. Étude des enjeux reliés à la narration par l'image en mouvement et des bulletins cinématographiques d'actualités. Étude des représentations du passé et du futur, comme les films sur l'Antiquité, les guerres mondiales, et la science-fiction.

**HIST 2311 Sujet choisi en histoire I (T) 3 cr**

Étude un thème choisi en histoire. Le contenu varie d'année en année. Il sera donc possible de se faire créditer ce cours plus d'une fois.

**HIST 2361 L'Europe de 1870 à nos jours (E) 3 cr**

Étude historique des événements, enjeux et processus ayant marqué l'Europe depuis 1870 tels que l'unification allemande et la guerre franco-prussienne, l'industrialisation, les tensions de classes et le socialisme, le nouvel impérialisme et les fascismes, le féminisme, les guerres mondiales, la Révolution russe, l'entre-deux-guerres, la Guerre Froide, l'État providence et sa remise en cause néolibérale et l'unification européenne. On ne peut se faire créditer HIST 2361 et HIST 2360.

**Equiv To:** HIST 2360

**HIST 2661 Histoire de l'Union soviétique (E) 3 cr**

Une attention particulière sera donnée à la Révolution russe de 1917, à la nature et au fonctionnement du système politique soviétique, aux expériences sociales et économiques du régime soviétique ainsi qu'au rôle des Soviétiques dans la politique internationale. L'étudiant(e) qui détient le crédits du HIST 2661 ne peut se faire créditer aucun des cours HIST 2660, HIST 2490 ou l'ancien HIST 3471.

**Equiv To:** HIST 2660

**Mutually Exclusive:** HIST 2490, HIST 3471

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 2671 Histoire du capitalisme (T) 3 cr**

Étude de l'émergence et de l'évolution de capitalisme ainsi que de ses conséquences sociales du 15e siècle jusqu'à nos jours. L'étudiant(e) ne peut se faire créditer à la fois le HIST 2671 et le HIST 2670.

**Equiv To:** HIST 2670

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 2675 Histoire du communisme (T) 3 cr**

Étude histoire du communisme et d'autres formes de contestation du capitalisme. Analyse des idées, des systèmes communistes en Europe, en Asie, en Amérique latine, en Afrique et des mouvements transnationaux de solidarité internationale.

**HIST 2761 Histoire des États-Unis depuis 1877 (A) 3 cr**

Une revue générale du développement du peuple américain à partir de la Reconstruction jusqu'au présent. L'étudiant(e) qui détient le crédits du HIST 2761 ne peut se faire créditer aucun des cours HIST 2760 ou HIST 2230.

**Equiv To:** HIST 2760

**Mutually Exclusive:** HIST 2230

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 2841 Histoire de la Russie jusqu'en 1917 (E) 3 cr**

Un survol historique du développement de la Russie jusqu'à la fin de la période impériale. L'étudiant(e) qui détient le crédits du HIST 2841 ne peut se faire créditer aucun des cours HIST 2840 ou HIST 2490 ou l'ancien HIST 3471.

**Equiv To:** HIST 2840

**Mutually Exclusive:** HIST 2490, HIST 3471

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 2991 Histoire de l'Église catholique depuis 1540 (T) 3 cr**

Histoire de l'Église catholique depuis 1540 jusqu'à nos jours. On portera attention particulièrement à la réponse que l'Église a donnée à la modernisation du monde ainsi qu'à l'évolution théologique et aux réformes institutionnelles. L'étudiant(e) ne peut se faire créditer à la fois le HIST 2991 et le HIST 2990.

**Equiv To:** HIST 2990

**Attributes:** Université de Saint-Boniface, Humanities



**HIST 3011 La guerre au 20e siècle (T) 3 cr**

Ce cours aborde le phénomène de la guerre au 20e siècle dans tous ses aspects: militaires, économiques, sociaux, culturels, humains. Il sera question des deux guerres mondiales et de la Guerre froide mais aussi des guerres régionales ou locales. Nous traiterons aussi des différentes formes que la guerre a prises au siècle dernier: décolonisation, guérilla, terrorisme.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 3031 Histoire de la francophonie canadienne minoritaire (C) 3 cr**

Étude historique et thématique de la francophonie canadienne minoritaire à travers ses différentes communautés, des premiers établissements en Acadie et dans la vallée du Saint-Laurent, aux implantations contemporaines en Ontario, en Acadie de l'Atlantique et dans l'Ouest canadien. Les thèmes abordés comprennent notamment l'économie, les structures sociales, les institutions, les références identitaires et le juridique. On ne peut se faire créditer HIST 3031 et l'ancien HIST 3781 Études choisies en histoire du Canada I: La francophonie minoritaire canadienne ou HIST 3781 Les communautés francophones minoritaires du Canada.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou l'autorisation professorale.

**Mutually Exclusive:** HIST 3780, HIST 3781

**HIST 3087 L'Asie et le monde (B) 3 cr**

Étude historique des relations intérieures et extérieures de l'Asie, de l'Antiquité à nos jours de vue politique, économique, social et culturel. On ne peut se faire créditer HIST 3087 et l'ancien HIST 3111 Sujets spéciaux 1: L'Asie et le monde.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou l'autorisation professorale.

**Mutually Exclusive:** HIST 3111

**HIST 3093 Histoire des empires (T) 3 cr**

Étude comparée des empires de l'Antiquité à nos jours. Analyse des stratégies employées pour conquérir et maintenir le pouvoir sur des territoires et des populations diverses. On ne peut se faire créditer HIST 3093 et l'ancien HIST 3111 Sujets spéciaux 1: Histoire des empires.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou l'autorisation professorale.

**Mutually Exclusive:** HIST 3111

**HIST 3095 La guerre de Sécession: causes, déroulement et conséquences (A) 3 cr**

Étude historique de la guerre de Sécession de ses causes profondes (tensions entre État fédéral et États, esclavagisme, clivages Nord-Sud) et cause immédiates (élection Lincoln), de son déroulement (batailles, décisions politiques et tournants) et de ses conséquences (Reconstruction). On ne peut se faire créditer HIST 3095 et l'ancien HIST 3761 Sujets particuliers en histoire des États-Unis I: La guerre de sécession: causes, déroulement et conséquences.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou l'autorisation professorale.

**Mutually Exclusive:** HIST 3760, HIST 3761

**HIST 3097 Histoire du Manitoba (C) 3 cr**

Étude historique du Manitoba de ses origines à nos jours. Analyse des peuples, personnages, événements et processus structurants, tels que les Premières Nations, les Métis, les missionnaires, la traite des fourrures, l'entrée dans la Confédération, la question scolaire, la francophonie, les crises, l'immigration. On ne peut se faire créditer HIST 3097 et l'ancien HIST 3721.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou l'autorisation.

**Mutually Exclusive:** HIST 3721

**HIST 3101 Histoire de l'Éducation en Occident depuis 1500, une introduction (T) 3 cr**

Introduction à l'histoire de l'éducation en Occident. Présentation des grands jalons au cours des cinq cents dernières années. Parmi les thèmes abordés, il y aura la création et de l'évolution des différents niveaux d'écoles, la programmation, le financement, la place de l'Église et celle de l'État dans l'éducation, les méthodes d'enseignement, les différences entre les sexes, la progression de l'alphabétisation et de la scolarisation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 3103 Histoire contemporaine des religions au XIXe et XXe siècle (T) 3 cr**

Étude des mouvements religieux et de leurs transformations au cours de l'histoire des dix-neuvième et vingtième siècles. Étude du christianisme, de l'islam, du bouddhisme, des religions syncrétiques et des mouvements millénaristes. Analyse de leur rôle dans la colonisation, la décolonisation et les mouvements nationalistes. Analyse de leur lien avec le capitalisme, le communisme et la guerre froide.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou l'autorisation professorale.

**HIST 3111 Sujets spéciaux 1 (G) 3 cr**

Occasion d'étudier un thème choisi en histoire. Le contenu varie mais doit comprendre un travail en histoire sociale ou culturelle ou sur un sujet spécifique. Consulter le département d'histoire et le Guide d'inscription.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois.

**Mutually Exclusive:** HIST 3087, HIST 3093

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 3141 Histoire de la démocratie (T) 3 cr**

Ce cours aborde un sujet au coeur de l'actualité: la démocratie et, plus spécialement la démocratisation des États dans le monde depuis le 19e siècle. Nous abordons les aspects théoriques de la démocratie et l'évolution de la mise en pratique de la théorie démocratique.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Humanities

**HIST 3227 Philosophie de l'histoire (T) 3 cr**

Introduction à la philosophie de l'histoire. Étude historique des réflexions philosophiques concernant le processus et le pratique historique, à travers les œuvres notamment de saint Augustin, Hegel, Marx, Collingwood, Hempel, Riccoeur. Réflexion sur la pertinence de la philosophie de l'histoire pour les historiens. Aussi offert sous la cote PHIL 3227. On ne peut se faire créditer HIST 3227 et PHIL 3227.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou en philosophie ou l'autorisation professorale.

**Equiv To:** PHIL 3227

**HIST 3301 Histoire du terrorisme contemporain (T) 3 cr**

Étude d'un aspect particulier des conflits sociopolitiques qui ont marqué l'histoire contemporaine : le terrorisme. L'évolution historique de ce phénomène est traitée tant du point de vue de sa notion / définition(s), son / ses idéologie (s), ses objectifs ou buts, que de ses revendications, sa géographie et ses méthodes d'action.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans 6 crédits en Histoire ou l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface

**HIST 3311 Sujet choisi en histoire II (T) 3 cr**

Étude d'un thème choisi en histoire. Le contenu variera d'année, il est donc possible de se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou l'autorisation ou l'autorisation professorale.

**HIST 4013 Qu'est-ce que l'histoire? Perspectives philosophiques et sociales (T) 3 cr**

Questionnement sur la nature de la connaissance historique, tant du point de vue philosophique que social. Analyse des fins et des moyens de la connaissance historique. Étude des fonctions sociales de l'histoire: mémoire, enseignement, musée, patrimoine.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: avoir obtenu un minimum de 30 crédits, dont 9 en histoire, ou l'autorisation professorale.

**HIST 4421 Histoire de l'histoire (T) 3 cr**

Analyse du développement de la pratique historique de ses origines jusqu'à nos jours. Étude des approches du savoir historique ayant marqué son histoire dont l'histoire-enquête grecque, l'histoire-magistra vitae romaine, l'histoire théologique médiévale, l'histoire érudite moderne, l'histoire méthodique, les > histoires.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: avoir obtenu un minimum de 30 crédits, dont 9 en histoire, ou l'autorisation professorale.

## Human Res. Mgmt/Indus Relat. (HRIR)

**HRIR 2441 Gestion des ressources humaines 1 3 cr**

Introduction au système de gestion des ressources humaines. Les sujets abordés ont trait à: la planification, l'analyse de postes, la formation, la gestion de la diversité, la gestion des carrières. l'évaluation du rendement, l'acquisition des ressources humaines, les modes de reconnaissance et la problématique de la gestion des ressources humaines dans un contexte en constant changement. On ne peut se faire créditer à la fois le HRIR 2441 et le HRIR 2440.

**Equiv To:** HRIR 2440

**Mutually Exclusive:** ABIZ 2620, AGRI 3030, DAGR 0530

**HRIR 3451 Relations industrielles 3 cr**

**Equiv To:** HRIR 3450

**HRIR 3511 Gestion des ressources humaines 2 3 cr**

La planification des tâches, la structuration des rôles et du travail, la coordination et la réalisation des activités feront l'objet d'un apprentissage théorique associé au développement d'habiletés.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: HRIR 2440 (D).

**HRIR 3541 Gestion des équipes de travail 3 cr**

Initiation à la gestion des équipes de travail en mettant l'accent sur les dimensions humaines et administratives du travail en équipe.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: GMGT 2070 (D).

**HRIR 4411 Dotation et développement des ressources humaines 3 cr**

Le cours est une analyse approfondie et pratique des problèmes de dotation et de développement des ressources humaines au sein des organisations. À travers ce cours, les étudiant(e)s développeront leurs habiletés d'intervention dans des domaines tels que la planification des emplois, le recrutement et la sélection, l'évaluation de la performance, l'analyse des besoins de formation, l'implantation et le contrôle d'un programme de formation, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: HRIR 2440 (D).

**Equiv To:** HRIR 4410

**HRIR 4421 Rémunération 3 cr**

Ce cours est une analyse des principaux concepts et des systèmes de rémunération incluant: stratégie, équité salariale, compétitivité, reconnaissance des contributions individuelles, incitatifs de performance, avantages sociaux, politiques gouvernementales, rôle des syndicats dans la rémunération, incidences et gestion du processus de rémunération.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: HRIR 2440 (D).

**Equiv To:** HRIR 4420

**HRIR 4481 La négociation collective 3 cr**

Ce cours est une analyse des éléments et enjeux de la négociation collective et de la gestion des conventions collectives et une analyse du cadre juridiques des négociations publiques et privées. Le système canadien de relations industrielles est comparé à d'autres systèmes nationaux.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: HRIR 3450 (D).

**Equiv To:** HRIR 4480

**HRIR 4511 Gestion de la diversité 3 cr**

La gestion de la diversité du point de vue historique, social, légal et opérationnel. L'influence de la diversité de la main-d'oeuvre sur les politiques, les pratiques et les procédures de l'organisation. Modèle du développement organisationnel pluraliste relié à un ensemble de systèmes sociaux.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: HRIR 2440 (D).

**HRIR 4521 Relations industrielles et gestion des ressources humaines comparées 3 cr**

Perspective internationale des relations industrielles (RI) et de la gestion des ressources humaines (GRH) par l'analyse et l'étude comparée des systèmes de relations industrielles et des pratiques de gestion des ressources humaines dans certains pays ainsi que des développements actuels. Théories et questions pertinentes à cette matière. On ne peut se faire créditer le HRIR 4521, le HRIR 4520. Préalable recommandé mais non obligatoire: le HRIR 3451.

**Equiv To:** HRIR 4520

**HRIR 4531 Gestion du changement 3 cr**

Changement et développement organisationnel: processus de changement, agent de changement. Domaines d'intervention: changements dans l'environnement et l'organisation, processus sociaux, culture d'entreprise, techno-structure, qualité de vie au travail. Dilemmes et perspectives.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: HRIR 2440 (D).

**HRIR 4541 Innovations en gestion des ressources humaines 3 cr**

Présentation des nouveaux courants en gestion des ressources humaines; examen de ses fondements, présentation des modèles d'implantation et en analyse critique.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: HRIR 2441 (HRIR 2440).

## Intercultural Studies - CUSB (INTC)

**INTC 1101 Introduction aux relations interculturelles 3 cr**

Initiation à l'étude des rapports entre les groupes culturels. Survol des principales approches théoriques employées en sciences humaines et sociales. Application de ces théories pour explorer des enjeux interculturels contemporains tels que l'immigration, la réconciliation avec les peuples autochtones, le racisme, les conflits ethniques et religieux, et les politiques d'accommodation de la diversité.

**INTC 2203 Penser le leadership 3 cr**

Étude interdisciplinaire de la théorie et la pratique du leadership. Survol des grandes approches éthiques pouvant guider la prise de décision. Description des sources psychologiques et sociales du leadership, des types de leaders et de leur impact. Présentation de quelques techniques de persuasion et d'activisme employées par les leaders. On ne peut se faire créditer INTC 2203 et PHIL 2203.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 15 crédits universitaires.

**Equiv To:** PHIL 2203

**INTC 3101 Médiation et communications interculturelles 3 cr**

Initiation à la pratique de la médiation culturelle. Exercices de perfectionnement des compétences interculturelles. Survol de méthodes d'intervention pour réduire les conflits et faciliter le rapprochement entre groupes majoritaires, peuples autochtones et métis, communautés francophones et personnes migrantes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 45 crédits universitaires.

**INTC 3103 Sujet choisi en études interculturelles 3 cr**

Occasion d'étudier un thème choisi en études interculturelles. Le contenu du cours varie, mais il vise à faire un travail sur un sujet précis touchant les rapports entre les cultures (consulter un professeur ou une professeure de la Faculté et le Guide d'inscription). Le contenu variera d'année, il est donc possible de se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits de la majeure en leadership interculturel ou l'autorisation professorale.

## Interdisciplinary Management (IDM)

**IDM 2983 Stage coopératif I 1 cr**

Stage de travail rémunéré dans le domaine des affaires, en industrie ou dans le secteur public pour l'étudiante ou l'étudiant inscrit au programme coopératif de l'École d'administration des affaires. On ne peut se faire créditer IDM 2983 et (IDM 2980 ou IDM 2982).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: Permission écrite du Comité du programme coopératif de l'École d'administration des affaires.

**Equiv To:** IDM 2982

**Mutually Exclusive:** IDM 2980

**IDM 3983 Stage coopératif II 1 cr**

Stage de travail rémunéré dans le domaine des affaires, en industrie ou dans le secteur public pour l'étudiante ou l'étudiant inscrit au programme coopératif de l'École d'administration des affaires. On ne peut se faire créditer IDM 3983 et (IDM 3980 ou IDM 3982).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: IDM 2983 (C) et la permission écrite du Comité du programme coopératif de l'École d'administration des affaires.

**Mutually Exclusive:** IDM 3980, IDM 3982

**IDM 4983 Stage coopératif III 1 cr**

Stage de travail rémunéré dans le domaine des affaires, en industrie ou dans le secteur public pour l'étudiante ou l'étudiant inscrit au programme coopératif de l'École d'administration des affaires. On ne peut se faire créditer IDM 4983 et (IDM 4980 ou IDM 4982).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: IDM 3983 (C) et la permission écrite du Comité du programme coopératif de l'École d'administration des affaires.

**Mutually Exclusive:** IDM 4980, IDM 4982

## International Business (INTB)

**INTB 2201 Introduction au management international 3 cr**

Acquisition de connaissances et de savoir-faire relatifs à la gestion, au maintien et au contrôle du flux international de personnes, d'informations, de fonds, de biens ou de services, à des fins commerciales, entrepreneuriales ou caritatives.

**Equiv To:** INTB 2200

**INTB 3001 Gestion interculturelle 3 cr**

Mise en évidence de l'influence de facteurs culturels sur les pratiques de gestion et la vie des entreprises. Présentation des dimensions de la culture de chaque pays étudié (religion, valeurs, normes, histoire, etc.) et développement d'outils pour faciliter l'adaptation des employés étrangers dans ces pays et le développement d'une communication interculturelle efficace avec leurs ressortissants. On ne peut se faire créditer INTB 3001 et GMGT 3521 ou INTB 4501.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: GMGT 2071.

**INTB 4501 Cultures du monde 3 cr**

Un aperçu des principales cultures du monde. Étude des relations entre la culture d'un peuple et ses rapports économiques internationaux.

**INTB 4581 Problèmes contemporains en gestion internationale 3 cr**

Étude des thèmes relatifs aux problèmes et aux défis que pose la gestion dans un contexte international. Le contenu du cours peut varier d'une année à l'autre en fonction de l'actualité, des besoins et des intérêts de la clientèle étudiante.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : INTB 2201 ou GMG 4121 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** INTB 4580

## International Studies - CUSB (INTL)

**INTL 1011 Introduction aux études internationales 3 cr**

Introduction à l'étude du monde contemporain sous un angle interdisciplinaire. Le cours analyse les fondements historique, politique et les principaux outils méthodologiques et théoriques qui président à l'étude de la société internationale contemporaine.

**Attributes:** Université de Saint-Boniface

**INTL 3011 Sujets particuliers en études internationales 3 cr**

Le contenu du cours variera. Contacter le secteur pour une description de cours.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: consentement écrit du chef de département.

**Attributes:** Université de Saint-Boniface

## Management Info. Systems (MIS)

**MIS 2001 Les systèmes d'information de gestion 3 cr**

(Laboratoire requis) Introduction aux systèmes d'information dans les organisations, au développement et à l'acquisition des systèmes et à la gestion des systèmes d'information. On ne peut se faire créditer ACC 1101 et ACC 1100

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: ACC 1101 ou ACC 1100 avec une note minimale de D, ou l'autorisation écrite du professeur.

**Equiv To:** MIS 2000

## Management Science (MSCI)

**MSCI 2151 Introduction aux sciences de la gestion 3 cr**

Introduction aux techniques et aux modèles des sciences de la gestion. La programmation linéaire, les problèmes d'affectation et de transport, la théorie de la décision et les files d'attente. On ne peut se faire créditer MSCI 2151 et MSCI 2150 ou ABIZ 2520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : Une note minimale de C dans (MATH 1520 ou MATH 1501 ou MATH 1500 ou MATH 1230) et (STAT 1150 ou STAT 1001 ou STAT 1000).

**Equiv To:** ABIZ 2520, MSCI 2150

**MSCI 3401 Sciences de la gestion II 3 cr**

Modèles de recherche opérationnelle utilisés dans l'analyse de problèmes de gestion. Les réseaux, les problèmes d'inventaire du point de vue déterministe, la programmation dynamique, la théorie des jeux. On ne peut se faire créditer MSCI 3401 et MSCI 3400.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : MSCI 2151 ou MSCI 2150, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** MSCI 3400

## Marketing (MKT)

**MKT 2211 Principes de marketing 3 cr**

Analyse des problèmes précis de marketing, l'accent étant mis sur l'analyse de différentes façons de maximiser les bénéfices dans le processus de la distribution des biens et des services; le marketing et la société.

**Equiv To:** MKT 2210

**Attributes:** Université de Saint-Boniface, Recommended Intro Courses

**MKT 3221 Recherche en marketing 3 cr**

Étude de la planification et de la mise en oeuvre de la recherche comme exigence pour prendre des décisions éclairées en marketing. On ne peut se faire créditer MKT 3221 et MKT 3220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: Une note minimale de D dans MKT 2211 ou MKT 2210 ou l'autorisation professorale.

**Equiv To:** MKT 3220

**MKT 3231 Comportement du consommateur 3 cr**

Étude de l'influence de l'environnement et de l'influence individuelle sur le comportement du consommateur.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: MKT 2210 (D).

**Equiv To:** MKT 3230

**MKT 3291 Publicité 3 cr**

Analyse du rôle et de la gestion de la publicité dans le cadre du plan marketing. Théorie de la communication et la formulation de messages publicitaires, établissement du budget, la sélection des médias et l'analyse de l'efficacité de la publicité.

**MKT 3301 Marketing international 3 cr**

Analyse comparée des structures, des fonctions et des processus de marketing dans des environnements sociaux, culturels et économiques variés. Diagnostic de l'environnement externe et élaboration des stratégies de marketing mix international.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : MKT 2211.

**Attributes:** Université de Saint-Boniface

**MKT 3311 Gestion de commerce de détail et du canal de distribution 3 cr**

**Equiv To:** MKT 3310

**MKT 4211 Gestion du marketing 3 cr**

Examen des stratégies et des tactiques marketing que les managers utilisent pour leurs produits et services à différents niveaux du cycle de vie du produit. Utilisation des analyses qualitatives et quantitatives pour développer la pensée critique essentielle à la prise de décision en marketing. Ne peut être pris qu'en dernière année du programme. On ne peut se faire créditer le MKT 4211 et le MKT 4210.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [(MKT 3221 (D) ou le MKT 3220 (D) ou le MKT 3231 (D) ou le MKT 3230 (D)] et un cours additionnel de marketing niveau 3000 ou 4000 (D) et [ACC 1111 (D) ou ACC 1110 (D)]. Prérequis ou concomitant: seulement un des deux cours suivants: (MKT 3221 ou le MKT 3220 (D) ou MKT 3231 ou le MKT 3230 (D)).

**Equiv To:** MKT 4210

**MKT 4271 Administration des ventes 3 cr**

Analyse de l'administration de la vente personnelle, y compris l'analyse la fonction-vente, la supervision de la force de vente et la gestion des ventes.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: MKT 2210 (D).

**Equiv To:** MKT 4270

## Mathematics (MATH)

**MATH 1081 Principes fondamentaux du raisonnement mathématique 3 cr**

(Laboratoire requis) La logique, le raisonnement, la résolution de problèmes, une introduction à la théorie des ensembles, l'induction mathématique, une introduction à la théorie des nombres, les bases de l'arithmétique et les algorithmes standard, l'utilisation des fractions et des fonctions. Ce cours est recommandé pour les étudiants qui aimeraient devenir enseignant au niveau élémentaire ou intermédiaire. Ce cours ne peut pas être reconnu aux fins d'un programme spécialisé, de majeur, général ou de mineur dans les sciences mathématiques. On ne peut se faire créditer MATH 1081 et MATH 1080.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de Mathématiques 40S (pré-calcul) (50 %), l'ancien MATH 40S (300) (50 %), Mathématiques appliquées 40S (65%), MATH 0401, MATH 1018 (C+), ou MSKL 0100.

**Equiv To:** MATH 1080

**Attributes:** Mathematics Requirement

**MATH 1091 Raisonnement mathématique en géométrie euclidienne 3 cr**

(Laboratoire requis) Introduction à la géométrie euclidienne avec emphase sur le raisonnement mathématique. Périmètre, aire, volume. congruence de triangles, lignes parallèles et quadrilatères, similitudes, cercles, géométrie des coordonnées et géométrie des transformations. Ce cours est recommandé pour les étudiants qui aimeraient devenir enseignant au niveau élémentaire ou intermédiaire. On ne peut se faire créditer MATH 1091 et MATH 1090.

**Equiv To:** MATH 1090

**Attributes:** Mathematics Requirement

**MATH 1191 Sujets choisis en mathématiques 6 cr**

Cours offrant aux étudiants et aux étudiantes de diverses facultés un aperçu des mathématiques modernes. Sujets à l'étude tirés des systèmes de nombres, de la géométrie et de la combinatoire. Cours terminal et ne pouvant être reconnu comme préalable à aucun autre cours universitaire en mathématiques. Ne peut pas être reconnu aux fins d'un programme spécialisé ou général, majeure ou mineure en sciences mathématiques. Sont exclus ceux qui ont obtenu une note de C ou plus dans un cours de mathématiques, à l'exception de MATH 1010 ou MATH 1020 (FA 1020). Seul concomitant en mathématiques : MATH 1010 ou MATH 1020 (FA 1020). Aucun préalable.

**Mutually Exclusive:** MATH 1201, MATH 1210, MATH 1211, MATH 1220, MATH 1230, MATH 1232, MATH 1240, MATH 1241, MATH 1300, MATH 1301, MATH 1310, MATH 1500, MATH 1501, MATH 1510, MATH 1520, MATH 1690, MATH 1700, MATH 1701, MATH 1710

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1211 Techniques d'algèbre classique et linéaire 3 cr**

(Laboratoire requis) Introduire une variété de concepts algébriques pratiques et d'outils nécessaires pour l'étude du calcul et des mathématiques avancées de l'ingénieur. L'emphase est mise sur le développement d'une méthodologie et d'outils algébriques nécessaires pour la réussite d'études plus avancées dans les mathématiques de l'ingénieur. Ce cours s'adresse uniquement aux étudiants en génie et en géophysique. On ne peut se faire créditer MATH 1211 et MATH 1210, MATH 1201, MATH 1200, MATH 1301, MATH 1300, MATH 1310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: un de Mathématiques pré-calcul 40S (60 %), l'ancien Mathématiques 40S (300) (60 %), MATH 1018 (C+), MSKL 0100 (60 %), ou MATH 0401.

**Equiv To:** MATH 1210

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1200, MATH 1201, MATH 1220, MATH 1300, MATH 1301, MATH 1310

**Attributes:** Université de Saint-Boniface

**MATH 1241 Éléments de mathématiques discrètes 3 cr**

(Laboratoire requis) Ce cours est destiné aux étudiantes et aux étudiants des disciplines riches en mathématiques. Introduction aux idées mathématiques, aux méthodes et techniques de démonstration et à l'écriture mathématiques, exploré à partir de sujets des mathématiques discrètes. On ne peut se faire créditer MATH 1241 et MATH 1240 (ou l'ancien MATH 3120).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [une note minimale de 60% en MATH 40S pré-calcul (ou l'ancien MATH 40S (300))] ou [MATH 0401, MATH 1018 (C+), ou MSKL 0100].

**Equiv To:** MATH 1240

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 3120

**Attributes:** Mathematics Requirement, Recommended Intro Courses

**MATH 1301 Géométrie vectorielle et algèbre linéaire 3 cr**

(Laboratoire requis) Introduction aux vecteurs, aux matrices, aux systèmes d'équations linéaires et à la géométrie à trois dimensions. On ne peut se faire créditer MATH 1301 et MATH 1211, MATH 1210, MATH 1220, MATH 1300 ou MATH 1310 (ou l'ancien MATH 1680).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: un de Mathématiques Précalcul 40S (60 %), ou l'ancien Mathématiques 40S (300) (60 %), Mathématiques appliquées 40S (70 %), MATH 1018 (C+), MATH 0401, ou MSKL 0100.

**Equiv To:** MATH 1300, MATH 1310

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1210, MATH 1211, MATH 1220, MATH 1680

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1501 Introduction au calcul 3 cr**

(Laboratoire requis) Différentiation et intégration des fonctions élémentaires avec application à la théorie des extrêmes, aux taux de changements ainsi qu'aux aires et aux volumes. On ne peut se faire créditer MATH 1501 et MATH 1230, MATH 1500, MATH 1510, MATH 1520 ou MATH 1690 (ou les anciens MATH 1530, MATH 1680).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: un de Mathématiques Pré-calcul 40S (60 %), l'ancien Mathématiques 40S (300) (60 %), MATH 1018 (C+), MATH 0401, ou MSKL 0100.

**Equiv To:** MATH 1500, MATH 1510, MATH 1520, MATH 1530

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1230, MATH 1680, MATH 1690

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Science, Recommended Intro Courses

**MATH 1701 Calcul II 3 cr**

(Laboratoire requis) Théories et techniques d'intégration, tracés de courbes, calculs de volume, de longueurs d'arc, d'aires et des dérivées partielles. On ne peut se faire créditer MATH 1701 et MATH 1232, MATH 1690, MATH 1700 ou MATH 1710.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans un de MATH 1230, MATH 1501, MATH 1500, MATH 1510, MATH 1520 (ou les anciens MATH 1530, MATH 1680).

**Equiv To:** MATH 1700, MATH 1710, MATH 1730

**Mutually Exclusive:** FA 1020, MATH 1010, MATH 1018, MATH 1020, MATH 1191, MATH 1232, MATH 1690

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Science, Recommended Intro Courses

**MATH 2021 Algèbre 1 3 cr**

(Laboratoire requis) Ce cours est destiné aux étudiantes et aux étudiants dans des disciplines riches en mathématiques. Groupes, anneaux, corps : concepts élémentaires et exemples. On ne peut se faire créditer MATH 2021 et MATH 2020 (ou l'ancien MATH 3350).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [une note minimale de C dans MATH 2091 ou MATH 2090 (ou l'ancien MATH 2352)] ou [une note minimale de B dans l'ancien MATH 2301 (ou l'ancien MATH 2300)].

**Equiv To:** MATH 2020

**Mutually Exclusive:** MATH 3350

**Attributes:** Mathematics Requirement

**MATH 2031 Combinatoire 1 3 cr**

(Laboratoire requis). Introduction à la combinatoire, incluant les principes de base de dénombrement, les permutations et combinaisons, l'énumération, le principe d'inclusion-exclusion, le principe du pigeonier, les solutions de récurrences simples, les relations, et les dérangements. On ne peut se faire créditer MATH 2031 et MATH 2030 (ou les anciens MATH 2451, MATH 2450, MATH 3400).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C en MATH 1241 ou MATH 1240 (ou un des anciens MATH 2202 ou MATH 2352).

**Equiv To:** MATH 2030

**Mutually Exclusive:** MATH 2450, MATH 2451, MATH 3400

**Attributes:** Mathematics Requirement

**MATH 2071 Théorie des graphes 1 3 cr**

(Laboratoire requis) Introduction aux graphes, digraphes et multigraphes. Les sujets comprennent les arbres, les cycles, les circuits, les graphes planaires, les algorithmes élémentaires et les applications des graphes aux sciences sociales et physiques. On ne peut pas se faire créditer MATH 2071 et MATH 2070 (ou l'ancien MATH 2400) ou COMP 4340.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [MATH 1241 ou MATH 1240] et [(MATH 1220) ou (MATH 1301 (C+) ou MATH 1300 (C+)) ou (MATH 1211 (B) ou MATH 1210 (B))].

**Equiv To:** MATH 2070

**Mutually Exclusive:** COMP 4340, MATH 2400

**Attributes:** Mathematics Requirement

**MATH 2081 Introduction à l'analyse 3 cr**

(Laboratoire requis) Propriétés fondamentales du système de nombres réels en tant que corps ordonné complet, propriété archimédienne, existence de racines carrées, densité des nombres rationnels, non dénombrabilité des nombres réels, suites, sous suites, théorèmes sur les limites, monotonie, théorème de Bolzano-Weierstrass, suites de Cauchy, traitement rigoureux des limites, continuité des fonctions à une ou plusieurs variables, continuité uniforme et applications. On ne peut se faire créditer MATH 2081 et MATH 2080 (ou l'ancien MATH 2202).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [MATH 1232 ou MATH 1690 ou MATH 1701 (B) ou MATH 1700 (B) ou MATH 1710 (B)] et [MATH 1220 ou MATH 1301 (C+) ou MATH 1300 (C+) ou MATH 1211 (B) ou MATH 1210 (B)] et [MATH 1241 ou MATH 1240].

**Equiv To:** MATH 2080

**Mutually Exclusive:** MATH 2202, MATH 2711, MATH 2730, MATH 2731

**Attributes:** Mathematics Requirement

**MATH 2091 Algèbre linéaire 2 3 cr**

(Laboratoire requis) Espaces vectoriels abstraits, transformations linéaires, bases et systèmes de coordonnées, représentations matricielles, orthogonalisation, diagonalisation, théorème des axes principaux. On ne peut se faire créditer MATH 2091 et MATH 2090 (ou les anciens MATH 2300, MATH 2301, MATH 2350, MATH 2352).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : MATH 1220 ou MATH 1301 (C+) ou MATH 1300 (C+) ou MATH 1211 (B) ou MATH 1210 (B).

**Equiv To:** MATH 2090

**Mutually Exclusive:** MATH 2300, MATH 2301, MATH 2352

**Attributes:** Mathematics Requirement

**MATH 2151 Calcul à plusieurs variables 3 cr**

(Laboratoire requis) Ce cours est destiné aux étudiantes et aux étudiants dans des disciplines riches en mathématiques. Introduction aux fonctions à plusieurs variables des points de vue algébrique et géométrique telles qu'on les retrouve dans le calcul des courbes et surfaces de niveaux, les dérivations partielles et le calcul du gradient, de la divergence et du rotationnel. On aborde aussi les problèmes de Min/Max, le calcul des intégrales doubles, triples, curvilignes et de surfaces, les fonctions vectorielles, les champs de vecteurs et leurs applications ainsi que les théorèmes de Green, de Stokes et de la divergence. On ne peut se faire créditer MATH 2151 et MATH 2130, MATH 2150, MATH 2720, MATH 2721, (ou l'ancien MATH 2750).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans MATH 2081 ou MATH 2080 (ou l'ancien MATH 2202).

**Equiv To:** MATH 2150

**Mutually Exclusive:** MATH 2130, MATH 2720, MATH 2721, MATH 2750

**Attributes:** Mathematics Requirement

**MATH 2161 Analyse numérique 1 3 cr**

(Laboratoire requis) Techniques élémentaires de résolutions numériques des équations linéaires et non-linéaires : techniques des différences finies, techniques d'interpolation, techniques de dérivation et d'intégration numériques. On ne peut se faire créditer MATH 2161 et MATH 2160 ou MATH 2120 (ou les anciens MATH 2600, MATH 2601).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [MATH 1232 ou MATH 1690 ou MATH 1701 (B) ou MATH 1700 (B) ou MATH 1710 (B)] et [MATH 1220 ou MATH 1301 (C+) ou MATH 1300 (C+) ou MATH 1211 (B) ou MATH 1210 (B)].

**Equiv To:** MATH 2160

**Mutually Exclusive:** MATH 2120, MATH 2600, MATH 2601, MECH 2150

**Attributes:** Mathematics Requirement

**MATH 2301 Algèbre linéaire II 3 cr**

Suite de MATH 1301. Espaces vectoriels à dimensions finies; transformations linéaires et matrices; vecteurs réels et valeurs réelles. La diagonalisation et ses applications. Espaces avec produits scalaires. On ne peut se faire créditer MATH 2301 et MATH 2300, l'ancien MATH 2350, MATH 2352 ou MATH 3130.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans MATH 1301, MATH 1300 ou MATH 1310, et un de MATH 1501, MATH 1500, MATH 1510, MATH 1520, MATH 1530 ou MATH 1690.

**Equiv To:** MATH 2300

**Mutually Exclusive:** MATH 2090, MATH 2091, MATH 2350, MATH 2352, MATH 3130

**Attributes:** Université de Saint-Boniface, Science

**MATH 2311 Géométrie euclidienne et non euclidienne 3 cr**

(Laboratoire requis) Les axiomes d'Euclide, la géométrie des triangles et des cercles, les transformations du plan, les constructions avec règle et compas, la puissance d'un point et l'axe radical, la division et les faisceaux harmoniques, l'inversion et les problèmes d'Apollonius. Introduction aux axiomes d'Hilbert, à la géométrie projective et aux géométries non euclidiennes. On ne peut se faire créditer MATH 2311 et les anciens MATH 2551, MATH 2550 ou MATH 2552.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [une note minimale de B dans MATH 1301 ou MATH 1300] ou [une note minimale de C dans MATH 1220].

**Mutually Exclusive:** MATH 2550, MATH 2551, MATH 2552

**Attributes:** Mathematics Requirement

**MATH 2451 Mathématiques combinatoires 6 cr**

Introduction à certains sujets d'intérêt courant en mathématiques combinatoires : les techniques d'énumération, les graphiques, les dessins de blocs et les généralisations, les récursions linéaires. On ne peut se faire créditer MATH 2451 et MATH 2450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de "C" dans un cours d'introduction aux sciences mathématiques, à l'exception de MATH 1000, MATH 1010, MATH 1020, FA 1020, et MATH 1191 ou MATH 1190, ou l'autorisation écrite du directeur du Département des sciences mathématiques.

**Equiv To:** MATH 2450

**Mutually Exclusive:** MATH 2031

**Attributes:** Université de Saint-Boniface, Science

**MATH 2501 Introduction à la théorie des nombres 3 cr**

Étude de la divisibilité, de la factorisation unique, des congruences linéaire et quadratique et du théorème de Fermat. On ne peut se faire créditer MATH 2501 et MATH 2500.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un cours d'introduction en sciences mathématiques à l'exception de MATH 1000, MATH 1010, MATH 1020, FA 1020 et MATH 1191 ou MATH 1190, ou l'autorisation écrite du directeur du Département des sciences mathématiques.

**Equiv To:** MATH 2500

**Attributes:** Université de Saint-Boniface, Science

**MATH 2551 Géométrie moderne 6 cr**

Approche moderne à la géométrie à l'aide de transformations géométriques. Sujets variés, tels isométries, symétries, similarités, inversion circulaire et groupes. On ne peut se faire créditer MATH 2551 et MATH 2550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans MATH 1690 ou un de MATH 1501, MATH 1500, MATH 1510, MATH 1520, MATH 1530; aussi, un de MATH 1301, MATH 1300, MATH 1310, MATH 1701, MATH 1700, MATH 1710 ou MATH 1730.

**Equiv To:** MATH 2550

**Mutually Exclusive:** MATH 2311, MATH 2552, MATH 3380

**Attributes:** Université de Saint-Boniface, Science

**MATH 2601 Mathématiques numériques I 3 cr**

Techniques élémentaires de solution numérique de problèmes mathématiques : solution d'équation; différences finies; interpolation, systèmes d'équations; différentiation numérique; intégration numérique. On ne peut se faire créditer le MATH 2601 et le MATH 2600, MATH 2120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : MATH 1301 ou MATH 1300 ou MATH 1310, MATH 1690, MATH 1701 ou MATH 1700, MATH 1710, et COMP 1011 ou COMP 1010 ou son équivalent, ou l'autorisation écrite du professeur.

**Equiv To:** MATH 2600

**Mutually Exclusive:** MATH 2120, MATH 2160, MATH 2161, MECH 2150

**Attributes:** Université de Saint-Boniface, Science

**MATH 2701 Calcul III A 3 cr**

Calcul des variables multiples. On ne peut se faire créditer le MATH 2701 et le MATH 2751.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : le MATH 1301 ou MATH 1311 et un des MATH 1691, MATH 1701, MATH 1711 ou MATH 1731.

**Equiv To:** MATH 2751

**Attributes:** Université de Saint-Boniface, Mathematics Requirement

**MATH 2711 Calcul III B 3 cr**

Analyse, suites et séries. On ne peut se faire créditer le MATH 2711 et le MATH 2751.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : un de MATH 1690, MATH 1701, MATH 1711 ou MATH 1731 et un de MATH 1201 ou MATH 2201. Concomitant : MATH 1301 ou le MATH 1311.

**Equiv To:** MATH 2751

**Mutually Exclusive:** MATH 2081

**MATH 2721 Calcul à plusieurs variables 3 cr**

(Laboratoire requis) Calcul différentiel et intégral à plusieurs variables. On ne peut se faire créditer MATH 2721 et MATH 2720, MATH 2151, MATH 2150 ou MATH 2130 (ou les anciens MATH 2751, MATH 2750, MATH 2110).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [MATH 1301 ou MATH 1300 ou MATH 1220 ou MATH 1211 (B) ou MATH 1210 (B) ou MATH 1310] et [MATH 1701, MATH 1700, MATH 1232, MATH 1690, MATH 1710 ou l'ancien MATH 1730].

**Equiv To:** MATH 2720

**Mutually Exclusive:** MATH 2110, MATH 2130, MATH 2150, MATH 2151, MATH 2750

**Attributes:** Université de Saint-Boniface, Science

**MATH 2801 Équations différentielles ordinaires et leurs applications I 3 cr**

Introduction à la théorie des équations différentielles ordinaires.

Techniques pratiques de solution, principalement en ce qui a trait aux équations du premier ordre et aux équations linéaires d'ordre plus élevé.

Systèmes linéaires. Applications à des problèmes en sciences ou à d'autres domaines. On ne peut se faire créditer le MATH 2801 et le MATH 2800 ou le MATH 2132 ou le MATH 2100.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : MATH 1301 ou MATH 1300 ou MATH 1310. Concomitant : MATH 2721, MATH 2720 ou MATH 2750.

**Equiv To:** MATH 2800

**Mutually Exclusive:** MATH 2100, MATH 2132

**Attributes:** Université de Saint-Boniface, Science

**MATH 3331 Algèbre computationnelle 3 cr**

Une introduction à l'utilisation des ordinateurs pour le calcul symbolique mathématique, incluant la résolution des systèmes non linéaires et les équations différentielles. Un logiciel approprié sera utilisé pour explorer les applications. On ne peut se faire créditer MATH 3331 et MATH 3330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans MATH 2091 ou MATH 2090 (ou les anciens MATH 2301, MATH 2300, MATH 2352) ou l'autorisation écrite du professeur ou de la professeure.

**Equiv To:** MATH 3330

**MATH 3361 Combinatoire 2 3 cr**

Sujets avancés en combinatoire, incluant fonctions génératrices, théorie élémentaire de la conception, récurrences, chaînes et antichaînes, énumération de Pólya. Ce cours est exigeant et s'adresse à des étudiantes et étudiants dans des disciplines riches en mathématiques. On ne peut se faire créditer MATH 3361 et MATH 3360 (ou l'ancien MATH 4400).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans MATH 2031 ou MATH 2030 (ou l'ancien MATH 3400).

**Equiv To:** MATH 3360

**Mutually Exclusive:** MATH 4400

**MATH 3821 Introduction à la modélisation mathématique 3 cr**

Introduction aux principes et aux techniques entourant le design, le développement, la résolution, l'expérimentation et la révision de modèles mathématiques de phénomènes du « vrai monde », à l'aide d'études de cas. On ne peut se faire créditer MATH 3821 et MATH 3820.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : MATH 2600 ou MATH 2601, puis MATH 2800 ou MATH 2801 (C). Préalable ou concomitant : STAT 1001 ou STAT 1000.

**Equiv To:** MATH 3820

**Mutually Exclusive:** MATH 2140, MATH 3610

**Attributes:** Université de Saint-Boniface

**MATH 3911 Sujets choisis en mathématiques 1 3 cr**

Sujet d'intérêt courant en mathématiques ou en mathématiques appliquées, selon les besoins et intérêts des étudiantes et des étudiants et de la professeure ou du professeur, incluant notamment des sujets spécialisés non abordés dans les autres cours offerts par le secteur.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface

## Microbiology (MBIO)

**MBIO 1011 Microbiologie I 3 cr**

(Laboratoire requis) Définition et historique de la microbiologie, des concepts pratiques de la microbiologie, de la structure des cellules procaryotes, de l'expression des gènes spécifiques aux procaryotes, du transfert de l'information génétique, du rôle des microbes dans l'environnement incluant le corps humain, ainsi que des applications de la microbiologie dans la production des aliments et dans la biotechnologie. On ne peut se faire créditer MBIO 1011 et MBIO 1010 (ou les anciens MBIO 2101, MBIO 2100, MBIO 2111 ou MBIO 2110).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : (BIOL 1021 ou BIOL 1020) et [(CHEM 1101 ou CHEM 1100) ou un des anciens (CHEM 1301, CHEM 1300)].

**Equiv To:** MBIO 1010

**Mutually Exclusive:** MBIO 1220, MBIO 2100, MBIO 2101, MBIO 2110, MBIO 2111

**Attributes:** Science

**MBIO 2021 Microbiologie II 3 cr**

(Laboratoire requis) Étude de la croissance bactérienne, de la réplication de l'ADN, des processus de la transcription et de la traduction ainsi que leurs rôles dans la régulation de l'expression génétique. Présentation des familles des bactéries et de virus animaux, de leurs modes de reproduction, de leurs pouvoirs pathogènes. Introduction aux mutations et au transfert de gènes bactériens. On ne peut se faire créditer MBIO 2021 et MBIO 2020 (ou les anciens MBIO 2111 et MBIO 2110).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [MBIO 1011 ou MBIO 1010] et [(CHEM 1111 ou CHEM 1110) et (CHEM 1121, CHEM 1120 ou CHEM 1126)] ou un des anciens (CHEM 1311 ou CHEM 1310 ou CHEM 1320)].

**Equiv To:** MBIO 2020

**Mutually Exclusive:** MBIO 1410, MBIO 2110, MBIO 2111

**Attributes:** Université de Saint-Boniface, Science

**MBIO 2701 Biochimie 1 : molécules biochimiques et introduction à l'énergie métabolique 3 cr**

Le cours vise à faire découvrir le fonctionnement de la cellule en examinant les composés biochimiques les plus importants – les protéines, les glucides, les acides nucléiques ainsi que les lipides. Une introduction à la bioénergétique sera faite en utilisant les concepts d'énergie libre, de catabolisme ainsi que d'ATP. Ce cours est aussi donné comme CHEM 2701. On ne peut se faire créditer MBIO 2701 et MBIO 2700, CHEM 2701, CHEM 2700, MBIO 2730, CHEM 2730, ou les anciens (MBIO 2361, MBIO 2360, CHEM 2361, CHEM 2360, MBIO 2770, CHEM 2770, CHEM 2860).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : un de [(CHEM 1111 ou CHEM 1110) et un de (CHEM 1121 ou CHEM 1120 ou CHEM 1126) ou un des anciens (CHEM 1310 ou CHEM 1311)] et un de (BIOL 1031 ou BIOL 1030).

**Equiv To:** CHEM 2700, CHEM 2701, MBIO 2700

**Mutually Exclusive:** CHEM 2360, CHEM 2361, CHEM 2730, CHEM 2770, MBIO 2360, MBIO 2361, MBIO 2730, MBIO 2770

**Attributes:** Université de Saint-Boniface, Science



**MBIO 2711 Biochimie II : catabolisme, synthèse et voies d'information 3 cr**

Introduction aux processus métaboliques cellulaires de base incluant la production et l'utilisation de l'énergie moléculaire, la dégradation et la synthèse des molécules biochimiques, la synthèse de l'ADN, de l'ARN et des protéines et la régulation de ces processus. Ce cours est aussi donné comme CHEM 2711. On ne peut se faire créditer MBIO 2711 et MBIO 2710, CHEM 2711, CHEM 2710, CHEM 2750, MBIO 2750, ou les anciens (CHEM 2371, CHEM 2370, MBIO 2371, MBIO 2370, MBIO 2780, CHEM 2780).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [un de (CHEM 2701, CHEM 2700, MBIO 2701, MBIO 2700) ou un des anciens (MBIO 2361, MBIO 2360, CHEM 2361, CHEM 2360, CHEM 2860)] et [un de (CHEM 2101, CHEM 2100) ou un des anciens (CHEM 2211 ou CHEM 2210)].

**Equiv To:** CHEM 2710, CHEM 2711, MBIO 2710

**Mutually Exclusive:** CHEM 2370, CHEM 2371, CHEM 2750, CHEM 2780, MBIO 2370, MBIO 2371, MBIO 2750, MBIO 2780

**Attributes:** Université de Saint-Boniface, Science

**MBIO 3011 Mécanismes des maladies microbiennes 3 cr**

Étude des relations hôtes-parasites. Introduction à la réponse immunitaire, à la pathogénie microbienne, aux maladies virales, à la microbiologie clinique, à la santé publique et aux agents antimicrobiens. On ne peut se faire créditer MBIO 3011 et MBIO 3010.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans MBIO 2021, MBIO 2020 ou les anciens MBIO 2100, MBIO 2101.

**Equiv To:** MBIO 3010

**Attributes:** Université de Saint-Boniface, Science

**MBIO 3033 Microbiologie III : Physiologie et Métabolisme 3 cr**

Introduction à la croissance et à la génomique microbiennes ainsi qu'aux techniques moléculaires utilisées pour l'analyse du métabolisme bactérien. À l'aide de ces outils, la physiologie des parois cellulaires bactériennes, le transport et la motilité, ainsi que le métabolisme microbien lié à la production d'ATP, la respiration, la fermentation et la fixation du carbone seront discutés. On ne peut se faire créditer MBIO 3033 et MBIO 3032 (ou les anciens MBIO 3031, MBIO 3030, MBIO 2101, MBIO 2100).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: (MBIO 2021 ou MBIO 2020) et [(un de MBIO 2711, CHEM 2711, MBIO 2710 ou CHEM 2710) ou (un des anciens MBIO 2371, CHEM 2371, MBIO 2370, CHEM 2370, MBIO 2730, CHEM 2730)].

**Equiv To:** MBIO 3032

**Mutually Exclusive:** MBIO 2100, MBIO 2101, MBIO 3030, MBIO 3031

**MBIO 3283 Communautés microbiennes 3 cr**

Ce cours examinera les communautés microbiennes. Il vise à comprendre la composition et les adaptations physiologiques de ces communautés et à étudier leurs effets sur l'environnement abiotique et biologique. Les sujets abordés seront le cycle des nutriments, la biodégradation et l'adaptation aux environnements extrêmes, ainsi que les applications découlant de ces fonctions microbiennes. Les méthodes de quantification de la biomasse microbienne et de l'activité biologique seront discutées. On ne peut se faire créditer MBIO 3283 et MBIO 3282 (ou l'un des anciens MBIO 2280, MBIO 3280). MBIO 2021, MBIO 2020, ou MBIO 1410 sont recommandés.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [MBIO 1011 ou MBIO 1010] et [un de (CHEM 1111, CHEM 1110) (ou l'un des anciens CHEM 1311, CHEM 1310)].

**Equiv To:** MBIO 3282

**Mutually Exclusive:** MBIO 2280, MBIO 3280

**MBIO 3411 Biologie moléculaire 3 cr**

Traitement rigoureux des bases de la biologie moléculaire moderne reliées à la maladie moléculaire, aux manipulations génétiques et cellulaires, ainsi qu'aux contrôles cellulaires. On ne peut se faire créditer MBIO 3411 et MBIO 3410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [(un de MBIO 2701, MBIO 2700, CHEM 2701, CHEM 2700, MBIO 2730 ou CHEM 2730) ou (un des anciens MBIO 2361, MBIO 2360, CHEM 2361, CHEM 2360, MBIO 2770, CHEM 2770)] et [un de MBIO 2021, MBIO 2020, BIOL 2521, BIOL 2520, BIOL 2501, BIOL 2500, PLNT 2520].

**Equiv To:** MBIO 3410

**Mutually Exclusive:** MBIO 1410

**Attributes:** Université de Saint-Boniface, Science

**MBIO 3451 Régulation des processus biochimiques 3 cr**

Mécanismes de régulation de l'activité enzymatique, incluant l'allostérie, le contrôle de certaines routes biosynthétiques ou dégradatives sélectionnées, ainsi que la régulation de l'expression génétique. On ne peut se faire créditer MBIO 3451 et MBIO 3450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [MBIO 2021 ou MBIO 2020] et [(un de MBIO 2711, MBIO 2710, CHEM 2711 ou CHEM 2710) ou (un des anciens MBIO 2371, MBIO 2370, CHEM 2371 ou CHEM 2370)], ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** MBIO 3450

**Attributes:** Université de Saint-Boniface, Science

**MBIO 3461 Biochimie membranaire et cellulaire 3 cr**

(Laboratoire requis) Isolement, fractionnement, structure et fonction des membranes cellulaires et des composés subcellulaires. Mise en évidence du rôle central joué par ces éléments dans la biochimie des processus cellulaires. On ne peut se faire créditer MBIO 3461 et MBIO 3460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : [un de (MBIO 2711, CHEM 2711, MBIO 2710, CHEM 2710) et un de (CHEM 2721, CHEM 2720)] ou [un des anciens (MBIO 2371, CHEM 2371, MBIO 2370, CHEM 2370)].

**Equiv To:** MBIO 3460

**Attributes:** Université de Saint-Boniface, Science

**MBIO 3601 Techniques en microbiologie moléculaire 3 cr**

(Laboratoire autonome) Cours pratique en laboratoire, visant l'apprentissage des techniques fondamentales requises pour travailler dans un laboratoire moderne en microbiologie moléculaire. Les étudiants développeront une compréhension approfondie des théories qui sous-tendent les techniques introduites dans ce cours, les compétences pratiques courantes de la microbiologie moléculaire et l'application de ces techniques afin d'explorer des questions scientifiques telles que l'identification d'inconnues. L'évaluation accentuera la réussite des protocoles et la présentation des résultats, avec une emphase sur la rédaction scientifique. On ne peut se faire créditer MBIO 3601 et MBIO 3600 ou MBIO 4601 ou MBIO 4600 ou MBIO 4030 quand l'intitulé est Advanced Microbial Genetics Lab.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [MBIO 3411 ou MBIO 3410] et [un de (MBIO 2711, CHEM 2711, MBIO 2710, CHEM 2710) et un de (CHEM 2721, CHEM 2720) ou (l'un des anciens MBIO 2371, CHEM 2371, MBIO 2370, CHEM 2370)].

**Mutually Exclusive:** MBIO 4030, MBIO 4600, MBIO 4601

**MBIO 4021 Immunologie 3 cr**

Étude des antigènes, des anticorps, des réactions antigènes-anticorps, de l'immunogénétique, de la régulation de la réponse du système immunitaire, du complément, des réactions d'hypersensibilité, de l'auto-immunité, des déficiences immunitaires, de l'immunologie des greffes et des tumeurs. On ne peut se faire créditer MBIO 4021 et MBIO 4020 (ou les anciens MBIO 4011, MBIO 4010).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : MBIO 3011, MBIO 3010, MBIO 3411 (B) ou MBIO 3410 (B).

**Equiv To:** MBIO 4020

**Mutually Exclusive:** MBIO 4010, MBIO 4011

**MBIO 4411 Virologie 3 cr**

Analyse détaillée des propriétés fondamentales des virus, de la taxonomie virale ainsi que des façons dont les virus se reproduisent. Examen des méthodes expérimentales utilisées en virologie et des façons dont les virus provoquent des maladies. On ne peut se faire créditer MBIO 4411 et MBIO 4410.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [MBIO 3011 ou MBIO 3010] et [MBIO 3411 ou MBIO 3410] et [MBIO 2711, MBIO 2710, CHEM 2711 ou CHEM 2710 (ou un des anciens MBIO 2371, MBIO 2370, CHEM 2371 ou CHEM 2370)].

**Equiv To:** MBIO 4410

**Attributes:** Université de Saint-Boniface, Science

**MBIO 4541 Transduction de l'énergie biologique 3 cr**

Biochimie des processus biologiques comportant l'interconversion des différentes formes d'énergie comme la phosphorylation oxydative, le transport dans les membranes et les processus de contractions. On ne peut se faire créditer MBIO 4541 et MBIO 4540. MBIO 3033 ou MBIO 3032 est recommandé. MBIO 3033 ou MBIO 3032 est recommandé.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : MBIO 2711, MBIO 2710, CHEM 2711 ou CHEM 2710 (ou un des anciens MBIO 2371, MBIO 2370, CHEM 2371 ou CHEM 2370).

**Equiv To:** MBIO 4540

**Attributes:** Université de Saint-Boniface, Science

**MBIO 4581 Technologie de l'ADN recombinant 3 cr**

Techniques d'isolement de plasmides, la digestion de l'ADN par les enzymes (endonucléases) de restriction, le clonage, la détermination de la séquence des nucléotides dans l'ADN, la transformation de l'ADN, le transfert de gènes. On ne peut se faire créditer MBIO 4581 et MBIO 4570.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans MBIO 3411 ou MBIO 3410.

**Equiv To:** MBIO 4580

**Mutually Exclusive:** MBIO 4670, MBIO 4672

**Attributes:** Université de Saint-Boniface, Science

**MBIO 4603 Génétique moléculaire des procaryotes 3 cr**

Étude détaillée des principes qui sous-tendent les mécanismes moléculaires de la génétique bactérienne en se concentrant sur la conjugaison, la transduction, la transformation, la recombinaison et les éléments génétiques mobiles. Les rôles de ces mécanismes dans les approches moléculaires et dans la pathogénie de certains pathogènes bactériens seront également abordés. On ne peut se faire créditer MBIO 4603 et MBIO 4602 ou les anciens (MBIO 4601 et MBIO 4600).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [MBIO 3411 ou MBIO 3410] et [MBIO 2021 ou MBIO 2020].

**Equiv To:** MBIO 4602

**Mutually Exclusive:** MBIO 4600, MBIO 4601

**Attributes:** Université de Saint-Boniface, Science

**MBIO 4613 Génétique moléculaire des eucaryotes 3 cr**

Une étude approfondie de la réplication et l'expression de l'ADN, la structure génomique et le rôle des gènes dans les maladies telles que le cancer. On ne peut se faire créditer MBIO 4613 et MBIO 4612 ou l'ancien MBIO 4610.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [MBIO 3411 or MBIO 3410] et [(un de MBIO 2711, CHEM 2711, MBIO 2710, CHEM 2710) ou (l'un des anciens MBIO 2371, CHEM 2371, MBIO 2370, CHEM 2370)].

**Equiv To:** MBIO 4612

**Mutually Exclusive:** MBIO 4610

## Operations Management (OPM)

**OPM 2601 Principes de la gestion des opérations et de la production 3 cr**

Étude des notions de base en gestion des opérations et de la production, systèmes de production, conception de système, analyse et contrôle.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable ou concomitant : STAT 1001 ou l'équivalent.

**Equiv To:** OPM 2600

**OPM 4611 Gestion de projets 3 cr**

Étude de la gestion de projets. Définition et contexte d'application de la gestion de projets. Techniques, approches et outils de gestion d'un projet en fonction de la structure organisationnelle de l'entreprise et des contraintes de temps, de coût et de qualité.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: GMGT 2081, GMGT 2080 et OPM 2601, OPM 2600.

## Philosophy (PHIL)

**PHIL 1291 Pensée critique 3 cr**

Ce cours aide les étudiants à penser clairement et de manière critique, à présenter, à défendre et à évaluer des arguments. On discutera des bons et des mauvais raisonnements, des sophismes quotidiennes et de certaines formes de raisonnement telles que le syllogisme catégorique et des moyens et des manières de définir les mots. Les étudiants ne peuvent se faire créditer à la fois les cours PHIL 1291 et un quelconque des cours suivants: PHIL 1290 ou PHIL 1320 ou PHIL 1321.

**Equiv To:** PHIL 1290, PHIL 1329

**Mutually Exclusive:** PHIL 1320, PHIL 1321

**PHIL 1401 Introduction à l'éthique 3 cr**

Introduction aux notions fondamentales de la morale et de l'éthique et présentation des théories morales occidentales les plus importantes pour notre appréciation de notre condition morale actuelle : la morale des vertus (Aristote), la morale religieuse (le catholicisme), la morale déontologique (Kant) et la morale utilitariste (Bentham et Mill). Études de problèmes moraux contemporains à partir de ces théories. On ne peut se faire créditer PHIL 1401 et aucun de l'ancien PHIL 2530, l'ancien PHIL 2531.

**Mutually Exclusive:** PHIL 2531

**PHIL 1511 Introduction historique à la philosophie 6 cr**

Introduction aux grands penseurs de la civilisation occidentale des anciens grecs tels que Platon et Aristote jusqu'aux philosophes analytiques et (si possible) aux existentialistes contemporains. Introduction aux grandes questions telles que la nature de la réalité, l'existence de Dieu, la connaissance humaine et la moralité. La logique élémentaire sera aussi étudiée. L'étudiant(e) qui détient les crédits du PHIL 1511 ne peut se faire créditer aucun des cours PHIL 1510 ou PHIL 1200 ou PHIL 1260. Le cours PHIL 1510 fait partie à la fois du groupe 1 et du groupe 2.

**Equiv To:** PHIL 1200, PHIL 1261, PHIL 1510

**Attributes:** Université de Saint-Boniface, Humanities, Recommended Intro Courses

**PHIL 2171 Sujets particuliers 3 cr**

Les sujets traités varient d'année en année. Compte tenu du fait que le contenu de ce cours varie d'année en année, il peut être suivi plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans trois crédits de philosophie ou avoir complété un minimum de 30 crédits universitaires.

**PHIL 2203 Penser le leadership 3 cr**

Étude interdisciplinaire de la théorie et la pratique du leadership. Survol des grandes approches éthiques pouvant guider la prise de décision. Description des sources psychologiques et sociales du leadership, des types de leaders et de leur impact. Présentation de quelques techniques de persuasion et d'activisme employées par les leaders. Aussi offert sous la cote INTC 2203. On ne peut se faire créditer PHIL 2203 et INTC 2203.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 15 crédits universitaire.

**Equiv To:** INTC 2203

**PHIL 2301 Philosophie politique 6 cr**

Analyse et évaluation des doctrines des grands penseurs politiques tels que Platon, Hobbes, Locke, Mill, Marx; leurs idéaux de justice, de liberté, de bonheur, d'égalité et d'épanouissement personnel, leurs théories sur la nature humaine et sur les fondements de la société. L'étudiant(e) ne peut se faire créditer à la fois le PHIL 2301 et le PHIL 2300.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: après avoir complété et réussi 30 unités de cours universitaires.

**Equiv To:** PHIL 2300

**Attributes:** Université de Saint-Boniface, Humanities

**PHIL 2631 Le rationalisme continental 3 cr**

Étude des philosophes du continent: Descartes, Spinoza, Leibniz, qui ont perçu la raison plutôt que l'expérience comme la clé de toute connaissance de l'Univers. On ne peut se faire créditer à PHIL 2631 et PHIL 2630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans six heures-crédits au niveau 1000 en philosophie] ou autorisation écrite du professeur.

**Equiv To:** PHIL 2630

**Attributes:** Université de Saint-Boniface, Humanities

**PHIL 2641 L'empirisme britannique 3 cr**

Revue et analyse des théories des grands empiristes britanniques: Locke, Berkeley et Hume, sur la nature et les fondements de la connaissance humaine et ses relations avec l'expérience. On ne peut se faire créditer à la fois PHIL 2641 et PHIL 2640.

**Equiv To:** PHIL 2640

**Attributes:** Université de Saint-Boniface, Humanities

**PHIL 2661 Aristote 3 cr**

Étude des idées les plus importantes d'Aristote sur la réalité, la connaissance, la nature humaine, la morale et la politique. On ne peut se faire créditer PHIL 2661 et PHIL 2660.

**Equiv To:** PHIL 2660

**Attributes:** Université de Saint-Boniface, Humanities

**PHIL 2701 Philosophie de la religion 6 cr**

Examen critique des raisons pouvant justifier l'attitude religieuse. Le cours portera entre autres sur l'existence de Dieu et sa nature, le mal, la raison et la foi, la signification du discours religieux, la révélation, les miracles, le mysticisme. On ne peut se faire créditer PHIL 2701 et PHIL 2700 ou PHIL 2730.

**Equiv To:** PHIL 2700

**Mutually Exclusive:** PHIL 2730

**Attributes:** Université de Saint-Boniface, Humanities

**PHIL 2741 Éthique et biomédecine 3 cr**

Le cours examine quelques-unes des plus importantes questions d'éthique soulevées par les récents développements en biologie et en médecine. Les sujets à couvrir incluent: l'attribution de rares ressources médicales limitées. la manipulation génétique; l'euthanasie vs la prolongation de la vie; l'avortement et l'infanticide ainsi que l'expérimentation sur des sujets humains. On ne peut se faire créditer PHIL 2741 et [PHIL 2290 ou PHIL 2531].

**Equiv To:** PHIL 2740

**Mutually Exclusive:** PHIL 2290, PHIL 2531

**PHIL 2751 Éthique et environnement 3 cr**

Examen de certaines questions éthiques importantes en rapport avec la pollution de l'environnement et de l'épuisement des ressources. On étudiera (entre autres) : l'idéal des limites de la liberté et de l'environnement, la rareté et l'idéal de la justice, la croissance versus l'état de stabilité économique, les droits des animaux et l'éthique de la survie vs. l'éthique du bien être. On ne peut se faire créditer PHIL 2751 et [PHIL 2290 ou PHIL 2531].

**Equiv To:** PHIL 2750

**Mutually Exclusive:** PHIL 2290, PHIL 2531

**PHIL 2781 Musique et comportement humain 3 cr**

Examen critique de l'influence de la musique sur le comportement humain à partir des penseurs les plus marquants à ce sujet : Pythagore, Platon, Aristote, Philodème de Gadara, Nietzsche, Adorno et Bloom. Écoute d'extraits musicaux pour ancrer les notions dans la réalité musicale ancienne et contemporaine.

**PHIL 2811 Philosophie de l'éducation 3 cr**

Présentation des thèmes centraux à la philosophie de l'éducation : quels sont les traits désirables à acquérir, pourquoi le sont-ils et comment peut-on les acquérir. Le cours présente également différentes réponses à ces questions qu'apportent les théories de la nature humaine. On ne peut se faire créditer PHIL 2811 et aucun de l'ancien PHIL 2810, l'ancien PHIL 3550, l'ancien PHIL 3551.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : avoir complété avec succès 30 crédits universitaires.

**Equiv To:** PHIL 2810

**Mutually Exclusive:** PHIL 3550, PHIL 3551

**PHIL 2823 Philosophie de l'existence 3 cr**

Présentation des principaux thèmes de ce courant philosophique et mise en relief de la vision particulière des auteurs étudiés, en particulier celle de Søren Kierkegaard, de Karl Jaspers, de Martin Buber, de Gabriel Marcel, de Jean-Paul Sartre et de Paul-Louis Landsberg. On ne peut se faire créditer PHIL 2823 et l'ancien PHIL 2820 ou PHIL 2821.

**Mutually Exclusive:** PHIL 2820, PHIL 2821

**PHIL 2831 Éthique des affaires 3 cr**

Le cours explore l'application de la théorie éthique dans les affaires. Les sujets discutés incluent normalement: les théories sur la justice, la responsabilité des corporations, l'éthique dans la publicité, la protection du consommateur et de l' environnement, les préférences à l'embauche. On ne peut se faire créditer PHIL 2831 et PHIL 2830.

**Equiv To:** PHIL 2830

**PHIL 2841 Éthique de la guerre et de la paix 3 cr**

Une étude des questions éthiques relatives à la guerre et à la recherche de la paix qu'on trouve traitées dans les oeuvres des plus grands philosophes et des penseurs politiques et militaires choisis. Les théories morales pertinentes telles que la non-violence, la guerre sainte, la guerre juste, les raisonnements éthiques qui sous-tendent les politiques de dissuasion seront examinées de manière critique dans le contexte historique et contemporain. On ne peut se faire créditer à la fois PHIL 2841 et PHIL 2840.

**Equiv To:** PHIL 2840

**PHIL 2861 Philosophie du droit 3 cr**

Une introduction à la philosophie du droit et au système réglementaire en général. Les sujets abordés incluent: le concept de loi (la loi et la religion, la loi naturelle, et les lois des livres), la relation, s'il y a lieu, entre la loi et la moralité et les politiques du droit au Canada et ailleurs. On ne peut se faire créditer à la fois PHIL 2861 et PHIL 2860.

**Equiv To:** PHIL 2860

**PHIL 2871 La philosophie et le droit 3 cr**

Examen de la philosophie du droit à partir des questions non traitées du cours PHIL 2861. L'étudiant examinera des thèmes tels que: la culpabilité et la responsabilité; les théories du châtement; le droit à la dissidence; le raisonnement légal et l'éthique professionnelle. On ne peut pas se faire créditer à la fois PHIL 2871 et PHIL 2870.

**Equiv To:** PHIL 2870

**PHIL 2901 Philosophie de la démocratie 3 cr**

A partir d'une réflexion portant sur l'émergence de la démocratie et de ses fondements, d'une réflexion portant sur son implantation de plus en plus universelle et d'une réflexion portant sur ce que la démocratie contient comme promesses et dangers, le cours, à l'aide des penseurs les plus importants pour approcher la démocratie, veut aider les étudiant(e)s à mieux comprendre philosophiquement le système politique dans lequel ils vivent.

**PHIL 3223 Philosophie et littérature 3 cr**

Les sujets abordés incluent : l'analyse de l'acte de la lecture, la structure fondamentale de l'œuvre littéraire, les qualités esthétiques de la nouvelle et du roman, la vérité et le mensonge en littérature, le rôle de la littérature dans l'éducation. Dans la deuxième partie, on propose une analyse philosophique des œuvres célèbres de Heinrich von Kleist, de Dostoïevski et d'Orwell.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : avoir complété avec succès 30 crédits universitaires.

**PHIL 3225 Anthropologie philosophique 3 cr**

L'anthropologie philosophique naît du questionnement et de la réflexion portant sur la nature et le sens de la vie humaine. Au-delà de l'analyse proprement philosophique des traits caractéristiques de l'être humain, elle cherche à intégrer et à mettre en valeur les contributions des sciences humaines. Après avoir présenté les points de vue des principaux représentants de ce courant de pensée (Scheler, Plessner, Gehlen, Straus), ce cours propose une réflexion approfondie sur les principales dimensions de l'existence humaine. On ne peut se faire créditer PHIL 3225 et PHIL 3571.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : avoir complété avec succès 30 crédits universitaires.

**Mutually Exclusive:** PHIL 3571

**PHIL 3227 Philosophie de l'histoire 3 cr**

Introduction à la philosophie de l'histoire. Étude historique des réflexions philosophiques concernant le processus et la pratique historique, à travers les oeuvres notamment de St-Augustin, Hegel, Marx, Collingwood, Hempel, Ricoeur. Réfléchir à la pertinence de la philosophie de l'histoire pour les historiens. Aussi offert sous la cote HIST 3227. On ne peut se faire créditer PHIL 3227 et HIST 3227.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans 6 crédits en histoire ou en philosophie ou l'autorisation professorale.

**Equiv To:** HIST 3227

**PHIL 3591 Nietzsche 3 cr**

À partir de la présentation biographique du philosophe et d'une brève présentation de ses opposants philosophiques (Socrate, Rousseau, le judéo-christianisme, le wagnérisme), le cours permet l'approfondissement des thèses et thèmes les plus importants de la pensée nietzschéenne : volonté de puissance, surhomme, mort de Dieu, nihilisme, amor fati, éternel retour du même, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : 30 crédits universitaires.

## Physics (PHYS)

**PHYS 1021 Physique générale I 3 cr**

(Laboratoire requis) Initiation à la physique ne requérant pas de calcul et traitant de certains thèmes tirés de la mécanique et de la thermodynamique avec des exemples tirés des sciences biologiques et physiques. Ce cours, de même que le PHYS 1031, est particulièrement conseillé aux étudiants désireux d'avoir une vue d'ensemble de la physique ou qui ont l'intention d'entreprendre des études dans les sciences de la santé. Il peut aussi servir comme cours de base pour un programme de spécialisation en physique ("B+" ou mieux) ou de majeure en physique ("B" ou mieux). On ne peut se faire créditer PHYS 1021 et PHYS 1020, PHYS 1051, PHYS 1050, PHYS 1410 ou PHYS 1420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [un de Physique 40S, PHYS 0900, PSKL 0100, PHYS 1018 ou l'équivalent] et [un de Mathématiques 40S (pré-calcul), Mathématiques appliquées 40S avec une note minimale de 70%, MATH 0401, MATH 1018, MSKL 0100 ou l'équivalent]. Il est fortement recommandé aux étudiants d'obtenir une note de 70% dans le cours Mathématiques 40S (pré-calcul) et de Physique 40S.

**Equiv To:** PHYS 1020

**Mutually Exclusive:** PHYS 1018, PHYS 1050, PHYS 1051, PHYS 1410, PHYS 1420

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Science, Recommended Intro Courses

**PHYS 1031 Physique générale II 3 cr**

(Laboratoire requis) Découvrez comment la physique est à la base de toute la haute technologie du monde dans lequel on vit et comment on y vit. Apprenez à utiliser des concepts physiques simples et intuitifs, qu'on peut décrire avec peu de mathématiques et sans calcul différentiel et intégral, pour comprendre divers sujets tels que la production d'électricité, les causes de l'effet de serre, ce qui fait briller un diamant, les lasers, la chirurgie LASIK pour les yeux et le fonctionnement de l'œil humain. Comme PHYS 1021, ce cours particulièrement conseillé pour avoir une vue d'ensemble de la physique ou avant d'entreprendre des études en sciences de la santé. On ne peut se faire créditer PHYS 1031 et PHYS 1030, l'ancien PHYS 1410 ou l'ancien PHYS 1420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans un de PHYS 1021, PHYS 1020, PHYS 1051 ou PHYS 1050.

**Equiv To:** PHYS 1030

**Mutually Exclusive:** PHYS 1410, PHYS 1420

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Science, Recommended Intro Courses

**PHYS 1051 Physique I : La mécanique 3 cr**

(Laboratoire requis) La mécanique est la science des fusées! Elle permet de décrire la trajectoire des objets en mouvement (cinématique) et de les expliquer (dynamique). Les concepts de base du calcul ainsi que les lois de la conservation du moment et de l'énergie sont utilisés pour développer les outils nécessaires à la description, à l'analyse et à la prédiction des mouvements linéaires ou en rotation dans les systèmes mécaniques simples. Une brève introduction à la théorie de la relativité restreinte d'Einstein offre un avant-goût des approches modernes.

Ce cours est destiné particulièrement aux étudiants qui voudraient poursuivre leur programme d'études dans les sciences physiques ou en ingénierie. On ne peut se faire créditer PHYS 1051 et PHYS 1050, PHYS 1021, PHYS 1020, l'ancien PHYS 1410 ou l'ancien PHYS 1420.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [un de Physique 40S avec une note minimale de 60%, PHYS 0900, PSKL 0100, PHYS 1018 ou l'équivalent]. Préalables ou concomitants: [un de MATH 1230, MATH 1501, MATH 1500, MATH 1510, MATH 1520, l'ancien MATH 1530 ou MATH 1690]

**Equiv To:** PHYS 1050

**Mutually Exclusive:** PHYS 1018, PHYS 1020, PHYS 1021, PHYS 1410, PHYS 1420

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**PHYS 1071 Physique II : La physique des ondes et la physique moderne 3 cr**

(Laboratoire requis) Au cœur des communications modernes, les ondes et les oscillations sont la clé de la compréhension du monde qui nous entoure, des échelles subatomiques jusqu'au cosmos lui-même en passant par la biologie, le débit de la circulation, la bourse et les changements climatiques. Découvrez le mystérieux monde quantique, les bases de la dernière nanotechnologie et dans quelles circonstances les particules sont des ondes et les ondes, des particules. Explore le modèle de l'atome de Bohr et découvrez le principe d'incertitude de Heisenberg. Ce cours fait appel au calcul différentiel et intégral pour traiter les concepts sous-jacents de l'ingénierie et de la physique moderne. Destiné, comme PHYS 1051, à ceux et celles qui veulent suivre un programme d'études en sciences physiques. On ne peut se faire créditer PHYS 1071 et PHYS 1070, l'ancien PHYS 1410 ou l'ancien PHYS 1420 ou PHYS 2152.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans PHYS 1051 ou PHYS 1050] ou [une note minimale de B dans PHYS 1021 ou PHYS 1020] et [une note minimale de C dans un de MATH 1230, MATH 1501, MATH 1500, MATH 1510 ou MATH 1520 ou l'ancien MATH 1530]. Préalable ou concomitant : un de MATH 1232, MATH 1690, MATH 1701, MATH 1700 ou l'ancien MATH 1710. Recommandé pour entrer dans les programmes spécialisés (avec une note minimale de B).

**Equiv To:** PHYS 1070

**Mutually Exclusive:** PHYS 1410, PHYS 1420, PHYS 2152

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**PHYS 1301 Énergie et environnement 6 cr**

Présentation des particularités physiques générales de notre environnement. Étude de certains problèmes d'actualité, à savoir l'atmosphère, le cosmos, la structure de la matière et de l'énergie, les sources d'énergie, l'application des principes de la physique à la technologie moderne, etc. Projections de films et démonstrations. La participation aux discussions et au choix des sujets à traiter est encouragée. Conçu pour les étudiantes et étudiants de toutes les facultés, ce cours n'exige aucune connaissance des mathématiques ou de la physique. Il ne peut être reconnu aux fins des programmes de mineure ou de majeure en physique. On ne peut se faire créditer PHYS 1301 et PHYS 1300.

**Equiv To:** PHYS 1300

**Mutually Exclusive:** PHYS 1303

**Attributes:** Université de Saint-Boniface, Science, Recommended Intro Courses

**PHYS 1303 Énergie et durabilité 3 cr**

Ce cours présente les différentes sources d'énergie découvertes par l'homme, leurs méthodes d'exploitation et impact sur l'environnement. Étude des concepts physiques sous-jacents et des diverses solutions retenues : combustion du bois, énergies fossiles et nucléaires, récentes technologies de production d'énergie renouvelable. Analyse des conséquences de l'exploitation des ressources sur la préservation de l'environnement et de la ressource elle-même. Réflexion sur le lien étroit entre l'évolution de l'humanité et l'énergie qu'elle produit. Ce cours est conçu pour les étudiantes et étudiants de toutes les facultés. Les mathématiques pourront être utilisées pour soutenir et clarifier certaines discussions mais ne fera appel qu'à des connaissances de base. Ce cours ne peut pas être reconnu aux fins d'un programme de mineure, de majeure ou spécialisé en physique. On ne peut se faire créditer PHYS 1303 et [PHYS 1301, l'ancien PHYS 1300, PHYS 2350].

**Mutually Exclusive:** PHYS 1300, PHYS 1301, PHYS 2350

**Attributes:** Université de Saint-Boniface, Science

**PHYS 2261 Optique 3 cr**

(Laboratoire requis) Étude de la réfraction, de la réflexion, des systèmes de lentilles simples et des systèmes optiques, de la dispersion, de l'achromatisme. Vue élémentaire de la diffraction, de l'interférence et de la polarisation. On ne peut se faire créditer PHYS 2261 et PHYS 2260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans PHYS 1051 ou PHYS 1050] ou [une note minimale de C+ dans PHYS 1021 ou PHYS 1020] et [une note minimale de C dans un de MATH 1230, MATH 1501, MATH 1500, MATH 1510, MATH 1520, ou MATH 1690]. Prérequis ou concomitants : [un de PHYS 1031, PHYS 1030, PHYS 1071, PHYS 1070 ou PHYS 2152] et [un de MATH 1220, MATH 1301, MATH 1300 ou MATH 1310] et [un de MATH 1232, MATH 1690, MATH 1701, MATH 1700 ou MATH 1710].

**Equiv To:** PHYS 2260

**Attributes:** Université de Saint-Boniface, Science

## Political Studies (POLS)

**POLS 1503 Introduction à la politique I 3 cr**

Introduction aux concepts fondamentaux à l'analyse des phénomènes politiques. Problèmes et enjeux associés à l'exercice de l'autorité et à la construction de la légitimité politique. Exploration des dynamiques politiques au sein des institutions politiques : démocraties libérales et régimes autoritaires. On ne peut se faire créditer POLS 1503 et POLS 1500 ou l'ancien POLS 1501.

**Mutually Exclusive:** POLS 1500, POLS 1501, POLS 1502

**POLS 1505 Introduction à la politique II 3 cr**

Aperçu des principales idéologies contemporaines. Évaluation de leur rôle dans les dynamiques politiques. Parmi les idéologies existantes, seront principalement abordées: libéralisme, néo-libéralisme, conservatisme, fascisme, néo-conservatisme, socialisme, anarchisme, féminisme. On ne peut se faire créditer POLS 1503 et POLS 1500 ou l'ancien POLS 1501.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: POLS 1503.

**Mutually Exclusive:** POLS 1500, POLS 1501

**POLS 2003 Introduction à la politique comparée I 3 cr**

Introduction à l'étude comparative de processus et dynamiques politiques internes aux états, dans différents contextes historiques, culturels et institutionnels. Méthodes, approches, typologies et concepts utilisés dans l'analyse comparée des dynamiques et processus politiques : révolutions sociales, contre-révolution, modernisation, démocratisation, industrialisation, formes variées d'action collective. On ne peut se faire créditer POLS 2003 et POLS 2000.

**Mutually Exclusive:** POLS 2000, POLS 2602

**POLS 2005 Introduction à la politique comparée II 3 cr**

Introduction à l'étude comparative des institutions et des régimes politiques dans différents contextes historiques, culturels et institutionnels. Méthodes, approches, typologies et concepts utilisés dans l'analyse comparée des institutions et régimes politiques : démocraties libérales, régimes totalitaires, autoritaires et post-communistes. On ne peut se faire créditer POLS 2005 et POLS 2000.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : POLS 2003.

**Mutually Exclusive:** POLS 2000, POLS 2602

**POLS 2043 Introduction à la politique globale I 3 cr**

Introduction à l'analyse des actions et des interactions politiques au sein du système mondial. Analyse de la formation et des transformations des normes et du cadre institutionnel qui influencent les interactions entre les divers acteurs du système mondial : compétition, conflit et coopération. Analyse du processus d'institutionnalisation des asymétries de pouvoir au sein du système mondial sur la longue durée. On ne peut se faire créditer POLS 2043 et POLS 2040 ou l'ancien POLS 2041.

**Mutually Exclusive:** POLS 2040, POLS 2041, POLS 2502

**POLS 2045 Introduction à la politique globale II 3 cr**

Aperçu des grandes traditions théoriques pour l'étude des actions et des interactions politiques internationales : idéalisme, réalisme et marxisme. Aperçu des transformations contemporaines des structures et dynamiques du système mondial : Sécurité, guerre, droit et institutions internationales et émergence des acteurs transnationaux. On ne peut se faire créditer POLS 2045 et POLS 2040 ou l'ancien POLS 2041.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : POLS 2043.

**Mutually Exclusive:** POLS 2040, POLS 2041, POLS 2504

**POLS 2051 Préparation aux carrières dans la fonction publique 3 cr**

Introduction aux concepts, théories et enjeux de l'administration publique dans une perspective fédérale, provinciale et municipale. Étude des principales structures et de la fonction publique, de ses relations avec le pouvoir politique, du processus budgétaire, des mécanismes de contrôle et de l'élaboration des politiques publiques. On ne peut se faire créditer POLS 2051 et l'ancien POLS 2571 ou POLS 2902.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: POLS 1503 ou l'autorisation professorale.

**Mutually Exclusive:** POLS 2570, POLS 2571, POLS 2902

**POLS 2053 Introduction à la politique africaine 3 cr**

Analyse des enjeux politiques et sociaux de l'Afrique contemporaine. Analyse de la singularité des trajectoires historiques et socioculturelles du processus de formation de l'État en Afrique depuis la colonisation jusqu'à nos jours. Les thèmes suivants seront abordés: gouvernance et démocratisation; néopatrimonialisme et corruption; guerres et conflits civils; développement économique et social; relation entre l'Afrique et la communauté internationale. On ne peut se faire créditer POLS 2053 et POLS 3141 quand l'intitulé est Politique africaine contemporaine.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: POLS 1503 ou l'autorisation professorale.

**Mutually Exclusive:** POLS 3141

**POLS 2073 Introduction à la politique canadienne 1 : État et société 3 cr**

Étude du processus de formation et de transformation de l'État canadien de la Confédération au contexte contemporain. Analyse du développement des formes d'intervention étatique sur la société canadienne et de leurs transformations sur la longue durée. Analyse des forces sociales, des conflits sociaux et des idéologiques politiques, tant au niveau national que régional, sur la configuration des institutions politiques canadiennes. On ne peut faire créditer POLS 2073 et l'ancien POLS 2071 ou POLS 2070.

**Mutually Exclusive:** POLS 2070, POLS 2071, POLS 2702

**POLS 2075 Introduction à la politique canadienne II : Institutions et politiques publiques 3 cr**

Étude des principales institutions politiques canadiennes, incluant la Constitution, le fédéralisme, le système électoral, les pouvoirs exécutif, législatif, judiciaire, administratif et médiatique. Le cours analysera aussi des politiques publiques centrales qui illustrent le fonctionnement et l'interaction de ces institutions. On ne peut se faire créditer POLS 2075 et l'ancien POLS 2071 ou POLS 2070.

**Mutually Exclusive:** POLS 2070, POLS 2071, POLS 2702

**POLS 2513 Pensée politique classique 3 cr**

Les grandes questions de la pensée politique analysées à travers la lecture critique des auteurs classiques depuis l'Antiquité jusqu'au XVI<sup>e</sup> siècle. Permanence, pertinence actuelle et discontinuités de la réflexion politique. Les auteurs, situés dans leur contexte historique, comprendront notamment Platon, Aristote, Cicéron, Saint Augustin, Saint Thomas d'Aquin et Machiavelli. On ne peut se faire créditer POLS 2513 et POLS 2510 ou l'ancien POLS 2511.

**Mutually Exclusive:** POLS 2510, POLS 2511, POLS 3310

**POLS 2515 Pensée politique moderne 3 cr**

Introduction à la genèse et au développement des grands courants de pensée des XVII<sup>e</sup>, XVIII<sup>e</sup> et XIX<sup>e</sup> siècles. Les idées libérales et leurs critiques situées dans leur contexte historique. Les concepts du libéralisme et les idées de l'égalitarisme social. Les auteurs étudiés incluront notamment Hobbes, Locke, Rousseau, Burke, Smith et Marx. On ne peut se faire créditer POLS 2515 et POLS 2510 ou l'ancien POLS 2511.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : POLS 2513.

**Mutually Exclusive:** POLS 2510, POLS 2511, POLS 3380

**POLS 3141 Sujets particuliers en politique 1 3 cr**

Contenu du cours variable d'année en année. Contacter le département pour une description de cours. On ne peut se faire créditer POLS 3141 et POLS 3140 (019.314). Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** POLS 2053

**Attributes:** Université de Saint-Boniface, Social Science

**POLS 3151 Sujets particuliers en politique 2 3 cr**

Contenu du cours variable d'année en année. Contacter le département pour une description de cours. On ne peut se faire créditer POLS 3151 et POLS 3150. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Social Science

**POLS 3161 Droits de la personne et libertés civiles 3 cr**

Une étude des fondements des systèmes modernes de droits de la personne dans les démocraties libérales. Les thèmes abordés incluent les principaux arguments philosophiques relatifs aux droits de la personne, les principales théories des droits, ainsi que les conventions internationales et les systèmes de protection des droits de la personne.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans POLS 2515 ou POLS 2510 (ou l'ancien POLS 2511) ou POLS 2070 (ou l'ancien POLS 2171) ou (POLS 2073 et POLS 2075)] ou l'autorisation de la professeure ou professeur.

**Equiv To:** POLS 3160

**POLS 3171 La Charte canadienne des droits et libertés 3 cr**

Une étude systématique des droits et libertés garantis par la Charte à travers les jugements de la Cour suprême. Des thèmes supplémentaires sont abordés, dont les sources historiques, politiques et intellectuelles de la protection des droits au Canada, ainsi qu'un survol des lois canadiennes relatives aux droits de la personne.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans POLS 2071 ou POLS 2070 (ou l'ancien POLS 2171) ou (POLS 2073 et POLS 2075)] ou l'autorisation de la professeure ou du professeur.

**Equiv To:** POLS 3170

**POLS 3181 Droits humains dans le système mondial 3 cr**

Analyse du développement des droits humains comme projet politique. Introduction aux chartes et instruments juridiques internationaux encadrant les droits humains. Analyse de leur développement, évolution et mise en application depuis 1945. Mise en relation du processus de mondialisation et de ses effets en termes d'insécurité des populations vulnérables. Analyse de situations de violation de droits humains (civils, politiques, économiques et sociaux) dans le contexte de la mondialisation au moyen d'études de cas.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans POLS 2041 ou POLS 2040, ou dans POLS 2043 et POLS 2045, ou l'autorisation écrite de la professeure ou du professeur.

**POLS 3211 Sociopolitique des conflits armés 3 cr**

Analyse des causes (endogènes et exogènes), déroulement, conséquences et prévention des conflits armés à partir d'études de cas. Évolution des notions de conflit, de guerre et de sécurité. Transformations de la pratique et de la conduite des conflits armés depuis 1945.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de B dans POLS 2040 ou POLS 2041 ou POLS 2043 et POLS 2045.

**POLS 3251 Économie politique internationale 3 cr**

Étude des interrelations entre processus politiques, production et distribution de la richesse dans l'environnement international. Accent mis autant sur le développement historique, les perspectives théoriques majeures que sur les enjeux fondamentaux en économie politique internationale. On ne peut se faire créditer POLS 3251 et POLS 3250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans POLS 2040 ou POLS 2041 ou POLS 2043 et POLS 2045 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** POLS 3250

**Mutually Exclusive:** POLS 3540

**Attributes:** Université de Saint-Boniface, Social Science

**POLS 3563 Le Canada dans le système mondial 3 cr**

Aperçu du rôle et de l'influence de l'État canadien au sein du système mondial depuis la Deuxième Guerre mondiale. Analyse des grandes mutations du système mondial et leurs effets sur la formulation et la conduite de la politique étrangère et de la défense canadienne. La participation canadienne au sein des institutions et forums multilatéraux en relation avec le processus de mondialisation. On ne peut se faire créditer POLS 3563 et POLS 3520 ou POLS 3561.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans POLS 1500 ou POLS 1501 ou dans POLS 1503 et POLS 1505 ou l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** POLS 3512, POLS 3514, POLS 3520, POLS 3561

**POLS 3621 Violence politique 3 cr**

Causes et formes de la violence visant le changement politique, le contrôle de l'État, le renversement d'un régime ou la modification des frontières politiques existantes. Analyse de la violence politique mobilisée par les acteurs étatiques et non-étatiques tant à l'intérieur qu'à l'extérieur des frontières nationales. Manifestations extrêmes de la violence politique : Guérillas, terrorisme et terrorisme d'État, émeutes, violence à caractère ethnique et religieux.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans POLS 1500 ou POLS 1501 ou dans POLS 1503 et POLS 1505.

**Mutually Exclusive:** POLS 3540

**POLS 3771 Organisations internationales: L'ONU et ses institutions spécialisées 3 cr**

Étude du rôle et des fonctions joués par les organisations internationales au sein du système mondial. Analyse du système des Nations Unies et de ses diverses composantes en relation avec les mutations de la configuration des rapports de pouvoir au sein du système mondial. Apports et limites des mécanismes assurant le principe de sécurité collective et la résolution pacifique des différends. On ne se peut faire créditer POLS 3371 et POLS 3550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans [POLS 2040 ou POLS 2041 ou POLS 2043] et POLS 2045, ou l'autorisation professorale.

**Mutually Exclusive:** POLS 3550

**POLS 3841 Les approches théoriques en relations internationales 3 cr**

Étude des différentes approches théoriques utilisées dans l'analyse des relations internationales, ainsi que des méthodologies utilisées par les analystes de la politique internationale. On ne peut se faire créditer POLS 3841 et POLS 3840.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans POLS 2041 ou POLS 2040 ou dans POLS 2043 et POLS 2045, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** POLS 3840

**Mutually Exclusive:** POLS 4580

**Attributes:** Université de Saint-Boniface, Social Science

**POLS 3881 Politique étrangère comparée 3 cr**

Étude comparative des facteurs internationaux, régionaux et domestiques qui façonnent la formulation de la politique étrangère des États. Analyse des causes des similarités et différences dans la formulation de la politique étrangère des États à partir d'études de cas choisies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans POLS 2040 ou POLS 2041 ou POLS 2043 et POLS 2045.

**Equiv To:** POLS 3880

**POLS 3951 Méthodes de recherche en sciences politiques 3 cr**

Introduction aux principales méthodes de recherche quantitative et qualitative utilisées dans l'étude des phénomènes politiques. Les méthodes abordées sont : conduite d'entrevues, analyse de contenu, études comparatives, questionnaires de sondage, échantillonnage, éthique de la recherche et analyse statistique de base. On ne peut se faire créditer POLS 3951 et POLS 3950.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans 6 crédits de sciences politiques de niveau 2000 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** POLS 3950

## Psychology (PSYC)

**PSYC 1211 Introduction à la psychologie I 3 cr**

Étude des processus fondamentaux sous-jacents à la psychologie tels que les bases biologiques des comportements, les processus sensoriels, la perception, les états de conscience, l'apprentissage et la mémoire. Description des méthodes de recherche propres à la psychologie scientifique. On ne peut se faire créditer PSYC 1211 et PSYC 1201 ou PSYC 1200.

**Mutually Exclusive:** PSYC 1200, PSYC 1201

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 1221 Introduction à la psychologie II 3 cr**

Étude des connaissances utilisées par les psychologues pour aider l'être humain dans sa compréhension personnelle et ses interactions sociales. Exploration des motivations, de l'intelligence, de la personnalité et de la psychopathologie. Description des outils et des méthodes de travail propres à la psychologie appliquée. On ne peut se faire créditer PSYC 1221 et PSYC 1201 ou PSYC 1200.

**Mutually Exclusive:** PSYC 1200, PSYC 1201

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 2251 Introduction à la recherche en psychologie 3 cr**

Étude de la psychologie comme discipline scientifique et description des méthodes de collecte et d'interprétation des données en psychologie. Cours obligatoire pour la majeure devant être suivi en deuxième année. Accompagné d'une séance de travaux dirigés hebdomadaire. On ne peut se faire créditer PSYC 2251 et PSYC 2250.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans PSYC 1201 ou PSYC 1200, ou dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 2250

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 2261 Introduction aux méthodes de recherche en psychologie 3 cr**

Étude des concepts inductifs d'inférence et d'explication. Les schèmes de recherche en psychologie. Cours obligatoire pour la majeure devant être suivi en deuxième année. Accompagné d'une séance de travaux dirigés hebdomadaire. Reconnu aux fins des exigences en mathématiques pour l'obtention du baccalauréat. On ne peut se faire créditer PSYC 2261 et PSYC 2260.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans PSYC 2251 ou PSYC 2250.

**Equiv To:** PSYC 2260

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Social Science

**PSYC 2291 Le développement de l'enfant 3 cr**

Étude du développement psychologique normal de la période prénatale à la puberté. Présentation des méthodes de recherche utilisées dans l'étude de l'enfant. On ne peut se faire créditer à la fois PSYC 2291 et PSYC 2290.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans PSYC 1201 ou PSYC 1200, ou dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 2290

**Mutually Exclusive:** FMLY 2600

**Attributes:** Université de Saint-Boniface, Social Science



**PSYC 2361 Cerveau et comportement 3 cr**

Étude de la relation entre le cerveau et les comportements. Apprentissage des éléments fondamentaux du système nerveux et comment ils s'intègrent pour assumer les sensations, le contrôle moteur, les émotions, le sommeil, l'apprentissage et la mémoire. On ne peut se faire créditer PSYC 2361 et aucun de PSYC 2360, PSYC 3530 ou PSYC 3540 quand l'intitulé est "Cerveau et comportement".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans PSYC 1200 ou dans l'ancien PSYC 1201 ou une note minimale de C dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 2360

**PSYC 2441 Principes de modification du comportement 3 cr**

Discussion des hypothèses fondamentales, des principes et des méthodes de modification du comportement à partir d'exemples tirés du comportement humain, normal et anormal. Projets de recherche supervisés dans des secteurs d'application précis ou recherche fondamentale sur le comportement. On ne peut se faire créditer PSYC 2441 et PSYC 2440.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans PSYC 1201 ou PSYC 1200 ou dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 2440

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 2481 Processus cognitifs 3 cr**

Une introduction aux processus langage, supérieurs dans une perspective de traitement de l'information. Les sujets abordés incluent l'attention, le développement cognitif, l'imagerie, le langage, la mémoire et la résolution de problèmes. Le cours sera basé sur de nombreuses références aux résultats expérimentaux récents. L'étudiant(e) ne peut se faire créditer à la fois le PSYC 2481 et le PSYC 2480.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans le PSYC 1200 ou le PSYC 1201] ou [une note minimale de C dans tous les deux PSYC 1211 et PSYC 1221] ou l'autorisation écrite du professeur.

**Equiv To:** PSYC 2480

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 2491 Psychologie de l'anormal 3 cr**

Étude de la théorie et de la recherche dans le domaine du comportement anormal de l'être humain. Discussion des formes principales des troubles psychologiques, leur prévention et leur traitement. On ne peut se faire créditer PSYC 2491 et aucun des PSYC 2490, l'ancien PSYC 3460, l'ancien PSYC 3461.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans PSYC 1200 ou dans l'ancien PSYC 1201 ou une note minimale de C dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 2490, PSYC 3460, PSYC 3461

**PSYC 2531 Psychologie de la personnalité 3 cr**

Étude de la théorie et de la recherche dans les principes qui gouvernent le développement de la personnalité. On ne peut se faire créditer PSYC 2531 et aucun de PSYC 2530, l'ancien PSYC 3451, l'ancien PSYC 3450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans PSYC 1200 ou dans l'ancien PSYC 1201 ou une note minimale de C dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 2530, PSYC 3450, PSYC 3451

**PSYC 2541 Psychologie sociale 3 cr**

Introduction aux façons par lesquelles nous affectons et sommes affectés par le comportement des autres. Les sujets abordés incluent typiquement : attitudes et changement d'attitudes, croyances et jugements sociaux, conformisme, persuasion, normes et rôles sociaux, dynamiques de groupes, préjugés, agression, altruisme, attraction et relations interpersonnelles ainsi que les conflits intergroupes. On ne peut se faire créditer PSYC 2541 et aucun de PSYC 2540, l'ancien PSYC 2410, l'ancien PSYC 2411, l'ancien PSYC 2420 ou l'ancien PSYC 2421.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans l'ancien PSYC 1201 ou dans PSYC 1200 ou une note minimale de C dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 2540

**Mutually Exclusive:** PSYC 2410, PSYC 2411, PSYC 2420, PSYC 2421

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 3131 Psychologie de la santé 3 cr**

Introduction au domaine de la psychologie de la santé. On y étudie comment les interactions complexes entre des facteurs environnementaux, psychologiques, neurologiques et immunitaires contribuent au maintien de la santé et, par conséquent, au développement des maladies. On ne peut se faire créditer PSYC 3131 et aucun de PSYC 3130, PSYC 3530 ou PSYC 3531 quand l'intitulé est "Psychologie de la santé".

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans PSYC 2541 ou PSYC 2540 ou l'ancien PSYC 2410 ou l'ancien PSYC 2411 ou l'ancien PSYC 2420 ou l'ancien PSYC 2421 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 3130

**Mutually Exclusive:** PSYC 3530, PSYC 3531

**PSYC 3151 Domaines d'application de la modification du comportement 3 cr**

Descriptions détaillées des lignes directrices pour le design, la mise en pratique et l'évaluation des méthodes de modification du comportement. Possibilité de réaliser un projet de recherche supervisé dans des domaines d'application spécifique ou de recherche fondamentale sur le comportement. On ne peut se faire créditer PSYC 3151 et aucun des PSYC 3150, l'ancien PSYC 2451, l'ancien PSYC 2450.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans PSYC 2441 ou PSYC 2440, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 3150

**Mutually Exclusive:** PSYC 2450, PSYC 2451

**PSYC 3311 Le développement de l'adolescent 3 cr**

Étude du développement psychologique normal de la puberté au stade adulte, à l'aide des résultats de recherches scientifiques. On ne peut se faire créditer PSYC 3311 et aucun des PSYC 3310, l'ancien PSYC 2311, l'ancien PSYC 2310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans PSYC 2291 ou PSYC 2290, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 2310, PSYC 2311, PSYC 3310

**PSYC 3341 Design et analyse de données en recherche en psychologie 3 cr**

Étude des méthodes visant à contrôler la validité interne des études en psychologie. L'échantillonnage aléatoire et stratifié, la distribution aléatoire, la configuration factorielle et les plans à mesures répétées sont discutés. Les méthodes d'analyse descriptive et d'analyse multivariée sont présentées. L'utilisation de logiciels statistiques est illustrée. On ne peut se faire créditer PSYC 3341 et PSYC 3340 ou l'ancien PSYC 4570.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de B dans PSYC 2261 ou PSYC 2260 ou PSYC 2300 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 3340, PSYC 4570

**PSYC 3351 Neurosciences du comportement 3 cr**

Présentation des fondements de la neurobiologie du comportement. Accent mis sur les propriétés du traitement de l'information du système nerveux de façon à offrir un cadre de référence à la compréhension de thèmes tels la perception, l'attention, le sommeil et la vigilance, la motivation et l'apprentissage. On ne peut se faire créditer PSYC 3351 et PSYC 3350, PSYC 3331 ou PSYC 3330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans PSYC 1201 ou PSYC 1200 ou dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 3330, PSYC 3331, PSYC 3350

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 3441 Perception 3 cr**

Survol des méthodes et des techniques qui traitent de l'interaction entre les informations sensorielles et les informations existantes au sein de l'organisme. La psychophysique, les constances perceptuelles, l'apprentissage perceptuel, l'adaptation et les distorsions. On ne peut se faire créditer PSYC 3441 et PSYC 3160.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: une note minimale de C dans PSYC 1201 ou PSYC 1200 ou dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 3160

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 3481 Psychologie des relations interculturelles et intergroupes 3 cr**

Étude des aspects psychologiques impliqués dans les relations entre individus ou groupes d'individus issus de cultures ou sous-cultures différentes. Définition des concepts de stéréotype, de préjugé et de discrimination et exploration de leurs sources d'influence respectives. Présentation des grandes théories qui visent à expliquer les conflits interculturels et intergroupes et celles qui visent à promouvoir de bonnes relations entre cultures. On ne peut se faire créditer PSYC 3481 et INTL 4481.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans PSYC 1201 ou PSYC 1200 ou dans PSYC 1211 et PSYC 1221, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** INTL 4481

**PSYC 3511 Psychologie industrielle et organisationnelle 3 cr**

Examen des modèles théoriques contemporains et de la recherche portant sur les aspects psychologiques impliqués dans le comportement en milieu de travail. Les thèmes abordés incluent la sélection du personnel, les processus de groupes, la satisfaction, la productivité et la culture organisationnelle. On ne peut se faire créditer PSYC 3511 et PSYC 3510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [une note minimale de C dans le PSYC 1200 ou le PSYC 1201] ou [une note minimale de C dans tous les deux PSYC 1211 et PSYC 1221] ou l'autorisation écrite du professeur.

**Equiv To:** PSYC 3510

**PSYC 3531 Problèmes contemporains 1 3 cr**

Contenu variable d'année en année, mais traitant généralement d'un sujet d'actualité concernant la psychologie ou l'analyse psychologique d'un problème d'intérêt public. On ne peut se faire créditer PSYC 3531 et PSYC 3530 quand le sujet est le même. Le contenu varie d'année en année, il est donc possible de se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : [une note minimale de C dans PSYC 1200 ou l'ancien PSYC 1201] ou [une note minimale de C dans PSYC 1211 et PSYC 1221], et l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 3530

**Mutually Exclusive:** PSYC 3130, PSYC 3131

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 3631 Mesure et évaluation en psychologie 3 cr**

Étude et application des principes de la mesure dans divers domaines psychologiques. Étude des concepts de validité, de constance, d'échelonnement, et de variance. Introduction à la construction et à l'utilisation de différents tests psychologiques. On ne peut se faire créditer PSYC 3631 et PSYC 3630.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de B dans PSYC 2261 ou PSYC 2260 ou l'ancien PSYC 2300, et l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** PSYC 3630

**Attributes:** Université de Saint-Boniface, Social Science

**PSYC 3641 Introduction à la neuropsychologie 3 cr**

Un survol des connaissances actuelles touchant les relations entre le cerveau et les comportements humains. Organisation du système nerveux, désordres neurologiques, effets des lésions cérébrales sur les comportements (agnosie, aphasie, apraxie, négligence, etc.) asymétrie cérébrale, applications cliniques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans PSYC 1201 ou PSYC 1200 ou dans PSYC 1211 et PSYC 1221 ou l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Social Science

## Religion (RLGN)

**RLGN 1283 Le Christianisme ancien et médiéval (A) 3 cr**

Étude des affirmations et des pratiques chrétiennes à partir de l'histoire du christianisme dès son début jusqu'à la fin du moyen âge. On ne peut se faire créditer RLGN 1283 et l'ancien RLGN 1281.

**Mutually Exclusive:** RLGN 1281

**RLGN 1285 Le Christianisme depuis la renaissance (A) 3 cr**

Étude des affirmations et des pratiques chrétiennes à partir de l'histoire du christianisme de la Réforme protestante jusqu'au présent. On ne peut se faire créditer RLGN 1285 et l'ancien RLGN 1281.

**Mutually Exclusive:** RLGN 1281

**RLGN 1323 Introduction aux religions du monde I 3 cr**

Aperçu de l'histoire, des grandes idées et pratiques des grandes religions du monde à partir de leur littérature et de leurs traditions : l'hindouisme, le bouddhisme, le sikhisme, le confucianisme et le taoïsme. On ne peut se faire créditer RLG 1323 et RLG 1321 ou RLG 1320.

**Equiv To:** RLG 1322

**Mutually Exclusive:** RLG 1320, RLG 1321

**RLGN 1325 Introduction aux religions du monde II (B) 3 cr**

Un aperçu de l'histoire, les grandes idées et pratiques des grandes religions du monde à partir de leur littérature et les traditions : le judaïsme, le Christianisme, l'Islam et les traditions des Amériques et de l'Afrique. On ne peut se faire créditer RLG 1325 et RLG 1320 ou RLG 1321.

**Equiv To:** RLG 1324

**Mutually Exclusive:** RLG 1320, RLG 1321

**RLGN 1421 Éthique religieuse (C) 3 cr**

Un examen de la pensée éthique de représentants d'une ou de plusieurs traditions religieuses. Une attention spéciale est portée sur des sujets comme la nature du bien et de la vertu, la place des lois ou commandements, et en relation entre la religion et la moralité. L'étudiant(e) qui détient le crédits du RLG 1421 ne peut se faire créditer aucun des cours RLG 1420.

**Equiv To:** RLG 1420

**Attributes:** Université de Saint-Boniface, Humanities, Recommended Intro Courses

**RLGN 2161 Introduction à l'Ancien Testament 3 cr**

Un aperçu de l'histoire, de la littérature et des idées religieuses de l'Ancien Testament. On ne peut se faire créditer RLG 2161 et RLG 2231 ou RLG 2160.

**Equiv To:** RLG 2160

**Mutually Exclusive:** RLG 2231

**RLGN 2171 Introduction au Nouveau Testament 3 cr**

Un aperçu de l'histoire, de la littérature et des idées religieuses du Nouveau Testament. On ne peut se faire créditer RLG 2171, RLG 2170 ou RLG 2711.

**Equiv To:** RLG 2170

**Mutually Exclusive:** RLG 2711

**RLGN 2413 Les religions établies au Canada (C) 3 cr**

Un aperçu historique des institutions et groupes religieux établis avant le 19<sup>e</sup> siècle, au Canada, notant comment ceux-ci répondent aux caractéristiques spéciales de la vie canadienne. On ne peut se faire créditer RLG 2413 et RLG 2410 ou RLG 2411.

**Mutually Exclusive:** RLG 2410, RLG 2411

**RLGN 2415 Les nouvelles religions au Canada (C) 3 cr**

Un aperçu historique et phénoménologique des nouvelles institutions et groupes religieux au Canada, visant comment ceux-ci répondent aux caractéristiques spéciales de la vie canadienne. On ne peut se faire créditer RLG 2415 et RLG 2410 ou RLG 2411.

**Mutually Exclusive:** RLG 2410, RLG 2411

**RLGN 2591 La religion et les problèmes sociaux (C) 3 cr**

Les problèmes tels que l'ordre, la justice, la guerre, le changement social, la désobéissance civile, l'avortement et l'euthanasie seront considérés à la lumière des ressources d'une ou de plusieurs traditions religieuses. L'étudiant(e) ne peut se faire créditer à la fois le RLG 2591 et le RLG 2590.

**Equiv To:** RLG 2590

**Attributes:** Université de Saint-Boniface, Humanities

**RLGN 2681 Les femmes et les religions I (C) 3 cr**

Le contenu de ce cours varie d'année en année. Toutefois, il traite, à travers divers modèles interprétatifs contemporains, de sujets d'intérêt courant en lien avec la compréhension et le rôle des femmes dans les différentes traditions religieuses. On ne peut pas se faire créditer RLG 2681 et RLG 2680.

**Equiv To:** RLG 2680

**RLGN 3131 La religion et la pensée moderne (C) 3 cr**

Étude des idées contenues dans certaines idéologies modernes telles que le marxisme, la théorie de l'évolution, les méthodes d'interprétation biblique, la psychologie moderne, l'athéisme et l'humanisme face à la religion. On ne peut se faire créditer à la fois le RLG 3131 et RLG 3251 ou RLG 3130.

**Equiv To:** RLG 3130

**Mutually Exclusive:** RLG 3251

**RLGN 3531 Problèmes contemporains I (C) 3 cr**

Exploration de sujets particuliers d'intérêt courant en religion, de certains aspects de méthodologie, de l'étude de la religion ou d'une analyse de certains problèmes courants d'intérêt général, du point de vue religieux. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer RLG 3531 et RLG 3530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Humanities

**RLGN 3541 Problèmes contemporains 2 (C) 3 cr**

Exploration de sujets particuliers d'intérêt courant en religion, de certains aspects de méthodologie de l'étude de la religion ou d'une analyse de certains problèmes courants d'intérêt général du point de vue religieux. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer RLG 3541 et RLG 3540.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: l'autorisation écrite de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Humanities

## Science Interdisciplinary (SCI)

**SCI 3981 Stage professionnel 1 pour le volet coopératif en sciences 0 cr**

Stage de travail de quatre mois (minimum de 12 semaines) à temps plein, supervisé, dans une entreprise, une industrie ou une agence gouvernementale. Réservé aux étudiantes et aux étudiants admis et inscrits au volet coopératif du Baccalauréat ès sciences avec majeure conjointe en biochimie-microbiologie. Les ateliers de formation professionnelle et l'évaluation des compétences linguistiques scientifiques en anglais doivent être complétés avant de pouvoir s'inscrire à son premier stage. Un rapport final doit être complété avec succès. Une note de réussite ou échec sera attribuée pour ce cours.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: l'autorisation écrite de la personne responsable des stages du Département des sciences expérimentales.

**SCI 3991 Stage professionnel 2 pour le valet coopératif en sciences 0 cr**

Stage de travail de quatre mois (minimum de 12 semaines) à temps plein, supervisé, dans une entreprise, une industrie ou une agence gouvernementale. Réservé aux étudiantes et aux étudiants admis et inscrits au volet coopératif du Baccalauréat ès sciences avec majeure conjointe en biochimie-microbiologie. Les ateliers de formation professionnelle et l'évaluation des compétences linguistiques scientifiques en anglais doivent être complétés avant de pouvoir s'inscrire à son premier stage. Un rapport final doit être complété avec succès. Une note de réussite ou échec sera attribuée pour ce cours.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [avoir réussi (P) SCI 3981 ou SCI 3980 (ou un des anciens MBIO 3981, MBIO 3980)] et [l'autorisation écrite de la personne responsable des stages du Département des sciences expérimentales].

**SCI 4981 Stage professionnel 3 pour le valet coopératif en sciences 0 cr**

Stage de travail de quatre mois (minimum de 12 semaines) à temps plein, supervisé, dans une entreprise, une industrie ou une agence gouvernementale. Réservé aux étudiantes et aux étudiants admis et inscrits au volet coopératif du Baccalauréat ès sciences avec majeure conjointe en biochimie-microbiologie. Les ateliers de formation professionnelle et l'évaluation des compétences linguistiques scientifiques en anglais doivent être complétés avant de pouvoir s'inscrire à son premier stage. Un rapport final doit être complété avec succès. Une note de réussite ou échec sera attribuée pour ce cours.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [avoir réussi (P) SCI 3991 ou SCI 3990 (ou un des anciens MBIO 3991, MBIO 3990)] et [l'autorisation écrite de la personne responsable des stages du Département des sciences expérimentales].

**SCI 4991 Stage professionnel 4 pour le valet coopératif en sciences 0 cr**

Stage de travail de quatre mois (minimum de 12 semaines) à temps plein, supervisé, dans une entreprise, une industrie ou une agence gouvernementale. Réservé aux étudiantes et aux étudiants admis et inscrits au volet coopératif du Baccalauréat ès sciences avec majeure conjointe en biochimie-microbiologie. Les ateliers de formation professionnelle et l'évaluation des compétences linguistiques scientifiques en anglais doivent être complétés avant de pouvoir s'inscrire à son premier stage. Un rapport final doit être complété avec succès. Une note de réussite ou échec sera attribuée pour ce cours.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: [avoir réussi (P) SCI 4981 ou SCI 4980 (ou un des anciens MBIO 4981, MBIO 4980)] et [l'autorisation écrite de la personne responsable des stages du Département des sciences expérimentales].

## Social Work (SWRK)

**SWRK 1313 Émergence de l'état providence Canadien de bien-être social 3 cr**

L'étude des transformations au fil du temps dans les politiques pour assurer le bien-être social au Canada. Le cours met l'accent sur les sociétés autochtones, l'époque coloniale, l'émergence, le développement et l'effritement de l'État-providence canadien, et les défis actuels et les futures tendances dans les politiques de bien-être social. On ne peut se faire créditer SWRK 1313 et SWRK 2110 ou l'ancien SWRK 2111.

**Mutually Exclusive:** SWRK 2110, SWRK 2111

**Attributes:** Recommended Intro Courses

**SWRK 2033 Travail social et santé mentale 3 cr**

Exploration du champ de la santé mentale des questions de pratique et de politiques sociales dans le domaine de la santé mentale. Accent est mis sur les outils nécessaires pour faire une analyse critique de différentes approches en santé mentale, une compréhension générale des politiques et programmes dans le domaine, connaissances en prévention de la maladie mentale, ainsi que sur la manière d'intervenir efficacement une fois qu'une maladie mentale a été diagnostiquée.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 2081 ou SWRK 2080], [SWRK 2093 ou SWRK 2090 ou l'ancien SWRK 2091] et [SWRK 3141 ou SWRK 3140].

**SWRK 2043 Travail social auprès des individus et des familles 3 cr**

Exploration des axes théoriques et d'application pratique du service social individuel et familial qui visent l'évaluation des problèmes personnels et interpersonnels, mais aussi du développement d'habiletés et de méthodes d'intervention appropriées auprès des individus et des familles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 2081 ou SWRK 2080], [SWRK 2093 ou SWRK 2090 ou l'ancien SWRK 2091] et [SWRK 3141 ou SWRK 3140].

**SWRK 2053 Travail social auprès des communautés 3 cr**

Acquisition de connaissances théoriques et d'habiletés permettant d'analyser les structures organisationnelles et de comprendre les questions liées à la pratique du travail social auprès des communautés. Application de ces concepts à la dynamique en vigueur au sein des communautés et des organisations et entre celles-ci. On ne peut se faire créditer SWRK 2053 et SWRK 2050 ou l'ancien SWRK 2051.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 2081 ou SWRK 2080], [SWRK 2093 ou SWRK 2090 ou l'ancien SWRK 2091], [SWRK 3141 ou SWRK 3140] et [SWRK 2073 ou SWRK 2070 ou l'ancien SWRK 2071].

**Mutually Exclusive:** SWRK 2050, SWRK 2051

**SWRK 2073 Travail social auprès des petits groupes 3 cr**

Explication des normes de groupe, des valeurs et des buts qui influencent la prise de décision et les modèles de communication dans les groupes. Influence du rôle des membres et des styles de leadership sur le développement et le fonctionnement du groupe. On ne peut se faire créditer SWRK 2073 et SWRK 2070 ou l'ancien SWRK 2071.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 2081 ou SWRK 2080], [SWRK 2093 ou SWRK 2090 ou l'ancien SWRK 2091] et [SWRK 3141 ou SWRK 3140].

**Mutually Exclusive:** SWRK 2070, SWRK 2071

**SWRK 2081 Habiletés en communication interpersonnelle 3 cr**

Acquisition d'une gamme essentielle d'habiletés interpersonnelles pour communiquer efficacement et pour établir et maintenir des relations tant dans des situations individuelles que de groupe. Accent sur l'apprentissage expérientiel utilisant une variété de techniques. On peut se faire créditer SWRK 2081 et SWRK 2080.

**Equiv To:** SWRK 2080

**Attributes:** Université de Saint-Boniface

**SWRK 2093 Travail social et comportement humain 3 cr**

Application d'une théorie générale des systèmes à l'étude de la situation de la personne dans sa famille et dans son environnement avec examen subséquent des implications pour la pratique du travail social. Critique de modèles du développement. Sessions sur les dimensions du comportement qui s'avère critiques par rapport à la pratique du travail social. On ne peut se faire créditer SWRK 2093 et SWRK 2090 ou l'ancien SWRK 2091.

**Mutually Exclusive:** SWRK 2090, SWRK 2091

**SWRK 2101 Perspectives sur les transitions de la vie et de l'individu 3 cr**

Examen de l'impact du cours transitoire de la vie sur le bien-être psychosocial des individus. Concentration sur les crises et les impasses problématiques qui surgissent aux moments décisifs avec leurs implications pour l'intervention en travail social. On ne peut se faire créditer SWRK 2101 (SWRK 2100).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : première moitié de SWRK 2091.

**Equiv To:** SWRK 2100

**SWRK 2113 L'analyse des politiques de bien-être social 3 cr**

Étude de la politique de bien-être social en tant que produit fini d'idéologies. Introduction à quelques éléments de l'idéologie et comparaison des systèmes idéologiques concurrents. Analyse de l'interaction des visions économiques, politiques et ethniques de la société et de leurs manifestations en tant que réponses sociétales aux besoins humains et aux services sociaux. On ne peut se faire créditer SWRK 2113 et SWRK 1310 ou l'ancien SWRK 1311.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: (SWRK 1313 ou SWRK 2110 ou l'ancien SWRK 2111) et (SWRK 3141 ou SWRK 3140).

**Mutually Exclusive:** SWRK 1310, SWRK 1311

**Attributes:** Recommended Intro Courses

**SWRK 2651 Aspects sociaux du vieillissement 3 cr**

Examen des aspects sociaux du vieillissement. Accent sur la compréhension du processus de vieillissement dans toute transition de vie impliquant une adaptation à l'interaction entre l'environnement social et l'environnement physique. On ne peut se faire créditer le SWRK 2651 et le REC 2650 ou IDES 2650 ou HMEC 2650 ou REC 2650.

**Equiv To:** HMEC 2650, IDES 2650, REC 2650

**SWRK 3103 Méthodologie de la recherche en travail social 3 cr**

Lien entre les méthodes systématiques de recherche scientifique et la pratique du travail social, la construction théorique pour la pratique, la collecte d'information et de données descriptives pour le processus décisionnel pour la compréhension des matériaux techniques de la recherche et introduction aux enjeux et aux défis des devis de recherche. On ne peut se faire créditer SWRK 3103 et SWRK 3100 ou l'ancien SWRK 3101.

**Mutually Exclusive:** SWRK 3100, SWRK 3101

**SWRK 3111 Perspectives sur la déviance 3 cr**

Étude des problèmes humains à l'aide de plusieurs modèles analytiques communément appliqués dans la pratique du travail social. On se peut se faire créditer SWRK 3111, SWRK 3110.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : première moitié de SWRK 2091.

**Equiv To:** SWRK 3110

**SWRK 3131 L'État canadien contemporain du bien-être social 3 cr**

Étude du bien-être social dans la société canadienne menant à une évaluation des approches actuelles à la lumière des transformations économiques des conditions sociales et des besoins mouvants. On ne peut se faire créditer le SWRK 3131 et SWRK 3130.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 1313 ou SWRK 1310 ou l'ancien SWRK 1311] et [SWRK 2113 ou SWRK 2110 ou l'ancien SWRK 2111].

**Equiv To:** SWRK 3130

**Attributes:** Recommended Intro Courses

**SWRK 3141 Introduction à la pratique du travail social 3 cr**

Introduction aux cadres opératoires de la pratique du travail social et le rôle des travailleuses sociales et travailleurs sociaux professionnels. Accent mis sur les valeurs et les connaissances incluant ainsi la définition même du problème, la consultation, le contrat, l'intervention et l'évaluation. Acquisition d'une formation de base en intervention sociale et de saisir la réalité sociale des individus selon différents contextes et diverses problématiques. On ne peut se faire créditer SWRK 3141 et SWRK 3140.

**Equiv To:** SWRK 3140

**Attributes:** Université de Saint-Boniface, Recommended Intro Courses

**SWRK 3151 Formation à la pratique du terrain 1 12 cr**

Première expérience de formation pratique sur le terrain au cours de laquelle l'étudiant ou l'étudiante aura l'occasion d'assumer une responsabilité dans son engagement pour le travail social, la consultation, la planification, l'intervention, l'évaluation et l'application concrète de la théorie apprise en classe. Le premier stage comprend 459 heures, dont 420 heures de stages sur le terrain et 39 heures pour le séminaire d'intégration aux stages. Les heures requises sur le terrain sont calculées sur une base de 28 semaines, 2 jours par semaine, 7,5 heures par jour, pour un total de 420 heures. Ces heures comprennent la participation aux activités de stage et l'évaluation de la performance. Ces heures incluent aussi les réunions et les entrevues formatives avec la personne qui supervise le stage sur une base individuelle ou en groupe. Le séminaire d'intégration aux stages comprend 13 sessions obligatoires d'ateliers d'application d'habiletés de 3 heures chacune aux deux semaines pendant les deux semestres pour un total de 39 heures. Une note de réussite ou d'échec sera attribuée pour ce cours. On ne peut se faire créditer le SWRK 3151 et SWRK 3150, SWRK 3152, ou SWRK 3153.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 1313 ou SWRK 2110 ou l'ancien SWRK 2111], [SWRK 2081 ou SWRK 2080], [SWRK 2093 ou SWRK 2090 ou l'ancien SWRK 2091], [SWRK 2043], [SWRK 3141, ou SWRK 3140] et FRAN 1091.

**Equiv To:** SWRK 3150, SWRK 3152, SWRK 3153

**SWRK 3153 Formation à la pratique du terrain 1: Reconnaissance des acquis (RDA) 12 cr**

La RDA (SWRK 3153) est un cours d'autoformation grâce auquel l'étudiante ou l'étudiant jugé admissible, aura l'occasion de démontrer des habiletés et des connaissances de base comme tous les étudiants doivent le faire lors de leur première formation (stage) pratique. Ils devront démontrer leurs connaissances de l'engagement, de l'évaluation des besoins ou de la problématique, du plan d'action, de l'intervention et de l'évaluation de l'intervention en service social ainsi que leur intégration des valeurs et de l'éthique et des cadres théoriques acquis par l'entremise des cours de base préalables. Les personnes admises et inscrites au cours SWRK 3153 en remplacement d'un premier stage pratique (SWRK 3151) devront réaliser tous les travaux du cahier de travail dans les délais prévus et communiquer avec l'évaluateur ou l'évaluatrice du cours de RDA lorsque des explications ou un soutien additionnel sont nécessaires. Si les travaux et les rapports sont exécutés, les étudiantes et étudiants seront ensuite évalués et obtiendront une note finale, soit "passage" ou "échec". On ne peut se faire créditer SWRK 3153 et SWRK 3151, SWRK 3150, ou SWRK 3152.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 1311 ou SWRK 2110 ou l'ancien SWRK 2111], [SWRK 2081 ou SWRK 2080], [SWRK 2093 ou SWRK 2090 ou l'ancien SWRK 2091], [SWRK 2043], [SWRK 3141 ou SWRK 3140] et FRAN 1091.

**Equiv To:** SWRK 3150, SWRK 3151, SWRK 3152

**Attributes:** Université de Saint-Boniface

**SWRK 4051 Sujets spéciaux 3 cr**

Lectures dirigées ou études concentrées sur un aspect particulier du service social selon l'intérêt de l'étudiant ou de l'étudiante. On ne peut se faire créditer le SWRK 4051 et SWRK 4050.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** SWRK 4050

**SWRK 4071 Problèmes sociaux et pratique du travail social 3 cr**

Étude en profondeur des situations à problèmes. Exploration des voies par lesquelles d'autres disciplines envisagent ou abordent le problème et renforcement des habiletés d'intervention chez l'étudiant ou l'étudiante. On ne peut se faire créditer SWRK 4071 et SWRK 4070.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: SWRK 3141 ou SWRK 3140, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** SWRK 4070

**SWRK 4081 Enjeux actuels en bien-être social 3 cr**

Étude d'un champ particulier du bien-être social en vue d'améliorer les politiques et les pratiques. L'étudiante ou l'étudiant aura à choisir un séminaire parmi de nombreux autres qui sont offerts. Ceux-ci peuvent varier d'une année à l'autre.

**Equiv To:** SWRK 4080

**SWRK 4121 Formation à la pratique du terrain II 12 cr**

Seconde expérience de formation pratique sur le terrain construite à partir du cours SWRK 3151. Occasion d'apporter une contribution professionnelle soutenue dans des situations nécessitant une intégration des valeurs, connaissances et aptitudes au niveau débutant d'un intervenant professionnel. Le stage comprend 459 heures, dont 420 heures de stages sur le terrain et 39 heures pour le séminaire d'intégration aux stages. Les heures requises sont calculées sur une base de 28 semaines, 2 jours par semaine, 7.5 heures par jour, pour un total de 420 heures. Ces heures comprennent la participation aux activités de stage et l'évaluation de la performance. Ces heures incluent aussi les réunions et les entrevues formatives avec la personne qui supervise le stage sur une base individuelle ou en groupe. Le séminaire d'intégration aux stages comprend 13 sessions obligatoires d'ateliers d'application, d'habiletés de 3 heures chacune aux deux semaines pendant les deux semestres pour un total de 39 heures. On ne peut se faire créditer SWRK 4121 et SWRK 4120.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 3151 ou SWRK 3150], [SWRK 2053 ou SWRK 2050 ou l'ancien 2051] et [SWRK 2073 ou SWRK 2070 ou l'ancien SWRK 2071].

Concomitants: SWRK 4303.

**Equiv To:** SWRK 4120

**SWRK 4131 Habiletés en communication interpersonnelle avancée 3 cr**

Cours expérientiel pour la compréhension de soi et la vigilance à soi pour produire une utilisation consciente et disciplinée de soi dans la communication et les relations professionnelles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SWRK 2081 (SWRK 2080) et l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** SWRK 4130

**SWRK 4213 Les perspectives féministes de la pratique du travail social 3 cr**

Analyse de la pratique du travail social et de la politique de bien-être social selon la perspective féministe. Accent mis sur l'imbrication synergique de l'intervention sociale avec les politiques dans le contexte du bien-être social et avec des concepts superposés tels que: potentialisation, pratique écologique, oppression et pratique en contexte de diversité culturelle. Il doit être admis que les femmes ne sont pas un groupe homogène et qu'en tenant compte des caractéristiques comme la classe, l'âge, l'orientation sexuelle, on contribue à une diversité d'expériences, de besoins et d'intérêts pour les femmes. On ne peut se faire créditer SWRK 4213 et SWRK 4210 ou l'ancien SWRK 4211.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 2113 ou SWRK 1310 ou l'ancien SWRK 1311], SWRK 2043, [SWRK 2081 ou SWRK 2080], [SWRK 2093 ou SWRK 2090 ou l'ancien SWRK 2091] et [SWRK 3141 ou SWRK 3140].

**Mutually Exclusive:** SWRK 4210, SWRK 4211

**SWRK 4221 Peuples autochtones et pratique du travail social 6 cr**

Analyse de la pratique du travail social et de la politique de bien-être social à partir d'une perspective autochtone. Étude des thèmes historiques et contemporains qui ont influencé le rapport entre les peuples autochtones et l'État Canadien. L'exploration de diverses approches et pratiques de changements (système client et système services) qui supporteront la survie, l'autodétermination, le bien-être socioculturel et la résilience de la collectivité autochtone. On ne peut se faire créditer SWRK 4221 et SWRK 4220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 2113 ou SWRK 1310 ou l'ancien 1311], SWRK 2043, [SWRK 2081 ou SWRK 2080], [SWRK 2093 ou SWRK 2090 ou l'ancien 2091] et [SWRK 3141 ou SWRK 3140].

**Equiv To:** SWRK 4220

**SWRK 4303 Champs d'intervention et de pratique du travail social 3 cr**

Séminaire d'enseignement des habiletés requises dans la pratique du travail social soit en contexte de stage ou d'intervention pratique. Insistance sur la pratique en termes de planification des changements (le système client), les politiques et les réseaux d'interrelations (le système service). Les séminaires peuvent varier d'une année à l'autre et sont organisés pour couvrir une variété de domaines ou de cadres d'intervention pratiques. On ne peut se faire créditer SWRK 4303 et SWRK 4300 ou l'ancien SWRK 4301.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: [SWRK 2113 ou SWRK 1310 ou l'ancien 1311], SWRK 2043, [SWRK 2081 ou SWRK 2080], [SWRK 2053 ou SWRK 2050 ou l'ancien SWRK 2051], [SWRK 2073 ou SWRK 2070 ou l'ancien SWRK 2071], [SWRK 2093 ou SWRK 2090 ou l'ancien 2091], [SWRK 3141 ou SWRK 3140] et [SWRK 3151 ou SWRK 3150]. Concomitant: SWRK 4121 ou SWRK 4120.

**Mutually Exclusive:** SWRK 4300, SWRK 4301

## Sociology (SOC)

**SOC 1211 Introduction à la microsociologie 3 cr**

Introduction systématique à la perspective sociologique : points de vue théorique, méthodes et domaines de recherche. Initiation à l'étude de la socialisation, des groupes, de la famille, de l'école, des minorités, des rôles sexuels. On ne peut se faire créditer SOC 1211 et SOC 1000 ou l'anciens SOC 1200 ou SOC 1201.

**Mutually Exclusive:** SOC 1000, SOC 1200, SOC 1201

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 1221 Introduction à la macrosociologie 3 cr**

Introduction systématique à la perspective sociologique : points de vue théoriques, méthodes et domaines de recherche. Initiation à la culture, à la stratification sociale, aux mouvements sociaux, à la population, aux institutions politiques, aux différents systèmes de la société. On ne peut se faire créditer SOC 1221 et SOC 1000 ou l'anciens SOC 1200 ou SOC 1201.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : SOC 1211.

**Mutually Exclusive:** SOC 1000, SOC 1200, SOC 1201

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2013 Initiation à la recherche en sciences sociales 3 cr**

Cours permettant de comprendre et d'apprécier la recherche menée dans les différentes disciplines de sciences humaines. Enjeux épistémologiques et éthiques. Problématique et questions de recherche. Logique des différents types de devis de recherche. Techniques d'analyse et de cueillette de données, incluant l'ethnographie, l'observation directe, l'entrevue, le groupe de discussion, l'analyse documentaire, le travail d'archive et le sondage. Ce cours est aussi donner comme ANTH 2013. On ne peut se faire créditer SOC 2013 et ANTH 2013, SOC 2292, SOC 2294, ou l'anciens ANTH 2831, SOC 2291, SOC 2290.

**Equiv To:** ANTH 2013

**Mutually Exclusive:** ANTH 2831, SOC 2290, SOC 2291

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2221 Théories sociologiques classiques 3 cr**

Aperçu de la théorie sociologique classique. Les principaux penseurs et les principales écoles de pensée en sociologie. On ne peut se faire créditer SOC 2221 et SOC 2220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2220

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2261 Sociologie de la ville et du milieu urbain 3 cr**

Étude des dimensions sociale et culturelle du phénomène urbain. Analyse de l'expérience urbaine, des formes de socialité et des inégalités sociales. On ne peut se faire créditer SOC 2261, SOC 2260, SOC 2271 ou SOC 2270.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2260, SOC 2270, SOC 2271

**SOC 2311 Choix de problèmes sociaux 3 cr**

Analyse d'un ou de plusieurs problèmes sociaux contemporains (autres que le crime et la délinquance). On pourra examiner, par exemple, des problèmes tels que la pauvreté, la guerre, l'environnement, la consommation de drogues, la mortalité. Pour plus de détails sur le contenu du cours, consulter le guide d'inscription ou s'adresser au professeur. On ne peut se faire créditer SOC 2311 et SOC 2310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2310

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2321 La société canadienne et sa culture 3 cr**

Analyse sociologique des institutions canadiennes en adoptant, comme point de référence, des perspectives historiques, culturelles, économiques et politiques. On ne peut se faire créditer SOC 2321 et SOC 2320.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2320

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2331 Psychosociologie 3 cr**

Examen de la relation entre individu, groupe et société, en soulignant l'interaction comme étant le processus qui donne à la vie quotidienne sa forme, sa direction et sa signification. Les sujets discutés peuvent inclure : le soi, le processus de formation de l'identité, la motivation, le contrôle des émotions. On ne peut se faire créditer SOC 2331 et SOC 2330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2330

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2371 Rapports ethniques 3 cr**

Introduction aux dimensions sociologiques et sociopsychologiques des rapports ethniques au Canada. On ne peut se faire créditer SOC 2371 et SOC 2370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2370

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2391 L'organisation sociale 3 cr**

Étude des forces qui influencent la formation de l'ordre dans la société, son maintien et son changement, le contrôle social, le conflit de pouvoir, l'intégration. On ne peut se faire créditer SOC 2391 et SOC 2390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2390

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2461 La famille 3 cr**

Analyse sociologique des diverses formes et pratiques familiales dans les sociétés contemporaines, ainsi que de leur évolution à partir de formes plus anciennes. Sont également étudiés les rapports entre les formes familiales et le contexte social global. On ne peut se faire créditer SOC 2461 et le SOC 2460.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2460

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2511 Criminologie 3 cr**

Introduction générale aux théories de comportement déviant et de criminologie. L'explication du crime en se référant aux facteurs physiques, psychologiques et sociaux. On ne peut se faire créditer SOC 2511 et le SOC 2510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2510

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 2531 Sociologie du Manitoba 6 cr**

Étude sociologique de la population du Manitoba avec un accent sur ses regroupements culturels et sa stratification sociale. On ne peut se faire créditer SOC 2531 et l'ancien SOC 2530.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 2530

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 3331 Origines de la pensée sociologique 3 cr**

Une introduction systématique à la pensée sociologique, de ses origines philosophiques jusqu'au milieu du 19<sup>e</sup> siècle. Examen de la pensée sociale qui deviendra la base de la théorie sociologique. On ne peut se faire créditer SOC 3331 et SOC 3330.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 2221 ou SOC 2220.

**Equiv To:** SOC 3330

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 3371 Sociologie du travail 3 cr**

Analyse du travail comme dimension centrale de la vie contemporaine. La transformation qu'a connu le travail dans le temps et par rapport aux changements politiques, technologiques et sociaux. L'organisation du travail du point de vue des travailleurs et des employeurs. L'impact du travail sur les individus, les institutions sociales et la société en général. On ne peut se faire créditer SOC 3371 et SOC 3370 ou LABR 3370.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** LABR 3370, SOC 3370

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 3391 Théories sociologiques contemporaines 3 cr**

Comparaison systématique des théories sociologiques contemporaines. Évolution compétitive des diverses écoles en sociologie et surtout l'apport des théoriciens les plus importants. On ne peut se faire créditer SOC 3391 et SOC 3390.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans SOC 2221 ou SOC 2220.

**Equiv To:** SOC 3390

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 3471 Sociologie politique 3 cr**

Évaluation critique de la théorie et des recherches sociologiques relatives aux rapports de force dans la société. Les divers aspects du pouvoir (économique, politique, idéologique), des conflits de classe, de la socialisation, de l'origine, des fonctions et de l'évolution de l'État.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 3470

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 3581 Culture, médias et société 3 cr**

Étude de l'influence des médias dans les sociétés contemporaines; analyse de la production, de la circulation et de la consommation de diverses formes médiatiques et de leur impact sur la vie sociale. On ne peut se faire créditer SOC 3581 et SOC 3580 ou l'anciens SOC 3591 ou SOC 3590.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201. SOC 2331 ou SOC 2330 est recommandé.

**Equiv To:** SOC 3580, SOC 3590, SOC 3591

**SOC 3731 Société et éducation 3 cr**

Examen critique des enjeux de l'éducation et de leur impact sur l'évolution de la société. Questions telles que : le curriculum; l'interaction au sein de la classe compte tenu des caractéristiques socio-économiques des élèves (sexe, ethnique, niveau de revenu et profession des parents, etc.).

Cours s'adressant particulièrement aux personnes qui se préparent à faire carrière en éducation. On ne peut se faire créditer SOC 3731 et SOC 3730.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 3730

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 3811 Sociologie de la sexualité et des rôles sexuels 3 cr**

Étude exploratoire des rapports entre les hommes et les femmes dans la société contemporaine. Examen du processus de construction sociale de la sexualité et des rôles sexuels, à travers une perspective historique de comparaison entre les cultures. On ne peut se faire créditer SOC 3811 et SOC 3810.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 3810

**Attributes:** Université de Saint-Boniface, Social Science

**SOC 3871 Inégalités sociales 3 cr**

Présentation des inégalités sociales dans la société capitaliste actuelle. Examen critique des explications proposées au sujet des diverses dimensions de l'inégalité sociale telles qu : la classe sociale d'appartenance, les rôles sexuels et l'appartenance ethnique. Discussions au sujet de la pauvreté, de la répartition sociale, de la richesse, du chômage, de l'évolution des postes et des contextes de travail à l'ère de la mondialisation. On ne peut se faire créditer SOC 3871 et SOC 3890 ou l'ancien SOC 3870.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SOC 1000 ou (SOC 1211 et SOC 1221) ou les anciens SOC 1200 ou SOC 1201.

**Equiv To:** SOC 3870

**Attributes:** Université de Saint-Boniface, Social Science

## Spanish (SPAN)

**SPAN 1171 Introduction à l'espagnol I 3 cr**

(Laboratoire requis) Ce cours est conçu pour des étudiants et des étudiantes ayant très peu ou n'ayant aucune connaissance de l'espagnol. Les étudiants et les étudiantes dont la langue maternelle est l'espagnol ou possédant des crédits d'espagnol 40 S ou l'équivalent ne peuvent s'inscrire à ce cours sans permission spéciale. On ne peut se faire créditer SPAN 1171 et aucun des cours suivants : SPAN 1180 ou l'ancien SPAN 1181 (ancien TRAD 1181). Ce cours n'est pas accessible aux étudiants qui ont déjà obtenu des crédits pour SPAN 1262 ou l'ancien SPAN 1260 ou SPAN 1261 (ancien TRAD 1261) ou SPAN 1272 ou l'ancien SPAN 1270 ou SPAN 1271 (ancien TRAD 1271) ou SPAN 1280 ou SPAN 1290.

**Mutually Exclusive:** SPAN 1180, SPAN 1181, TRAD 1181



**SPAN 1191 Introduction à l'espagnol II 3 cr**

(Laboratoire requis) Cours destiné aux étudiants et étudiantes connaissant déjà l'alphabet et le système de sons espagnols, ayant une compréhension élémentaire de la langue et maîtrisant les bases de la communication et de l'écriture équivalentes à celles qui seraient obtenues à SPAN 1171. On ne peut se faire créditer SPAN 1191 et SPAN 1190, l'ancien SPAN 1181 (TRAD 1181) ou SPAN 1180. Cours non accessible aux étudiants et étudiantes qui ont déjà obtenu des crédits pour l'ancien SPAN 1260, l'ancien SPAN 1261 (TRAD 1261), SPAN 1262, SPAN 1263, SPAN 1270, l'ancien SPAN 1271 (TRAD 1271), SPAN 1272, SPAN 1273, SPAN 1280, SPAN 1290.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans SPAN 1171, ou l'autorisation écrite du professeur ou de la professeure.

**Equiv To:** SPAN 1190

**Mutually Exclusive:** SPAN 1180, SPAN 1181, SPAN 1260, SPAN 1261, SPAN 1270, SPAN 1271, SPAN 1272, SPAN 1273, SPAN 1280, SPAN 1290, TRAD 1181, TRAD 1261, TRAD 1271

**SPAN 1263 Espagnol intermédiaire : grammaire et conversation 1 3 cr**

(Laboratoire requis) Ce cours est la première partie de l'espagnol intermédiaire. L'accent est mis sur le développement des compétences intermédiaires en lecture, écriture, expression orale et compréhension orale. Les principaux objectifs sont de renforcer les compétences de communication et de renforcer la sensibilisation sociale et culturelle du monde hispanophone. Ce cours n'est pas ouvert aux étudiants parlant couramment l'espagnol. Les étudiant(e)s ayant obtenu un crédit pour l'espagnol à l'école secondaire (40S) peuvent s'inscrire directement à ce cours. On ne peut se faire créditer SPAN 1263 et aucun de Spanish 40S, SPAN 1262, SPAN 1280, SPAN 1290, l'ancien SPAN 1260 ou l'ancien SPAN 1261 (ancien TRAD 1261).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: une note minimale de C dans SPAN 1180 ou l'ancien SPAN 1181 ou l'ancien TRAD 1181 ou SPAN 1190 ou (SPAN 1171 et SPAN 1191) ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** SPAN 1262

**Mutually Exclusive:** SPAN 1260, SPAN 1261, SPAN 1280, SPAN 1290, TRAD 1181, TRAD 1261

**SPAN 1273 Espagnol intermédiaire : grammaire et conversation 2 3 cr**

(Lab. requis) Ce cours est la deuxième partie de l'espagnol intermédiaire. L'accent est mis sur le développement des compétences intermédiaires en lecture, écriture, expression orale et compréhension orale.

Les principaux objectifs sont de renforcer les compétences de communication et de renforcer la sensibilisation sociale et culturelle du monde hispanophone. Ce cours n'est pas ouvert aux étudiants parlant couramment l'espagnol. On ne peut se faire créditer SPAN 1273 et aucun de SPAN 1272, SPAN 1271, SPAN 1280, SPAN 1290, l'ancien SPAN 1270, l'ancien TRAD 1271.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : une note minimale de C dans SPAN 1263 ou SPAN 1262 ou l'ancien SPAN 1260 ou SPAN 1261 ou l'ancien TRAD 1261 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** SPAN 1272

**Mutually Exclusive:** SPAN 1180, SPAN 1181, SPAN 1190, SPAN 1191, SPAN 1270, SPAN 1271, SPAN 1280, SPAN 1290, TRAD 1271

**SPAN 2361 Espagnol commercial 3 cr**

(Ancien TRAD 2361) Initiation au vocabulaire commercial et aux techniques d'écriture dans le domaine des affaires. Accent mis sur la composition appliquée au domaine commercial: rédaction de lettres, comptes rendus d'activités ou de réunion, etc.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans SPAN 1261 (TRAD 1261), l'ancien SPAN 1260, SPAN 1280, SPAN 1290 ou SPAN 1262 ou l'autorisation écrite de la professeure ou du professeur.

**SPAN 2461 Amérique latine : chocs et métissages culturels 3 cr**

Analyse des oeuvres littéraires, cinématographiques et artistiques, ainsi que des récits et des témoignages portant sur les rencontres qui ont eu lieu dans le « Nouveau monde » entre les civilisations et les peuples précolombiens et les Conquistadors, puis Colons, espagnols, et les conséquences de ces rencontres au fil du temps. Étude principalement les traces culturelles laissées sur les périodes qui ont marqué de façon permanente et profonde les cultures des pays latino-américains : la Conquête, le système esclavagiste et la formation des états-nations. Cette analyse recouvre différents types de productions culturelles : récits, témoignages, histoire, littérature, cinéma, peinture, sculpture, discours politiques, etc. On ne peut se faire créditer SPAN 2461 et SPAN 2671

Préalable: une note minimale de C dans SPAN 1263 ou SPAN 1262, SPAN 1280 ou SPAN 1290; ou l'ancien SPAN 1261 ou l'ancien SPAN 1260; ou l'autorisation professorale.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SPAN 1263 ou SPAN 1262, SPAN 1280 ou SPAN 1290; ou l'ancien SPAN 1261 ou l'ancien SPAN 1260; ou l'autorisation professorale.

**Mutually Exclusive:** SPAN 2671

**Attributes:** Université de Saint-Boniface

**SPAN 2551 Espagnol : langue avancée et composition 3 cr**

Le but de ce cours, destiné aux étudiantes et aux étudiants qui ont atteint une maîtrise de niveau intermédiaire de l'espagnol, est d'améliorer leur niveau de langue et l'habileté de leur expression écrite. On ne peut se faire créditer SPAN 2551 et SPAN 2550.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : Une note minimale de C dans SPAN 1261 ou SPAN 1262 ou SPAN 1280 ou SPAN 1290 ou l'ancien SPAN 1260 ou l'ancien TRAD 1261, ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** SPAN 2550

**SPAN 2553 Perfectionnement et pratique de l'espagnol, langue et grammaire 1 3 cr**

Cours de perfectionnement et de consolidation linguistique et grammaticale. L'objectif général est d'atteindre un niveau intermédiaire avancé dans la connaissance et la maîtrise de la langue espagnole. Certains aspects grammaticaux, lexicaux et phonétiques complexes seront étudiés, ainsi que certains aspects culturels à travers des activités écrites et orales. Le cours est orienté vers la correction formelle et la réflexion ainsi que vers la fluidité et l'utilisation appropriée de la grammaire et du vocabulaire. On ne peut se faire créditer SPAN 2553 et SPAN 2671

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables : SPAN 1263 ou SPAN 1262, SPAN 1280 ou SPAN 1290; ou l'ancien SPAN 1261 (TRAD 1261) et l'ancien SPAN 1260; ou l'autorisation professorale.

**Mutually Exclusive:** SPAN 2671

**Attributes:** Université de Saint-Boniface

**SPAN 2571 El español a través del cine hispanoamericano 3 cr**

(Ancien TRAD 2571) Les cultures espagnole et latino-américaine à partir d'oeuvres cinématographiques issues de ces cultures. Accent sur la discussion et l'expression orale.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans SPAN 1271 (TRAD 1271), SPAN 1270, SPAN 1280, SPAN 1290 ou SPAN 1272 ou l'autorisation écrite de la professeure ou du professeur.

**Equiv To:** TRAD 2571

**SPAN 2573 Espagnol sujet spécial I 3 cr**

Le contenu de ce cours varie en fonction des besoins et des intérêts des étudiants et des professeurs. La formule de tutorat peut être utilisée. Le contenu du cours varie d'année en année. Puisque les contenus varient d'année en année et que le cours se crée selon les besoins des étudiantes et des étudiants, les étudiantes et les étudiants pourraient suivre ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: Note minimale de "C" ou plus au cours d'espagnol TRAD 1261 ou le consentement écrit du professeur.

**SPAN 2591 Femmes et culture en Espagne et en Amérique latine 3 cr**

Panorama de la culture latino-américaine abordée à partir de la production féminine. Étude des oeuvres des femmes, de leurs conditions de production dans une perspective féministe et dans le cadre théorique des études culturelles. Panorama incluant divers pays et diverses époques, ainsi que différents types de production (littérature, cinéma, peinture et sculpture).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans SPAN 1262 (SPAN 1261, TRAD 1261), l'ancien SPAN 1260, SPAN 1280 ou SPAN 1290 ou l'autorisation écrite de la professeure ou du professeur.

**SPAN 2671 Espagnol sujet spécial I 3 cr**

Cours à contenu variant en fonction des besoins et des intérêts des personnes qui le suivent et de celles qui l'enseignent. La formule de tutorat peut être utilisée. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans SPAN 1262 (SPAN 1261, TRAD 1261), l'ancien SPAN 1260, SPAN 1280 ou SPAN 1290 ou l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** SPAN 2461, SPAN 2553

**SPAN 3271 Espagnol sujet spécial II 3 cr**

Cours au contenu variant en fonction des besoins et des intérêts des personnes qui le suivent et de celles qui l'enseignent. La formule de tutorat peut être utilisée. Cours dont le contenu varie d'année en année et pouvant donc être suivi plus d'une fois.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C à un cours d'espagnol de niveau 2000 ou l'autorisation écrite de la professeure ou du professeur.

**Mutually Exclusive:** SPAN 3463, SPAN 3465, SPAN 3467

**SPAN 3341 Grammaire et syntaxe de l'espagnol 3 cr**

Ce cours comprend une étude approfondie et détaillée de la grammaire et de la syntaxe de l'espagnol. On ne peut se faire créditer le SPAN 3340, SPAN 3341 et l'ancien SPAN 3280. Une note de « C » ou plus dans n'importe quel cours d'espagnol de niveau 2000 ou le consentement par écrit du professeur.

**Equiv To:** SPAN 3280, SPAN 3340

**SPAN 3461 Littérature et civilisation d'Amérique latine 3 cr**

(Ancien TRAD 3461) Initiation aux grands auteurs d'Amérique latine, ainsi qu'aux caractères spécifiques des sociétés latino-américaines : valeurs, pratiques culturelles, mais aussi politiques, commerciales et professionnelles.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans SPAN 1261 (TRAD 1261) ou SPAN 1260.

**Equiv To:** TRAD 3461

**SPAN 3463 Le réalisme magique dans la littérature latino-américaine 3 cr**

Étude des oeuvres significatives de la littérature latino-américaine appartenant à l'esthétique du réalisme magique. À travers l'interprétation et l'analyse des oeuvres littéraires importantes, ce cours étudiera les problématiques spécifiques à la culture latino-américaine dans le contexte des tensions et des relations entre différents sujets, institutions, groupes sociaux et genres. On ne peut se faire créditer SPAN 3463 et SPAN 3271 Espagnol sujet spécial 2 : Le réalisme magique dans la littérature latino-américaine.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : importe quel cours d'espagnol de niveau 2000 ou l'autorisation professorale.

**Mutually Exclusive:** SPAN 3271

**Attributes:** Université de Saint-Boniface

**SPAN 3465 Perfectionnement et pratique de l'espagnol, langue et grammaire 2 3 cr**

Cours de perfectionnement et de consolidation linguistique et grammaticale. L'objectif général est d'atteindre un niveau avancé élevé dans la connaissance et la maîtrise de la langue espagnole. Certains aspects grammaticaux, lexicaux et phonétiques complexes seront étudiés, ainsi que certains aspects culturels à travers des activités écrites et orales. Le cours est orienté vers la correction formelle et la réflexion ainsi que vers la fluidité et l'utilisation appropriée de la grammaire et du vocabulaire. On ne peut se faire créditer SPAN 3465 et SPAN 3271 Espagnol sujet special 2 : Perfectionnement et pratique de l'espagnol, langue et grammaire 2.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : importe quel cours d'espagnol de niveau 2000 ou l'autorisation professorale.

**Mutually Exclusive:** SPAN 3271

**Attributes:** Université de Saint-Boniface

**SPAN 3467 Représentations du handicap en Espagne et Amérique latine 3 cr**

Réflexion sur la représentation du handicap dans le dialogue social (télévision, cinéma, littérature, presse, etc.). Analyse et déconstruction des stéréotypes et des idées préconçues sur les personnes en situation de handicap présents dans les représentations qui circulent dans les sociétés hispanophones. Étude des mécanismes de la construction de l'identité/altérité que résultent dans l'exclusion et le rejet des personnes handicapées. On ne peut se faire créditer SPAN 3467 et SPAN 3271 Espagnol sujet spécial 2 : Représentations du handicap en Espagne et Amérique latine.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : importe quel cours d'espagnol de niveau 2000 ou l'autorisation professorale.

**Mutually Exclusive:** SPAN 3271

**Attributes:** Université de Saint-Boniface

**SPAN 3561 Cours avancé d'espagnol professionnel 3 cr**

(Ancien TRAD 3561) Pratique de la traduction de l'espagnol vers le français vers l'espagnol à partir de textes pragmatiques à caractère professionnel.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans SPAN 2361 (TRAD 2361).

**Equiv To:** TRAD 3561

**SPAN 3881 Violence, révolutions et dictatures dans la culture hispanophone 3 cr**

Panorama de la culture latino-américaine suivant l'histoire de la violence. On étudiera les manifestations culturelles reliées aux événements qui ont marqué l'histoire de l'Amérique latine: révolutions, guérillas, dictatures. Le contenu du cours se centre sur les manifestations des artistes et d'autres producteurs culturels vis-à-vis de la violence (apologistes ou pacifistes?).

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: Avoir obtenu (C) ou plus dans au moins un cours d'espagnol de niveau 2000 ou le consentement écrit du professeur.

## Statistics (STAT)

**STAT 1001 Analyse statistique de base I 3 cr**

(Laboratoire requis) Introduction aux principes fondamentaux de la statistique et aux procédures utilisées en analyse de données. Étude de la cueillette de données, de l'affichage et de l'élagage de données, des relations entre variables, des distributions échantillonnales, de l'estimation, des tests de signification et de l'inférence pour les moyennes. Ce cours n'est pas recommandé pour les étudiantes et les étudiants qui veulent poursuivre dans un programme de statistique ou dans une autre discipline qui requiert de bonnes habiletés en méthodes statistiques (voir la description de STAT 1150). On ne peut se faire créditer STAT 1001 et STAT 1000, STAT 1150 ou STAT 2220.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : N'importe quel cours de mathématiques de 12e année ou de niveau 40S, ou l'équivalent.

**Equiv To:** STAT 1000

**Mutually Exclusive:** STAT 1150, STAT 2220

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Science, Recommended Intro Courses

**STAT 2001 Analyse statistique de base II 3 cr**

(Laboratoire requis) Étude des procédures d'estimation et de tests d'hypothèses pour les moyennes et les proportions dans les contextes d'échantillonnage à une, deux ou plusieurs variables. Introduction à l'analyse de variance, à la régression et à la corrélation. Les méthodes non paramétriques, la conception d'expériences, les modèles probabilistes. Ce cours n'est pas recommandé pour les étudiantes et les étudiants qui veulent poursuivre dans un programme de statistique ou dans une autre discipline qui requiert de bonnes habiletés en méthodes statistiques (voir la description de STAT 2150). On ne peut se faire créditer STAT 2001 et STAT 2000 ou STAT 1150.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans STAT 1001 ou STAT 1000.

**Equiv To:** STAT 2000

**Mutually Exclusive:** STAT 1150

**Attributes:** Université de Saint-Boniface, Mathematics Requirement, Science, Recommended Intro Courses

## Supply Chain Management (SCM)

**SCM 2161 Gestion de la chaîne logistique et des opérations 3 cr**

Étude de la gestion de la chaîne logistique (GCL) et des opérations.

Positionne la gestion des opérations comme un domaine d'étude fondamental à l'intérieur de la GCL. Se focalise sur l'approche processus et la conception de système. L'étudiant (e) qui détient les crédits du SCM 2161 ne peut se faire créditer aucun des cours OPM 2601 ou OPM 2600 ou SCM 2160.

**Equiv To:** OPM 2600, OPM 2601, SCM 2160

## Theatre (THTR)

**THTR 1001 Initiation à l'improvisation théâtrale 3 cr**

Ce cours vise à initier les étudiants aux aspects fondamentaux de l'improvisation théâtrale. À ce titre, il aborde différents aspects de l'improvisation comme l'expression des sentiments et du corps, la mise en scène, le jeu à partir d'un motif, la créativité, l'écoute du public, la capacité d'attention, l'initiative, la réceptivité, la spontanéité sur scène et l'utilisation des accessoires.

**THTR 1021 Introduction à l'analyse du texte théâtral 3 cr**

S'il est indéniable que le texte de théâtre a beaucoup progressé depuis une trentaine d'années, en revanche la pratique du théâtre demeure encore souvent marquée par la difficulté de saisir le texte comme tel, comme s'il fallait toujours s'en remettre à la représentation pour que le texte théâtral soit considéré comme un véritable objet d'études. Ce cours permettra à l'étudiant-e de combler cette lacune tout en l'initiant aux aspects les plus saillants du texte théâtral. On pourra ainsi se demander s'il existe une spécificité du texte de théâtre, si l'étude du théâtre peut se passer de la représentation ou du texte théâtral. Cette investigation permettra d'aborder des questions qui touchent aussi bien à l'organisation et à la structuration du texte théâtral, qu'à la fiction, l'espace, le temps, l'énoncé, l'énonciation, le personnage et l'action.

**THTR 2521 Art théâtral et techniques de scène 3 cr**

Ce cours vise à initier les étudiants aux équipements spécialisés de la scène. Il y sera question d'éclairage (théorie de la lumière et de la couleur, fonctionnement des projecteurs, maîtrise de la console d'éclairage, création d'un ensemble scénique homogène) et des principes de la sonorité (fonctionnement des divers appareils: lecteurs, microphones, amplificateurs, réverbérateurs, etc.). Ce cours abordera aussi la sonorité: théorie du son, éventail de bruitages, utilisation d'effets sonores et de musique dans un spectacle, enregistrement. Enfin, ce cours se penchera sur la question de la régie: direction technique et direction de production théâtrale.

**THTR 2531 Le jeu corporel 3 cr**

Ce cours vise à initier les étudiants aux diverses approches du corps comme langage scénique: les rapports entre le langage et le geste, les fonctions de la gestuelle dans un jeu équilibré. Il sera aussi question des rapports entre le corps et l'espace, le corps et les rythmes. Il s'agira enfin de mettre l'accent sur les grandes tendances qui se dégagent des problématiques actuelles sur les rapports entre le corps et le jeu.

**THTR 2541 L'expression orale au théâtre 3 cr**

Étude de l'expression orale et de la communication sous leurs différents aspects. Étude des règles de la prononciation, de l'élocution et de la prosodie de français contemporain. Étude des diverses techniques de l'élocution théâtrale comme moyen de communication et comme moyen de l'art dramatique (registres tragique, dramatique et comique). Analyse des facteurs et des fonctions du langage et de la communication. Initiation aux techniques de lecture à première vue et aux textes à mémoriser. Initiation aux diverses techniques respiratoires et vocales.

**THTR 2551 Improvisation théâtrale 3 cr**

Ce cours reprend les grands principes de l'improvisation théâtrale proposés dans le THTR 1000 (Initiation à l'improvisation théâtrale), mais il les applique cette fois à nombre de thématiques, de situations et d'aspects différents du jeu improvisé. À ce titre, ce cours aborde et explore d'autres dimensions de l'improvisation théâtrale, tout en se fondant sur les acquis du cours l'improvisation de première année.

**THTR 3521 Interprétation, voix et expression orale 3 cr**

Étude de la voix sur le plan interprétatif et expressif. Les divers rapports entre la voix, l'expressivité individuelle, collective et le spectacle. Les rythmes de la voix (modulations, hésitations, accélérations...). Les rapports entre la voix, le corps et l'espace. Les principes de l'improvisation vocale et du jeu choral.

**THTR 3531 Jeu et caméra 3 cr**

Ce cours vise à initier les étudiants au rôle créateur de la caméra. À ce titre, les rapports entre le jeu de l'acteur et les différents types de cadrages relatifs au septième art seront abordés. En outre, il y sera question de compréhension et d'interprétation de scripts, ainsi que de nombreux aspects relatifs au jeu de l'acteur sur un plateau de tournage: scènes de combat, essayage de costumes, apprentissage d'accents étrangers, maniement d'armes, principes de jeu avec des animaux ou des doublures. Du reste, ce cours accordera une attention particulière à la question des auditions.

**THTR 3541 Le jeu réaliste 3 cr**

Connaissance théorique et pratique des techniques de jeu réaliste selon la méthode de Stanislavski et de l'Actors' Studio. Le rôle et les fonctions du corps, les techniques de l'identification et de l'incarnation; le rôle des émotions, l'écoute des partenaires de jeu, l'observation, la construction globale du personnage. Techniques et esthétiques du jeu réaliste.

**THTR 3551 Clown et masques 3 cr**

Ce cours vise à initier les étudiants aux aspects fondamentaux de l'art du clown et du rôle des masques dans l'engagement physique au théâtre. Aussi aborde-t-il les différents aspects du jeu du clown et de la pratique de jeu masqué (théâtre antique, Commedia dell'arte), comme la gestuelle, le langage, le mouvement, l'espace, l'utilisation des accessoires et l'importance de l'intégration du clown à la formation de l'acteur.

**THTR 3561 Scénographie 3 cr**

Introduction à la scénographie du point de vue historique et évolutif (du théâtre de l'Antiquité grecque au théâtre de la dérision). Introduction au travail d'agencement des moyens techniques et artistiques de la scénographie, en tenant compte des rapports entre le texte théâtral et l'espace de la scène. Mise en relief des différentes étapes de la conception scénographique (décors, costumes, jeu de lumières, effets scéniques, etc.). Réflexion sur le travail de scénographes réputés comme Walter Gropius, Yannis Kokkos et Wieland Wagner.

**THTR 3571 Atelier de théâtre 3 cr**

Cours d'initiation à la pratique théâtrale dans son ensemble: jeu, scénographie, mise en scène. Ce cours constitue une synthèse de tous les aspects de l'art dramatique en prévision de scènes devant la salle de classe et/ ou pour des invitées à la fin du trimestre. Des aspects incontournables de l'art dramatique figureront au programme de ce cours: la concentration, l'écoute personnelle et collective, le monologue intérieur, la mémoire sensorielle et affective, l'analyse approfondie de scènes, la construction de personnages, le travail à l'extérieur des répétitions ainsi que le comportement lors de répétitions.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: Avoir réussi l'un des deux cours consacrés à l'improvisation (THTR 1001, THTR 2551), 4 cours de 2e année et 2 cours de 3e année.

**THTR 4521 Mise en scène 3 cr**

Ce cours vise à initier les étudiants aux principes relatifs à la mise en scène. Les rapports entre l'art de la mise en scène et certaines théories esthétiques seront abordés. également de mettre l'accent sur les grandes tendances qui se dégagent des problématiques actuelles de la mise en scène. Ce cours propose aussi une réflexion critique sur la mise en scène comme forme d'interprétation qui mène à la création théâtrale.

**THTR 4531 Mise en scène II 3 cr**

Ce cours reprend les principes de Mise en scène I et les applique à la dramaturgie, à la scénographie, à différentes esthétiques historiques et au jeu de l'acteur. À ce titre, ce cours permet à l'étudiant de mieux connaître les ressources artistiques et pratiques à la disposition du metteur en scène. À travers une série de travaux pratiques et de projets, l'étudiant pourra parfaire ses connaissances de la mise en scène. Tout en insistant sur les divers aspects de la mise en scène, ce cours accordera aussi une importance particulière à la direction des acteurs.

**THTR 4541 Jouer les genres théâtraux: comédie, tragédie et drame 3 cr**

Cours de synthèse dans lequel les étudiants aborderont les techniques de jeu liées aux genres théâtraux: la comédie, la tragédie et le drame. À ce titre, une attention particulière sera apportée à l'action comique, tragique et dramatique sous le rapport des conflits et des renversements de situation, des rythmes vocaux (répliques, interaction entre comédiens), des didascalies, du contexte culturel des oeuvres dramaturgiques et du contexte théâtral en général. Ce cours permettra aussi d'aborder la question de la composition et de l'interprétation d'un personnage, en fonction de la compréhension du texte et des techniques de jeu.

**THTR 4551 Atelier de théâtre et production 3 cr**

L'objectif de ce cours consiste à produire une pièce de théâtre, soit une création collective, soit une oeuvre de répertoire. La contribution et l'implication des étudiant-e-s seront essentielles car ils devront prendre en charge, sous la supervision du professeur, les divers aspects d'une production théâtrale: publicité, décors, costumes, éclairages, bruitages jeu et, dans une moindre mesure, mise en scène. À ce titre, ce cours donne l'occasion aux étudiant-e-s de mettre en pratique ce qu'ils auront appris dans d'autres cours de la Spécialisation en études théâtrales; ce qui leur permettra d'acquies à la fois une plus grande autonomie et une expérience indispensable dans le domaine des arts de la scène.

## Traduction (St. Boniface) (TRAD)

**TRAD 2071 Grammaire normative 6 cr**

Dans le cadre d'une révision approfondie de la grammaire, apprentissage des particularités orthographiques du français. Les formes et les fonctions des parties du discours, en insistant sur le verbe et ses conjugaisons ainsi que sur les règles d'accord et de concordance à l'intérieur de la phrase simple et de la phrase complexe.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: réussite de l'examen d'admission aux programmes de traduction ou avoir obtenu une note minimale de B dans FRAN 1091 et FRAN 1111.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 2101 Analyse et résumé de textes I 3 cr**

Apprentissage des techniques d'analyse et de résumé de textes pragmatiques français de façon à développer l'aptitude interprétative (extraction du sens) et les capacités expressives (reformulation). Textes, écrits ou audiovisuels, touchant à l'actualité et aux divers domaines avec lesquels le traducteur sera appelé à se familiariser. N.B. Ce cours, obligatoire dans le cadre du baccalauréat spécialisé, ne l'est pas pour le certificat de traduction. Toutefois, si l'examen d'admission révélait des lacunes par rapport à l'analyse ou au résumé, l'étudiante ou l'étudiant pourrait devoir suivre ce cours en plus de ceux prévus pour le certificat.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalable: réussite de l'examen d'admission ou une note minimale de B+ au FRAN 1111] ou l'autorisation écrite du professeur ou de la professeure.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 2111 Informatique et traduction 3 cr**

Introduction à l'usage des ordinateurs en traduction: banques de données terminologiques, dictionnaires électroniques, traduction assistée par ordinateur. Introduction à la traduction automatique. Internet pour les traducteurs.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalable: réussite de l'examen d'admission ou l'autorisation écrite du professeur ou de la professeure.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 2151 Introduction à la traduction 3 cr**

Initiation à la pratique de la traduction, à sa terminologie et aux méthodes de travail. Réflexion sur la responsabilité du traducteur vis-à-vis de ceux qu'il traduit (auteurs, représentants politiques, etc.) et de ses lecteurs.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalable : réussite de l'examen d'admission ou l'autorisation écrite de la professeure ou du professeur.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 2301 Culture générale I 3 cr**

Cours autodidactique pluridisciplinaire. L'étudiant(e) établit son corpus à partir d'une liste de lecture et en accord avec le(la) responsable de son programme d'étude.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3011 Lexicologie comparée 3 cr**

Étude des domaines abordés par la lexicologie et comparaison des structures lexicosémantiques de l'anglais et du français dans l'optique de la traduction. Ce cours abordera entre autres des notions telles que la contextualisation; la cooccurrence; les interférences linguistiques (anglicismes, gallicismes, faux amis); et la modulation lexicale en traduction.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalable: avoir réussi l'examen d'admission ou obtenu l'autorisation du professeur ou de la professeure.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3051 Syntaxe comparée 3 cr**

Étude contrastive des structures syntaxiques de l'anglais et du français dans l'optique de la traduction. Apprentissage des techniques de transfert et particulièrement de la transposition syntaxique à l'aide de nombreux exercices pratiques. Correction des problèmes de syntaxe provenant d'interférences linguistiques: calques, mauvais emplois des prépositions, des temps, etc. On ne peut se faire créditer le TRAD 3051.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalable: réussite de l'examen d'admission ou l'autorisation du professeur ou de la professeure.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3101 Analyse et résumé de textes II 3 cr**

Pratique des techniques d'analyse et de résumé à partir de textes français ou anglais. La reformulation en français sera l'occasion d'un exercice intellectuel proche de la traduction. Recherches documentaires visant non seulement à l'amélioration des connaissances générales, mais aussi à l'établissement de glossaires. N.B. Ce cours, obligatoire dans le cadre du baccalauréat spécialisé, ne l'est pas pour le certificat de traduction. Toutefois, si l'examen d'admission révélait des lacunes par rapport à l'analyse ou au résumé, l'étudiante et l'étudiant pourrait devoir suivre ce cours en plus de ceux prévus pour le certificat.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalable: une note minimale de C dans le TRAD 2101.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3111 Laboratoire I 3 cr**

Travaux pratiques dans des conditions semblables à celles d'un bureau de traduction (qualité du produit fini, gestion du temps, échéances, etc.). Révision des travaux par le professeur ou la professeure.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalables : une note minimale de C dans TRAD 2101 et TRAD 3101 ou dans TRAD 3261 et TRAD 3131.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3121 Lexicographie comparée 3 cr**

Étude contrastive de dictionnaires unilingues et bilingues anglais/français. Lecture de manuels de lexicographie et comparaison de divers dictionnaires unilingues et bilingues.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalable: réussite de l'examen d'admission ou l'autorisation écrite du professeur ou de la professeure.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3131 Terminologie bilingue et documentation 3 cr**

Initiation aux diverses méthodes d'acquisition de la documentation permettant une application à la traduction: utilisation des encyclopédies, des ouvrages et des revues spécialisées à des fins terminologiques. Apprentissage de l'utilisation des banques de données et établissement de fiches terminologiques.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalables: une note minimale de C dans TRAD 2101 et TRAD 3101] ou une note minimale de C dans TRAD 2151 ou l'autorisation écrite du professeur ou de la professeure.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3141 Rédaction professionnelle comparée I 3 cr**

Étude comparative de documents professionnels anglais et français afin de mettre en lumière les différences qui peuvent exister dans les méthodes de présentation ou d'expression en anglais et en français. Production de textes professionnels variés (lettres, procès-verbaux, curriculum vitae, etc.).  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalables: une note minimale de C dans les TRAD 3101 ou dans TRAD 2151, ou l'autorisation écrite du professeur ou de la professeure.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3261 Traduction générale (anglais-français) 3 cr**

Mise en pratique des principes de traduction présentés dans le cours TRAD 2151 (Introduction à la traduction) auquel il fait suite. Textes à traduire de nature générale et portant sur divers domaines de l'actualité et de la vie professionnelle.  
**PR/CR: A minimum grade of C is required unless otherwise indicated.**  
 Préalable: une note minimale de C dans le TRAD 2151.  
**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3271 General Translation (French-English) 3 cr**

Apprentissage et application des règles de base de la traduction vers l'anglais de textes français d'intérêt général. Par une approche analytique du sens, découverte des principaux aspects du maniement du langage pour pouvoir saisir les idées d'un message et leur articulation, et les reformuler en exploitant les ressources de l'anglais.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans au moins un des cours suivants: le ENGL 2000 ou le ENGL 2001 ou le TRAD 2101 ou le TRAD 2151.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3281 Sujets particuliers 3 cr**

Contenu variable en fonction des besoins et des intérêts des étudiants et des professeurs.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: un cours (3 crédits) de niveau 2000 avec une note minimale de C ou l'autorisation de la professeure ou du professeur.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3301 Culture générale II 3 cr**

Cours autodidactique pluridisciplinaire. L'étudiante ou l'étudiant établit son corpus à partir d'une liste de lecture et en accord avec le ou la responsable de son programme d'étude.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 2301.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 3581 Sujets particuliers 3 cr**

Contenu variable en fonction des besoins et des intérêts. Cette cote de cours peut être utilisée pour différents titres de cours spécifiques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans TRAD 3261 et TRAD 3131 ou l'autorisation écrite de la professeure ou du professeur.

**TRAD 3981 Sujets particuliers 3 cr**

Contenu variable en fonction des besoins et des intérêts. Cette cote de cours peut être utilisée pour différents titres de cours spécifiques.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans TRAD 3261 et TRAD 3131 ou l'autorisation écrite de la professeure ou du professeur.

**TRAD 4011 Atelier de traduction professionnelle 3 cr**

Travaux pratiques de traduction en atelier où la simulation des conditions réelles de travail devra permettre d'améliorer sa productivité sous le rapport du temps et de la qualité.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans TRAD 3261 ou TRAD 3271 et une note minimale de C dans TRAD 3131, ou l'autorisation écrite du professeur ou de la professeure.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4031 Analyse du discours I 3 cr**

Le discours comme réseau de relation, fait de langage et fait social. Son inscription dans le schéma de la communication. Initiation à la théorie de communication. La notion de littérarité selon plusieurs modèles théoriques, notamment la théorie de réception et le modèle marxiste. Application à l'analyse de textes littéraires et pragmatiques. On ne peut se faire créditer le TRAD 4031 et l'ancien TRAD 4021.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: l'autorisation écrite du professeur ou du chef de département de français ou de traduction.

**Mutually Exclusive:** TRAD 4021

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4033 Analyse du discours II 3 cr**

Le discours comme réseau de relation, fait de langage et fait social. Son inscription dans le schéma de la communication. Initiation à la théorie de communication. La notion de littérarité selon plusieurs modèles théoriques, notamment la sémiotique et les perspectives psychoanalytiques. Application à l'analyse de textes littéraires et pragmatiques. On ne peut se faire créditer le TRAD 4033 et l'ancien TRAD 4021.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: l'autorisation écrite du professeur ou du chef de département de français ou de traduction.

**Mutually Exclusive:** TRAD 4021

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4051 Révision 3 cr**

Principes de la révision. Vérification et amélioration de textes traduits. Exercices comparatifs et raisonnés pour développer les facultés analytiques, le sens critique et l'habileté à manier la langue d'arrivée.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3261 ou l'autorisation écrite du professeur ou de la professeure.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4061 Terminologie appliquée 3 cr**

Travaux pratiques destinés à renforcer l'efficacité et la qualité des recherches documentaires et terminologiques exigées par la traduction de textes spécialisés.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4071 Mémoire de traduction 3 cr**

Travail indépendant réalisé sous la supervision d'un professeur à la toute fin du programme de l'étudiante ou de l'étudiant. Traduction commentée d'un texte d'environ 2500 mots accompagnée d'une analyse textuelle et d'un lexique élaboré à partir du texte à traduire. Recherche documentaire et terminologique à des fins traductionnelles. N.B. Ce cours doit être suivi à la toute fin du programme. Il faut avoir conservé une moyenne cumulative de B pour pouvoir s'inscrire au mémoire.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: une note minimale de C dans [TRAD 3261 ou TRAD 3271] et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4081 Sous-titrage 3 cr**

Survol des processus traductologiques et des techniques du sous-titrage. Volet pratique sur la traduction cinématographique à l'aide des sous-titres.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans un des cours suivants: le TRAD 4251, TRAD 4091 ou le TRAD 4281.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4091 Gestion d'un service de traduction 3 cr**

Principes de base de la gestion appliquée à un service de traduction. Gestion et la coordination des équipes en réseau Internet, tant sur le plan national qu'international. N.B. À l'intention des finissants et des finissantes du baccalauréat spécialisé ou du certificat de traduction, mais ouvert à d'autres avec l'autorisation écrite de la professeure ou du professeur.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 2151 et TRAD 3261 ou TRAD 3271.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4101 Mémoire de terminologie 3 cr**

Travail de recherche supervisé en terminologie de l'École de traduction. Recherche thématique sur un sujet et élaboration de fiches terminologiques. Approfondissement de ses compétences dans la manipulation des bases de données terminologiques, leur mise à jour et leur enrichissement. N.B. Ce cours devrait se faire à la toute fin du programme de l'étudiante ou de l'étudiant. Il faut avoir conservé une moyenne de B pour pouvoir s'inscrire au mémoire.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: une note minimale de B dans TRAD 3131 ou TRAD 4061.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4111 Laboratoire II 3 cr**

Travaux pratiques dans des conditions semblables à celles d'un bureau de traduction (qualité du produit fini, présentation, gestion du temps, relations interpersonnelles, etc.). Traduction des textes appartenant à des domaines de spécialité ou qui présentent un degré de difficulté plus élevé.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable : une note minimale de C dans TRAD 3111.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4141 Rédaction professionnelle comparée 2 3 cr**

Étude comparative de documents professionnels anglais et français. Rédaction, en anglais, de documents professionnels divers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le ENGL 2001 ou ENGL 2000 ou TRAD 3271.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4231 Translation in the Social Sciences 3 cr**

Révision et pratique des principes de la traduction vers l'anglais à partir de textes français appartenant au domaine des sciences sociales. Etablissement de dossiers documentaires et de fiches terminologiques bilingues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3271 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4241 Legal Translation 3 cr**

Révision et pratique des principes de la traduction vers l'anglais à partir de textes français appartenant au domaine juridique. Etablissement de dossiers documentaires et de fiches terminologiques dans ces domaines.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3271 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4251 Literary Translation 3 cr**

Révision et pratique des principes de la traduction vers l'anglais à partir de textes littéraires français. Analyse du style et des modes d'expression et recherche d'équivalences en langue d'arrivée.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3271.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4261 Initiation à l'interprétation 3 cr**

Initiation à la traduction orale français-anglais et anglais-français. Développement de l'expression orale dans ces deux langues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalables: une note minimale de C dans le TRAD 3261 et le TRAD 3271.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4263 Théories de la traduction 3 cr**

Étude des courants théoriques contemporains dans le domaine de la traduction, allant des sourcistes aux ciblistes. Accent particulier mis sur les approches intermédiaires, qui font ressortir la place du traducteur, des institutions, etc. dans le modèle.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: réussite d'au moins deux cours de traduction de niveau 3000.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4271 Scientific and Technical Translation 3 cr**

Révision et application des principes de la traduction vers l'anglais à partir de textes appartenant aux domaines scientifiques et techniques. Etablissement de dossiers documentaires et terminologiques dans ces domaines.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3271 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4273 Traduction biomédicale et pharmaceutique 3 cr**

Analyse et traduction de différents genres de textes dans le domaine biomédical et pharmaceutique. Accent mis sur les systèmes notionnels, terminologiques et phraséologiques propres au domaine et sur le développement d'une démarche d'exploitation de connaissances spécialisées.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans TRAD 3261 et TRAD 3131.

**TRAD 4281 Adaptation publicitaire 3 cr**

Initiation à l'adaptation et à la traduction de textes publicitaires. Apprentissage des méthodes de modulation intralinguistique et interlinguistique de l'énoncé publicitaire en fonction de facteurs linguistiques, affectifs et sociaux.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans TRAD 3261 ou TRAD 3271.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4361 Traduction spécialisée (anglais-français) 3 cr**

Révision et application des principes de la traduction vers le français à partir de textes pragmatiques anglais appartenant à divers domaines de spécialisation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3261 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4371 Specialized Translation (French-English) 3 cr**

Révision et application des principes de la traduction vers l'anglais de textes pragmatiques français appartenant à divers domaines de spécialisation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3271 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4381 Traduction en sciences sociales (anglais-français) 3 cr**

Familiarisation avec le langage propre aux sciences sociales et qui tient compte de méthodes de recherche et d'analyse bien définies, tant en anglais qu'en français et auquel on aura recours chaque fois que le texte de départ l'exigera, tout en enrichissant sa culture générale.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans TRAD 3261 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4391 Traduction juridique (anglais-français) 3 cr**

Révision et application des principes de la traduction vers le français de textes juridiques anglais appartenant à divers aspects du droit: textes législatifs, règlements, textes de jurisprudence, de doctrine, contrats.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3261 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4401 Traduction littéraire (anglais-français) 3 cr**

Application des principes de la traduction vers le français à des textes littéraires. Analyse des procédés stylistiques anglais et recherche d'équivalences en français. Pratique de la rédaction expressive.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3261.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4411 Traduction scientifique et technique (anglais-français) 3 cr**

Révision et application des principes de la traduction vers le français à partir de textes appartenant aux domaines scientifiques et techniques. Établissement de dossiers documentaires et terminologiques dans ces domaines.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3261 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4421 Version commerciale et économique (anglais-français) 3 cr**

Révision et application des principes de la traduction vers le français de textes pragmatiques spécialisés dans les domaines du commerce et de l'économie. Établissement de lexiques bilingues et enrichissement des connaissances dans ce domaine de spécialisation. Pratique de rédaction dans le style commercial.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans le TRAD 3261 et TRAD 3131.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4501 Initiation à la localisation 3 cr**

Utilisation de divers outils informatiques indispensables à la localisation et à l'adaptation de logiciels pour des publics très variés. Réflexion sur le rôle du traducteur au sein de l'équipe linguistique et technique.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans TRAD 2111 et TRAD 3261 ou TRAD 3271 ou l'autorisation du professeur ou de la professeure.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4531 Traduction militaire 3 cr**

Le cours portera sur l'étude des textes relatifs aux différents aspects de la vie militaire (différents corps d'armes: terre, air, marine), les grades militaires, les armes, l'histoire militaire, le rôle de l'armée dans la société moderne.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de B dans TRAD 2111 et TRAD 2151 et TRAD 3261 et TRAD 3271 et TRAD 4411.

**Attributes:** Université de Saint-Boniface, Humanities

**TRAD 4991 Révision II- Postédition 3 cr**

Initiation à la révision de traductions machines. Réflexion sur la place de la traduction automatique et des problématiques qu'elle pose au sein des services de traduction et pour l'avenir de la profession. Application des principes de la révision à des textes prétraduits appartenant à divers domaines.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Préalable: une note minimale de C dans TRAD 3261 et dans TRAD 4051, ou l'autorisation professorale.



# SOURCES OF INFORMATION FOR ALL STUDENTS

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Questions? (<http://umanitoba.ca/ask/>)  
askumanitoba (<http://umanitoba.ca/ask/>)

Student Guide (<http://umanitoba.ca/student/guide/>)  
Your guide for being a student at the University of Manitoba. (<http://umanitoba.ca/student/guide/>)

## Academic Advising

Visit [umanitoba.ca/student/academic-advisors/academic-advisors-list](http://umanitoba.ca/student/academic-advisors/academic-advisors-list) (<http://www.umanitoba.ca/student/academic-advisors/academic-advisors-list.html>) to locate your Faculty/School student advisor

## Student Bus Passes

Answers Information Booth, 1st Floor, University Centre

## Career Counselling

Career Services (<http://umanitoba.ca/student/careerservices/>), 474 University Centre, Fort Garry Campus

## Creating Computer Accounts (UMnetID)

[iridium.umanitoba.ca/](http://iridium.umanitoba.ca/) (<https://iridium.umanitoba.ca/>)

## Graduation and Convocation

[umanitoba.ca/convocation/](http://umanitoba.ca/convocation/) (<http://umanitoba.ca/convocation/>)

## Fee Assessment

Aurora Student (<https://aurora.umanitoba.ca/>); go to Enrolment and Academic Records

## Financial Aid and Awards

[umanitoba.ca/student/fin\\_awards](http://umanitoba.ca/student/fin_awards) ([http://umanitoba.ca/student/fin\\_awards/](http://umanitoba.ca/student/fin_awards/))

## Medical Insurance

[umsu.ca/services-and-support/health-dental](http://umsu.ca/services-and-support/health-dental) (<http://umsu.ca/services-and-support/health-dental/>), 110 University Centre  
International Students: [umanitoba.ca/student/records/international\\_students/phc.html](http://umanitoba.ca/student/records/international_students/phc.html) ([http://www.umanitoba.ca/student/records/international\\_students/phc.html](http://www.umanitoba.ca/student/records/international_students/phc.html))

## Payment of Fees

Cashiers Office, 138 University Centre, Fort Garry Campus  
[umanitoba.ca/feepayment](http://umanitoba.ca/feepayment) (<http://umanitoba.ca/feepayment/>)

## Personal Counselling

Student Counselling Centre (<http://umanitoba.ca/student/counselling/>), 474 University Centre  
Chaplains' Association (<https://umanitoba.ca/student/resource/chaplains/>), 102Y University Centre

## Registration

[umanitoba.ca/registrar](http://umanitoba.ca/registrar) (<http://umanitoba.ca/registrar/>) (for information)  
Aurora Student (<https://aurora.umanitoba.ca/>) (to activate registration)

## Student Photo ID

[umanitoba.ca/student/records/pii/photo\\_id.html](http://umanitoba.ca/student/records/pii/photo_id.html) (<https://umanitoba.ca/registrar/photo-id/>)

## T2202A Education Tax Forms

More information about Canadian Tax Forms (<http://umanitoba.ca/student/records/fees/951.html>)

## Transferring Faculties/Schools

[umanitoba.ca/admissions](http://umanitoba.ca/admissions/) (<http://umanitoba.ca/admissions/>)

## Transit from University 1

Aurora Student (<https://aurora.umanitoba.ca/>); go to Enrolment and Academic Records, and then to Declarations

## Transcripts

[umanitoba.ca/student/records/transcripts](http://umanitoba.ca/student/records/transcripts) (<https://umanitoba.ca/registrar/transcripts/>)

## UMAchieve

UMAchieve is the University of Manitoba's degree audit system. Select programs are now available for student use. Log in through your U of M JUMP account. Click on the UMACHIEVE link (<https://umanitoba.ca/registrar/um-achieve/>) to connect.

UM Learn (<http://umlearn.ca/>)

UM Learn (<http://umlearn.ca/>) is the University of Manitoba's online learning environment.

# FACILITIES, SERVICES AND RESOURCES

## Introduction

The Student Guide (<http://umanitoba.ca/student/guide/>) is a good information resource for being a student at the University of Manitoba.

The following is a list of selected facilities, services and resources which includes contact information for each of the University's colleges.

- Academic Advisors (<https://umanitoba.ca/student-supports/academic-supports/academic-advising/>)
- Academic Integrity (<https://umanitoba.ca/student-supports/academic-supports/academic-integrity/>)
- Academic Learning Centre (<https://umanitoba.ca/student-supports/academic-supports/academic-learning/>)
- Admissions Office (<https://umanitoba.ca/admissions/>)
- BookStore (<https://umanitoba.ca/bookstore/>)
- Campus Children's Centre (<https://www.campuschildrenscentre.com/>)
- Career Services (<https://umanitoba.ca/careerservices/>)
- Cashiers Office (p. 1770)
- Chaplains' Association (<https://umanitoba.ca/student/resource/chaplains/>)
- Colleges (<https://umanitoba.ca/colleges/>)
- Digital Copy Centre (<https://umsu.ca/businesses/digital-print-design-centre/>)
- English Language Centre (<https://umanitoba.ca/english-language-centre/>)
- Financial Aid and Awards (<https://umanitoba.ca/financial-aid-and-awards/>)
- Food Services (<https://umanitoba.campusdish.com/>)
- Health and Wellness (<https://umanitoba.ca/student-supports/health-wellness/>)
- Homestay Program (<https://umanitoba.ca/english-language-centre/homestay-accommodations/>)
- Indigenous Student Centre (ISC) (<https://umanitoba.ca/indigenous/student-experience/>)
- International Centre for Students (ICS) (<https://umanitoba.ca/international/>)
- Libraries (<https://umanitoba.ca/libraries/>)
- Mental Health on Campus (<https://umanitoba.ca/mentalhealth/>)
- Military Support Office (<https://umanitoba.ca/student-supports/military-support-office/>)
- Office of Human Rights and Conflict Management ([https://umanitoba.ca/human\\_rights/](https://umanitoba.ca/human_rights/))
- Parking Services (<https://umanitoba.ca/parking/>)
- Rainbow Pride Mosaic (RPM) (<https://umanitoba.ca/student/careerservices/equity/lgbttq.html>)
- Recreation Services (<https://umanitoba.ca/community/sport-recreation/recreation-services/>)
- Registrar's Office (<https://umanitoba.ca/registrar/>)
- Sports (Bison Sports) (<https://gobisons.ca/>)

- Student Accessibility Services (<https://umanitoba.ca/student-supports/accessibility/>)
- Student Advocacy (<https://umanitoba.ca/student-supports/academic-supports/student-advocacy/>)
- Student Counselling Centre (<https://umanitoba.ca/student-supports/counselling-resources-students/>)
- Student Life (<https://umanitoba.ca/student-supports/get-involved/>)
- Student Residences (<https://umanitoba.ca/housing/>)
- University Health Service (<https://umanitoba.ca/student-supports/health-wellness/university-health-service/>)
- UMSU Service Centre (<https://umanitoba.ca/campus-services/university-centre/>)
- University of Manitoba Indigenous Students Association (UMISA) (<https://umanitoba.ca/student/indigenous/umisa.html>)
- University of Manitoba Students' Union (UMSU) (<https://umanitoba.ca/current-students/first-year/um-commons/student-government/>)
- Womyn's Centre (<https://umanitoba.ca/student/careerservices/equity/women.html>)

## Academic Advisors

With three campuses in Winnipeg and over 100 programs across 24 faculties, the University of Manitoba offers more learning, teaching and research opportunities than any other post-secondary institution in the province. This can also lead to a lot of questions.

Helping students achieve academic success is a group of dedicated Academic Advisors.

If you need help, please find your Faculty/program's advisor here: [www.umanitoba.ca/student/academic-advisors/academic-advisors-list.html](http://www.umanitoba.ca/student/academic-advisors/academic-advisors-list.html) (<http://www.umanitoba.ca/student/academic-advisors/academic-advisors-list.html>)

## Academic Integrity

**Academic Integrity Coordinator:** Loie Gervais

**Phone:** 204 290 3856

**Email:** [Loie.Gervais@umanitoba.ca](mailto:Loie.Gervais@umanitoba.ca)

## Academic Learning Centre

**Campus Address/General Office:** 205 Tier (U1 First Year Centre)

**Phone:** 204 480 1481

**Fax:** 204 474 7659

**Email:** [academic\\_learning@umanitoba.ca](mailto:academic_learning@umanitoba.ca)

## The Academic Learning Centre Services

- Peer writing tutors
- Peer study skill coaches
- Online writing tutor
- English as an additional language specialist
- Graduate student writing and/or learning support (by appointment)
- Graduate student writing and/or learning support (by appointment)
- ALC Tutors in Migizii Agamik
- Learning skills specialists (by referral)
- Writing and study skills workshops
- Online writing and study skills workshops

- Handouts on writing, editing, grammar, time management and studying

## Admissions Office

**Campus Address/General Office:** 424 University Centre\

**Telephone:** (204) 474-8808

**North America Toll Free:** (800) 224-7713

**Fax:** (204) 474-7554

**E-mail:** admissions@umanitoba.ca

**Website:** [umanitoba.ca/student/admissions](http://umanitoba.ca/student/admissions/) (<http://umanitoba.ca/student/admissions/>)

- Application Information
- Admission Requirements

## BookStore

**Website:** [umanitoba.ca/bookstore](http://umanitoba.ca/bookstore/) (<http://umanitoba.ca/bookstore/>)

- owned and operated by the University of Manitoba
- textbooks, reference books, special orders, computers and software, art supplies, stationery, crested clothing, and giftware
- Computers on Campus, located at both stores
- Lists of required textbooks and course materials are available in August so that course materials may be purchased before classes begin. The Book Store also “buys back” reconfirmed textbooks for cash.
- Mail order service is also provided by writing, phoning, or faxing the Book Store

## Fort Garry Campus

**Store Hours Information Line:** (204) 474-8178

**Telephone:** (204) 474-8321

**Toll Free in Canada:** (800) 310-3331

**Fax:** (204) 474-7555

## Bannatyne Campus

**Telephone:** (204) 789-3601

**Fax:** (204) 789-3901

**Toll Free Fax:** (800) 361-2005

## Campus Children's Centre

Campus Children's centre provides early childhood education and care to children of University of manitoba students and staff. The daycare is licensed for 138 children: ages 3 months to 6 years. Please go to the provincial waiting list to register.

[www.manitoba.ca/onlinechildcareregistry](http://www.manitoba.ca/onlinechildcareregistry/) (<http://www.manitoba.ca/onlinechildcareregistry/>)

**Address:** 15/19 Dysart Road, Winnipeg MB R3T 2N2

**Telephone:** 204 474 9546 (9647)

**Email:** ccc19138@gmail.com

**Website:** <http://www.campuschildrenscentre.com> (<http://www.campuschildrenscentre.com/>)

## Career Services

**Website:** [umanitoba.ca/student/careerservices](http://umanitoba.ca/student/careerservices/) (<http://umanitoba.ca/student/careerservices/>)

**Fort Garry Campus:** 474 University Centre

**Telephone:** (204) 474-8592

## Cashiers Office

Fort Garry Campus

Room 138 University Centre

**Telephone:** (204) 474-8716; (204) 474-9433

**Office hours:** Monday - Friday 8:30 a.m. to 4:00 p.m.

**Email:** stdntfee@cc.umanitoba.ca

**Website:** Pay your tuition | University of Manitoba ([umanitoba.ca/registrars/tuition-fees/pay-your-tuition/](http://umanitoba.ca/registrars/tuition-fees/pay-your-tuition/))

## Chaplains' Association

**Campus Address/General Office:** 102Y University Centre

**Phone:** (204) 474-8389

**Fax:** (204) 474-7567

**Website:** [umanitoba.ca/student/resource/chaplains](http://umanitoba.ca/student/resource/chaplains/) (<http://www.umanitoba.ca/student/resource/chaplains/>)

Several religious denominations have appointed chaplains to offer support to students regardless of religious affiliation and preference, if any. They offer a variety of services including informal drop-in opportunities, personal and spiritual guidance, discussion groups, Bible studies and worship services (denominational, ecumenical, and interfaith).

## Colleges

### St. Andrew's College

**General Office:** 29 Dysart Road, Winnipeg, MB R3T 2M7

**Telephone:** (204) 474-8895

**Fax:** (204) 474-7624

**Email:** St\_Andrews@umanitoba.ca

**Website:** [umanitoba.ca/colleges/st\\_andrews](http://umanitoba.ca/colleges/st_andrews/) ([http://umanitoba.ca/colleges/st\\_andrews/](http://umanitoba.ca/colleges/st_andrews/))

### St John's College

**General Office:** 92 Dysart Road, Winnipeg MB R3T 2M5

**Telephone:** (204) 474-8531

**Manitoba Toll Free:** (800) 432-1960 ext. 8531

**Fax:** (204) 474-7610

**Email:** Stjohns\_College@umanitoba.ca.

**Website:** [umanitoba.ca/colleges/st\\_johns](http://umanitoba.ca/colleges/st_johns/) ([http://umanitoba.ca/colleges/st\\_johns/](http://umanitoba.ca/colleges/st_johns/))

**Student Council Office (room 126):** (204) 474-9583

### St. Paul's College

**General Office:** 70 Dysart Road, Winnipeg, MB R3T 2M6

**Telephone:** (204) 474-8575

**Fax:** (204) 474-7620

**Email:** stpaulscollege@umanitoba.ca

**Website:** [umanitoba.ca/stpauls](http://umanitoba.ca/stpauls/) (<http://umanitoba.ca/stpauls/>)

**Student Council Office:** (204) 474-9262

## University College

**General Office:** 203-220 Dysart Road, Winnipeg MB R3T 2M8

**Telephone:** (204) 474-9751

**Fax:** (204) 261-0021

**Email:** [jhonalyn.domingo@manitoba.ca](mailto:jhonalyn.domingo@manitoba.ca)

**Website:** [umanitoba.ca/colleges/uc/](http://www.umanitoba.ca/colleges/uc/) (<http://www.umanitoba.ca/colleges/uc/>)

## Université de Saint Boniface

**General Office:** 200 Cathedrale Avenue, Winnipeg, MB R2H 0H7

**Registrar's Office Telephone:** (204) 235-4408

**Email:** [registraire@ustboniface.ca](mailto:registraire@ustboniface.ca)

**Website:** [cusb.ca](http://www.cusb.ca/) (<http://www.cusb.ca/>)

## Digital Copy Centre

### Digital Copy Centre (UMSU)

**Website:** <https://dpdc.umsu.ca/>

**Campus Address/General Office:** 118 University Centre

**Phone:** (204) 474-6533

- Offers high speed, high quality printing and photocopying, as well as a wide range of finishing services
- Lowest printing costs on campus
- Self-serve copiers and printers are available 24 hours daily

## English Language Centre

**Campus Address/General Office:** 520 University Centre

**Telephone:** (204) 474-9251

**Fax:** (204) 275-8098

**Email:** [elc@umanitoba.ca](mailto:elc@umanitoba.ca)

**Website:** [umanitoba.ca/elc](http://umanitoba.ca/elc/) (<http://umanitoba.ca/elc/>)

- English Language Instruction for International Students

## Financial Aid and Awards

**Campus Address/General Office:** 422 University Centre

**Telephone:** (204) 474-9531

**Fax:** (204) 474-7543

**E-mail:** [awards@umanitoba.ca](mailto:awards@umanitoba.ca)

**Website:** [umanitoba.ca/student/fin\\_awards](http://umanitoba.ca/student/fin_awards/) ([http://umanitoba.ca/student/fin\\_awards/](http://umanitoba.ca/student/fin_awards/))

- Information about scholarships, bursaries, prizes
- Student aid
- Emergency loans
- The food bank

## Food Services

### On-Campus Dining

**Website:** [umanitoba.ca/campus/food.html](http://umanitoba.ca/campus/food.html) (<http://umanitoba.ca/campus/food.html>)

**Phone:** (204) 474-8880

**Email:** [campus\\_services@umanitoba.ca](mailto:campus_services@umanitoba.ca)

- The University of Manitoba has a wide variety of choices when it comes to dining on campus. The primary food service

provider is University of Manitoba Dining Services (<http://umanitoba.campusdish.com/>)

- Cafeterias, canteens and national branded franchises are located throughout the Fort Garry and Bannatyne Campuses

## Health and Wellness

At the University of Manitoba, we understand the health and wellness issues that students face. We are committed to helping students overcome these challenges by providing supports to ensure their success.

**Campus Address/General Office:** 469 University Centre

**Phone:** 204-295-9032

**Website:** [umanitoba.ca/student/health-wellness](http://umanitoba.ca/student/health-wellness/) (<http://umanitoba.ca/student/health-wellness/>)

## Homestay Program

**Campus Address/General Office:** 520 University Centre

**Telephone:** (204) 474-6809 or (204) 474-8701

**Website:** <http://umanitoba.ca/student/elc/homestay/>

An opportunity for a visiting international student to live in a Canadian home while studying at our university (See also International Centre for Students (<http://www.umanitoba.ca/student/ics/>))

## Indigenous Student Centre (ISC)

**Campus Address/General Office:** Migizii Agamik, 114 Sidney Smith St.

**Telephone:** (204) 474-8850

**Fax:** (204) 275-3142

**E-mail:** [isc@umanitoba.ca](mailto:isc@umanitoba.ca)

**Website:** [http://umanitoba.ca/student/indigenous](http://umanitoba.ca/student/indigenous/) (<http://umanitoba.ca/student/indigenous/>)

- Academic Assistance to Aboriginal students
- Tutorial referrals
- Advocacy
- Cultural support
- Elder-In-Residence
- Traditional teachings, sharing circles,
- Annual Traditional Graduation Pow Wow
- Emotional/personal support
- Aboriginal Student Lounge
- Financial information
- Recreational, political and cultural events

## International Centre for Students (ICS)

**Campus Address/General Office:** 541 University Centre

**Telephone:** (204) 474-8501

**Fax:** (204) 474-7562

**Website:** [umanitoba.ca/student/ics](http://umanitoba.ca/student/ics/) (<http://umanitoba.ca/student/ics/>)

- Facilitates international learning experiences
- Supports international students
- Facilitates student exchanges and internships
- Delivers cross-cultural programs

- Student exchange programs
- World W.I.S.E. Resource Centre (Work, Internship, Study, Exchange)
- Social and recreational events
- ICS Lounge: The ICS Lounge and outdoor patio
- Student Advocacy and Resource Services

(See also Homestay Program (<http://umanitoba.ca/student/elc/homestay/>))

## Libraries

**Telephone:** (204) 474-9881

**Recorded hours for all Libraries:** (204) 474-9770

**Website:** [umanitoba.ca/libraries/](http://umanitoba.ca/libraries/) (<http://umanitoba.ca/libraries/>)

- Online catalogue, called BISON
- Document delivery
- Photocopying facilities
- Laser printing

**Locations:** [umanitoba.ca/libraries/about/map.php](http://umanitoba.ca/libraries/about/map.php) (<http://umanitoba.ca/libraries/about/map.php>)

### Albert D. Cohen Library (Management)

208 Drake Centre; Phone: (204) 474-8440

### Architecture and Fine Arts Library

John A. Russell Building; Phone: (204) 474-9216

### Archives & Special Collections

331 Dafoe Library; telephone: (204) 474-9986

### Carolyn Sifton-Helene Fuld Library

409 Taché Avenue; telephone (204) 237-2807

### Concordia Hospital Library

Room 308, 1095 Concordia Ave., R2K 3S8; telephone (204) 661-7163

### Donald W. Craik Engineering Library

351 Engineering Building; telephone: (204) 474-6360

### Elizabeth Dafoe Library

25 Chancellors Circle, telephone: (204) 474-9844

### E.K. Williams Law Library

401 Robson Hall; telephone: (204) 474-9997

### Eckhardt-Gramatté Music Library

257 Taché Arts Complex; telephone (204) 474-9567

### Father Harold Drake Library

119 St. Paul's College; telephone: (204) 474-8585

### Bill Larson Library (Grace General Hospital)

300 Booth Drive, R3J 3M7; telephone (204) 837-0127

### J.W. Crane Memorial Library

Deer Lodge Centre, 2109 Portage Ave., R3J 0L3; telephone (204) 831-2107

### Misericordia Health Centre Library

99 Cornish Ave., R3C 1A2; telephone (204) 788-8109

### Neil John Maclean Health Sciences Library

Brodie Centre, Bannatyne Campus; telephone: (204) 789-3342

## Mental Health on Campus Success Through Wellness

The University of Manitoba's Campus Mental Health Strategy, Success Through Wellness, is a call to action for all of us to view the promotion and support of mental health as our collective responsibility. The strategy focuses equally on students, staff and faculty members, examining all aspects of the university and identifying ways in which we can be a community that is committed, caring, healthy, responsive, supportive and resourceful.

**Location:** 137 Education Building

**Phone:** 204-474-8323

**Website:** [umanitoba.ca/student/mentalhealth](http://umanitoba.ca/student/mentalhealth/) (<http://umanitoba.ca/student/mentalhealth/>)

## Office of Human Rights and Conflict Management

**Campus Address/General Office:** 201 Allen Building

**Telephone:** (204) 474-6348

**Fax:** (204) 474-7526

**Email:** [Human.Rights@umanitoba.ca](mailto:Human.Rights@umanitoba.ca)

**Website:** [umanitoba.ca/human\\_rights](http://umanitoba.ca/human_rights/) ([http://umanitoba.ca/human\\_rights/](http://umanitoba.ca/human_rights/))

The mission of Office of Human Rights and Conflict Management is to promote a respectful working and learning environment in which individuals are treated equitably and diversity is valued.

## Parking Services

**Campus Address/General Office:** Welcome Centre, 423 University Crescent

**Telephone:** (204) 474-9483

**Fax:** (204) 474-7658

**Website:** [umanitoba.ca/parking](http://umanitoba.ca/parking/) (<http://umanitoba.ca/parking/>)

- 3400 parking spaces are available for purchase by students
- Parkade, meters, pay and display and ticket-dispenser areas supply an additional 1,600 spaces
- Motorcycles are accommodated in two convenient locations.
- Commuter and Resident parking permits can be purchased online by credit card
- Fort Garry Campus wide Shuttle service available from September to April

## Rainbow Pride Mosaic (RPM)

**Campus Address/General Office:** 180 Helen Glass Centre

**Email:** [lgbtqrep@umsu.ca](mailto:lgbtqrep@umsu.ca)

**Web:** [umsu.ca/get-involved/student-clubs/rainbow-pride-mosaic/](http://umsu.ca/get-involved/student-clubs/rainbow-pride-mosaic/) (<http://umsu.ca/services/community/constituency-groups/>)

## Recreation Services

**Campus Address/General Office:** Active Living Centre - 430 University Crescent

**Telephone:** (204) 474-6100

**Fax:** (204) 474-7503

**Website:** <https://umanitoba.ca/community/sport-recreation/recreation-services> (<https://umanitoba.ca/community/sport-recreation/recreation-services/>)

- Wide variety of recreation facilities Intramurals and Sports Clubs
- Intramural sports
- Adult recreation instructional programs
- Fitness assessment, counselling, programming and fitness leadership development
- Children's camps

## Registrar's Office

**Campus Address/General Office:** 400 University Centre

**Telephone:** (204) 474-9420

**Toll Free North America:** (877) 474-9420

**Fax:** (204) 275-2589

**Website:** [umanitoba.ca/registrar](http://umanitoba.ca/registrar/) (<http://umanitoba.ca/registrar/>)

- Registration information
- Address and name changes
- Application and information for graduation
- Application for Letters of Permission
- Convocation ceremonies
- Fee assessment (charges and refunds), and fee appeals
- Examinations fee appeals
- Final grade reporting
- Graduation parchment replacement
- International student health insurance,
- Student photo ID cards
- Transcripts
- T2202A education tax forms.
- Academic Calendar
- Course Schedule

## Sports (Bison Sports)

**Telephone:** (204) 474-9611 or (204) 474-9234

**Website:** [gobisons.ca](http://www.gobisons.ca/) (<http://www.gobisons.ca/>)

- Member of Canada West Universities Athletic Association
- Regional association within Canadian Interuniversity Sport (CIS).
- Bison teams include basketball, football, golf, cross country, hockey, soccer, swimming, track and field, and volleyball

## Student Accessibility Services

Student Accessibility Services (SAS) is here to provide supports for students with disabilities.

Our offices are located on 3 floors of University Centre: 155 Test/Exam Centre; 335 Assistive Technology Lab; 520 Administrative Office. We also have Bannatyne Campus and Norrie Campus office hours.

**Telephone:** (204) 474-7423 Fax: (204) 474-7567

**Email:** [student\\_accessibility@umanitoba.ca](mailto:student_accessibility@umanitoba.ca)

**Website:** [umanitoba.ca/student/saa/accessibility](http://umanitoba.ca/student/saa/accessibility/) (<http://umanitoba.ca/student/saa/accessibility/>)

## Student Advocacy

**Campus Address/General Office:** 519 University Centre

**Telephone:** (204) 474-7423

**Fax:** (204) 474-7567

**Email:** [student\\_advocacy@umanitoba.ca](mailto:student_advocacy@umanitoba.ca)

**Website:** [umanitoba.ca/student/advocacy](http://umanitoba.ca/student/advocacy/) (<http://umanitoba.ca/student/advocacy/>)

- Assists students in the resolution of conflicts arising from actions or decisions taken by the University.
- Offers workshops and orientations to students, staff and faculty
- Resources on academic dishonesty, incivility, final grade appeal, term work grade appeal, student conduct

## Student Counselling Centre

**Fort Garry Campus:** 474 University Centre

**Telephone:** (204) 474-8592

**Bannatyne Campus:** S207 Medical Services Building

**Telephone:** (204) 789-3857

**Website:** [umanitoba.ca/student/counselling](http://umanitoba.ca/student/counselling/) (<http://umanitoba.ca/student/counselling/>)

Individual counselling, group programs, crisis management, consultation and assessment:

- Career planning and counselling
- Career mentor program
- Employment advising
- Job postings
- Support for students intending to/or already participating in co-op education/internship programs

## Student Life

**Campus Address/General Office:** 225 University Centre

**Telephone:** (204) 474-9093

**Email:** [student\\_life@umanitoba.ca](mailto:student_life@umanitoba.ca)

**Website:** <http://umanitoba.ca/student/studentlife/>

Ongoing training and development of student leaders in the campus and residence community:

- Parents Orientation
- Service Study Tours

## Student Residences

### Residence (On-Campus Accommodation)

**Campus Address/General Office:** 101-120 Dafoe Road

**Telephone:** (204) 474-9922

**Toll Free:** (800) 859-8737

**Fax:** (204) 474-7662

**Email:** [residence@umanitoba.ca](mailto:residence@umanitoba.ca)

**Website:** [umanitoba.ca/student/housing/](http://umanitoba.ca/student/housing/) (<http://umanitoba.ca/student/housing/>)

Six residences on the University's Fort Garry campus provide accommodation for over 1200 students

## Off-Campus Housing

**Website:** [och.cc.umanitoba.ca](http://och.cc.umanitoba.ca) (<https://och.cc.umanitoba.ca/>)

## UMSU Service Centre

(Formerly Answers Information Booth)

**Campus Address/General Office:** 101 UMSU University Centre

**Website:** [Umsu.ca/businesses/servicecentre/](http://umsu.ca/businesses/servicecentre/) (<http://umsu.ca/businesses/servicecentre/>)

**Telephone:** (204) 474-8211, (204) 474-6822

- Information on nearly everything on campus
- Transit post-secondary discounted bus passes
- Sales of long distance phone cards
- Campus lost and found
- Poster approvals for University Centre

## University Health Service

**Campus Address/General Office:** 104 University Centre

**Telephone:** (204) 474-8411

**Fax:** (204) 474-7573

**Website:** [umanitoba.ca/student/health](http://umanitoba.ca/student/health/) (<http://umanitoba.ca/student/health/>)

- Accessible by all currently registered University of Manitoba students
- Physicians and a visiting consultant psychiatrist
- An after hours on-call telephone service for urgent matters
- An on-site laboratory
- Travel health advice and required immunizations

## University of Manitoba Aboriginal Students Association (UMASA)

**Location:** Migizii Agamik – Bald Eagle Lodge, Room 109 - 114 Sidney Smith St.

**Telephone:** 204-474-8396

**Email:** [UMASACOUNCIL@gmail.com](mailto:UMASACOUNCIL@gmail.com)

**Website:** [umanitoba.ca/student/indigenous/umasa.html](http://umanitoba.ca/student/indigenous/umasa.html) (<http://umanitoba.ca/student/indigenous/umasa.html>)

## University of Manitoba Students' Union (UMSU)

**Campus Address/General Office:** 101 University Centre

**Telephone:** (204) 474-6822

**Fax:** (204) 269-1299

**Email:** [umsu@umsu.ca](mailto:umsu@umsu.ca)

**Website:** [umsu.ca](http://umsu.ca) (<http://umsu.ca/>)

- The university-wide representative body for undergraduate students at the University of Manitoba
- Advocates on behalf of students to University administration and to all levels of government
- Organizes many informational and entertaining student-focused events throughout the year
- Offers a collection of services to help students save money and enhance their campus experience

- UMSU is Local 103 of the Canadian Federation of Students (CFS), a provincial and national organization that provides representation and cost-saving services for its members.

## Womyn's Centre

**Campus Address/General Office:** 190 Helen Glass Centre

**Email:** [womensrep@umsu.ca](mailto:womensrep@umsu.ca)

**Website:** [umsu.ca/get-involved/student-clubs/womyns-centre/](http://umsu.ca/get-involved/student-clubs/womyns-centre/) (<http://www.umsu.ca/services/community/constituency-groups/>)

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